Reindeer-Herd Management in Transition

*The Case of Tuorpon Saameby
in Northern Sweden*

By Hugh Beach

Acta Universitatis Upsaliensis

Acta Universitatis Upsaliensis

Uppsala Studies in Cultural Anthropology

Editors: Anita Jacobson-Widding and
Carl-Axel Silow

1. Anita Jacobson-Widding: *Red-White-Black as a Mode of Thought*. 1979.
2. Lisa Colldén: *Trèsors de la Tradition Orale Sakata*. 1979.
3. Hugh Beach: *Reindeer-Herd Management in Transition*. 1981.

Uppsala Studies in Cultural Anthropology is the title of a new series in which books, theses, and essays under the heading of Cultural Anthropology, in the broad sense, will be published. Works of descriptive ethnography and collections of folklore will also be published as far as funds allow. The publications in the series will be issued at irregular intervals. Further information may be obtained from Uppsala Studies in Cultural Anthropology, Department of Cultural Anthropology, Kungsängsgatan 19, 753 22 Uppsala, Sweden.

Distributed by Almqvist & Wiksell International, Stockholm, Sweden

ISBN 91-554-1105-3
ISSN 0348-5099

*Reindeer-Herd Management in Transition:
The Case of Tuorpon Saameby in Northern Sweden*

Hugh Beach

Doctoral dissertation to be publicly examined in Room IV in the University Building on February 4, 1981, at 10 a.m. for the degree of Doctor of Philosophy.

The discussion will be held in English.

Abstract:

Beach, H. 1981. Reindeer-Herd Management in Transition. The Case of Tuorpon Saameby in Northern Sweden. *Acta Univ. Ups., Uppsala Studies in Cultural Anthropology* 3. 542 pp. Uppsala.
ISBN 91-554-1105-3

This thesis applies certain fundamental principles derived from communications theory and systems analysis and developed by Gregory Bateson and others to a discussion of changes in reindeer-herd management. The following important questions are discussed. What are the determinants which have been active in the progression from intensive to extensive herding? What were the herding effects of northern-Saami (Lapp) relocation in the early 1900s? What is rational herding, why and how have its principles developed? These questions will be answered with regard to the historical development of one particular, mountain-Saami, herding unit, Tuorpon.

Part I presents a diachronic analysis of Tuorpon-herding changes. Part II broadens the context to encompass the essential features of Swedish reindeer-herding legislation. In Part III, an attempt is made to bring this material together to explain the variable resistance to and compliance with governmental, rational ideals in Tuorpon.

Essential to this study is the recognition of numerous, hierarchical, resource-consumer relationships, such as grazing/reindeer, reindeer/herders, herders/Saamish society and Saamish society/the Swedish State. Thus, the land available for herding largely determines the size of the reindeer population, which in turn largely determines the size of the herder population and the extent to which this group can serve as a pillar of the Saamish minority etc. To survive, these relations must be in balance with each other. Certain patterns are uncovered in Swedish herding legislation as this search for balance continues.

Hugh Beach, Department of Cultural Anthropology, University of Uppsala, Kungsängsgatan 19, S-753 22 Uppsala, Sweden

Errata

Beach, H. 1981, **Reindeer-Herd Management in Transition: The Case of Tuorpon Saameby in Northern Sweden**. Acta Univ. Ups., Uppsala Studies in Cultural Anthropology 3. Uppsala.

- Page: 97 loose page insert to correct poorly printed map
- 109 line 16 fb: matrilineal
 read: maternal
- 119 line 14 from bottom (fb): (Kihlstedt, 1920).
 read: (Kihlstedt, 1899, cf. 1920).
- 147 line 11 fb: matrilineal
 read: uxorial
- 184 line 9 fb: Ella Kristina Nutti
 (1895-1974)
 read: Ella Kristina Nutti
 (1895-1979)
- 331 line 19 from top (ft): *samhällighet*
 read: *samfällighet*
- 355 line 17 fb: 30).
 read: 38).
- 386 line 6 ft: only one vote, while a herder with 200 head has two votes.
 read: only one extra vote, while a herder with 200 head has two extra
 votes.
- 516 line 23 ft, there is a missing reference under Kihlstedt.
 add: Kihlstedt, L. (1899), *Lappliv i Kvikkjokksfjällen. Hemåt.*
 Kristliga föreningen av unga kvinnor. Stockholm.

Acta Universitatis Upsaliensis

Uppsala Studies in Cultural Anthropology

3

Reindeer-Herd Management in Transition

The Case of Tuorpon Saameby
in Northern Sweden

by
Hugh Beach

UPPSALA 1981

Distributed by

ALMQVIST & WIKSELL INTERNATIONAL
STOCKHOLM, SWEDEN

Doctoral thesis at Uppsala University, 1981

ISBN 91-554-1105-3

ISSN 0348-5099

This work has been financially supported by the J. C. Kempe Memorial Fund.
The index has been prepared by Neil Tomkinson, B.A.

Abstract:

Beach, H. 1981. Reindeer-Herd Management in Transition. The Case of Tuorpon Saameby in Northern Sweden. *Acta Univ. Ups., Uppsala Studies in Cultural Anthropology* 3. 542 pp. Uppsala.
ISBN 91-554-1105-3

This thesis applies certain fundamental principles derived from communications theory and systems analysis and developed by Gregory Bateson and others to a discussion of changes in reindeer-herd management. The following important questions are discussed. What are the determinants which have been active in the progression from intensive to extensive herding? What were the herding effects of northern-Saami (Lapp) relocation in the early 1900s? What is rational herding, why and how have its principles developed? These questions will be answered with regard to the historical development of one particular, mountain-Saami, herding unit, Tuorpon.

Part I presents a diachronic analysis of Tuorpon-herding changes. Part II broadens the context to encompass the essential features of Swedish reindeer-herding legislation. In Part III, an attempt is made to bring this material together to explain the variable resistance to and compliance with governmental, rational ideals in Tuorpon.

Essential to this study is the recognition of numerous, hierarchical, resource-consumer relationships, such as grazing/reindeer, reindeer/herders, herders/Saamish society and Saamish society/the Swedish State. Thus, the land available for herding largely determines the size of the reindeer population, which in turn largely determines the size of the herder population and the extent to which this group can serve as a pillar of the Saamish minority etc. To survive, these relations must be in balance with each other. Certain patterns are uncovered in Swedish herding legislation as this search for balance continues.

Hugh Beach, Department of Cultural Anthropology, University of Uppsala, Kungsängsgatan 19, S-753 22 Uppsala, Sweden

© Hugh Beach 1981

Printed in Sweden by

LiberTryck, Stockholm 1980 004705

In memory of Inga Bergström Schenck,
who first brought me to Lapland

Table of Contents

List of Figures, Charts and Maps	xi
Acknowledgements	xiii
Abbreviations	xvii

Introduction

<i>Chapter 1. The Saamis</i>	1
<i>Chapter 2. Plan and Field Methodology</i>	9
<i>Chapter 3. Epistemology</i>	16
Hierarchical systems.....	16
The “economics of flexibility”	19
System and structure	23
<i>Chapter 4. Bateson’s Principles Applied to Reindeer Management</i>	26
<i>Chapter 5. Reindeer-Management Terms</i>	34
Intensive and extensive	34
Herding and husbandry.....	36
<i>Chapter 6. Basic-Determinant Relations</i>	39
The reindeer (<i>Rangifer tarandus</i>)	41
Herd size	42
Grazing.....	46
Predators	49
Natural and artificial boundaries.....	50
Climate.....	53

Part I. Tuorpon Yesterday

<i>Chapter 7. Tuorpon and the Rise of Classic, Intensive, Herd Management</i>	59
The old <i>sita</i>	59
The rise of the milking economy	65
The new <i>sita</i> and the new Village.....	71
From the tax era to the police era	76
The intensive period: Dynamic or steady state?	80

Herd management in the intensive period	83
Spring	84
Summer	88
Autumn	90
Winter	92
<i>Chapter 8. Setting the Stage Prior to Northern-Saami Relocation ..</i>	94
Changing migration patterns and Village relations.	95
Land determines group	98
Group determines land	106
The early Jokkmokk herders and their group divisions	108
Incipient extensivity	119
<i>Chapter 9. The Coming of the Karesuando Saamis (1910–20)</i>	121
The Nuortvalle Group	124
The Virihaure Group	131
<i>Chapter 10. New Waves of Karesuando Saamis (1920–30)</i>	144
<i>Chapter 11. Jokkmokk–Karesuando Conflict and Compromise</i> <i>(1930–40)</i>	157
<i>Chapter 12. The Official Group Lists and the Complex Reality</i> <i>(1940–50)</i>	178
<i>Chapter 13. Further Eastern Shift and Group Fission (1950–60) ...</i>	197
The Nuortvalle Group	198
The Viri–Kaska Tjavelk Group	201
Group fission	212
<i>Chapter 14. Additional Problems in the Eastern Pattern</i> <i>(1960–70)</i>	219
<i>Chapter 15. Land Encroachments</i>	237
A sketch of early northern industrialization	240
The State's physical planning and reindeer management	242
Mining	245
Dam construction	251
The timber industry	259
Tourism	268

Part II. The Rationalization of Herd Management

<i>Chapter 16. The Dilemmas of State Rationalization Policy</i>	277
The dilemma of isolationism and interactionism	282
Examples of Saamish v. Swedish herding regulation	283
What is “rational”?	286
The occupation–culture split	290
Equal rights and category rights	291

The dilemma of culture and living standard	293
The problem of the rising subsistence minimum	299
<i>Chapter 17. Saamis and Saami Herders.....</i>	304
<i>Chapter 18. Methods of Herd-Management Rationalization.....</i>	317
The change in attitude	317
Structural rationalization.....	323
Reindeer and herder proportions	323
Wage system and herding fee	328
Production rationalization	335
Premises and origins.....	336
Swedish rational husbandry: Slaughter, herd composition and selective breeding.....	338
The rationalization of terminology.....	346
<i>Chapter 19. The Dilemma of Protection and Over-Protection.....</i>	349
<i>Chapter 20. The Saameby: What is it?.....</i>	360
Lappby and Saameby.....	361
Economic corporation or just property with common responsibility?	364
Taxation: The Saameby—a firm with employees or a group of businessmen?.....	374
The self-rationalizing Saameby	379
<i>Chapter 21. The Identity Determinant.....</i>	394
Ethnic rights	394
The pan-Saamish movement.....	400
Factional alliance and conflict.....	415
The 1978 teachers' strike at the Saamish Folk High School	416
Saameby supporting members.....	418
The demonstration against the damming of Lake Sitojaure	421

Part III. Tuorpon Today and Tomorrow

<i>Chapter 22. The Web of Determinants</i>	427
The Virihaure Group	429
Current determinants	429
Herding adjustments.....	431
Group stability.....	433
Land utilization	435
The Nuortvalle Group.....	435
Current determinants	436
Herding adjustments.....	440
Group fission	444
Land utilization	448

<i>Chapter 23. Resistance to and Compliance with Swedish</i>	
Rationalization.....	452
Economic considerations	454
Tuorpon and Swedish production rationalization.....	454
Tuorpon and Swedish structure rationalization.....	459
A case of solidarity.....	464
<i>Chapter 24. Analysis and Summary</i>	467
Minority politics.....	470
Herding transitions.....	474
Appendix	
Mobility, control and land utilization.....	499
Confusion of historical and logical criteria	508
Bibliography	511
Index	527

List of Figures, Charts and Maps

<i>Fig. 1.</i>	The Saami settlement area today, as divided between different states (from Rönn, 1960)	2
<i>Fig. 2.</i>	The Jokkmokk parish and area of the Jokkmokk municipal authority	3
<i>Fig. 3.</i>	Map from Manker's book, <i>De svenska fjällapparna</i> (The Swedish Mountain Saamis)	6
<i>Fig. 4.</i>	Total Saami population in Sweden, 1750—1970 ...	297
<i>Chart 1.</i>	Native, Jokkmokk herders' family relations: early, Virihaure herders—Pavval	112
<i>Chart 2.</i>	More native, Virihaure herders—Pavval	113
<i>Chart 3a.</i>	Early, native Nuortvalle herders—Pavval	114
<i>Chart 3b.</i>	Later generations of native Nuortvalle herders—Pavval	115
<i>Chart 4.</i>	Native Virihaure and Kaska Tjavelk herders—Pavval	115
<i>Chart 5.</i>	More native Virihaure and Kaska Tjavelk herders—Kuoljokk	116
<i>Chart 6.</i>	More native Nuortvalle herders—Huljo	116
<i>Chart 7.</i>	More native Nuortvalle herders—Pavval	117
<i>Chart 8.</i>	Native, Jokkmokk herders (Nuortvalle)—Saulo ...	118
<i>Chart 9.</i>	Family relations of dislocated Karesuando herders—H. Blind	121–22
<i>Chart 10.</i>	Karesuando herders—Parffa	123
<i>Chart 11.</i>	Karesuando families—G. Omma, Piltto, Labba and Hotti	146–47
<i>Chart 12.</i>	Karesuando families—A. Blind and A. Valkeapää .	149
<i>Chart 13.</i>	Karesuando families—L. Blind, S. Blind, P. Gunnare, O. Gunnare, M. Omma	184–85

<i>Map A.</i>	A section of Olof Tresk's map of Torne Lappmark dated 1643 (from Ahnlund, 1928)	62
<i>Map B.</i>	A section of Andreas Bureus' Lapland map of 1611 (taken from an original print in Uppsala University Library)	63
<i>Map C.</i>	Saami Village migration routes (taken from <i>Förslag till Förordning angående de svenska Lapparne och de bofaste i Sverige</i> , 1883)	97
<i>Map D.</i>	Basic grazing zones for Tuorpon Village	100
<i>Map E.</i>	Suggested grazing-land distribution amongst Tuorpon groups in the early 1930s	166
<i>Map F.</i>	Grazing-land distribution authorized for Tuorpon groups in the late 1930s	167
<i>Map G.</i>	New Village boundaries after the creation of Jåkkå-kaska Village	192
<i>Map H.</i>	Conditions in Tuorpon after encroachment by the military	225

Acknowledgements

Many organizations and funds have supported my work, both in the field and at my desk. I should like to express my gratitude to the Harvard Peabody Museum, the Ella Lyman Cabot Trust Fellowship, the American-Scandinavian Foundation, the Swedish Institute and the J. C. Kempe Memorial Fund for their assistance. Also Mrs. Stephen Phillips has provided some timely, financial support.

I owe the theoretical foundations of this study (while not necessarily its shortcomings) to Gregory Bateson, with whom I had the privilege of traveling and studying for a year. I regret that I did not listen to him more then. I hear him now everywhere.

Here in Sweden, I have accumulated numerous academic debts of gratitude. Professor Anita Jacobson-Widding has hosted me at her Department of Cultural Anthropology for over three years since I first came from the field. The teachers and staff of the Department have provided me with the proper milieu for the composition of this book. Dr. Kerstin Eidlitz and I have carried on heated disputes, which have served to tighten up my arguments and have, moreover, provided the temperature necessary for a warm friendship. Dr. Carl-Axel Silow's blue pencil has trimmed my manuscript of much excess verbiage. Other colleagues in the Department, notably Mr. Kaj Århem and Dr. Bill Dockens, have provided comradeship, sympathy and sound advice.

I also want to offer my thanks to Professor Israel Ruong for the keen insights he has given me. He has a deep knowledge of Saamish history and culture and has played an essential role in their development. The Saami Ombudsman, Mr. Tomas Cramér, is another from whom I have learned much. I am most grateful for being allowed to share in his activities from time to time. Mr. Cramér has presented parts of this dissertation to the Swedish Supreme Court in the course of the "Tax Mountain Case", in which the State's and the Saamis' rights to land and water are being contested.

Dr. Olavi Korhonen has contributed his expertise in Saamish languages to my studies. I have also been his pupil in the language class, where, in his hands, each Saamish word was shown to be a storehouse of ethnographic information. Mr. Knut Gustavsson, at the Reindeer-Management Office in Umeå, has been kind enough to assist me on the confusing topic of Saameby economics. His opinions are not necessarily those expressed here, but without his help I could never have formulated my own on this

subject. Mr. Per Lithander, chief of the Reindeer-Management Department in Luleå, gave me the run of the Department's archives and through the years patiently answered all my queries on government policy. The dedication shown by his Department in helping the herders has impressed me and forced me away from any tendency to slide into the all-too-easy and prevalent attitude of dividing herders and administrators into "good guys and bad guys", thereby evading the difficult issues at stake.

I have met Professor Robert Paine occasionally during the last two years at lectures and conferences concerning Saami affairs. Our conversations have been intense, and upon each occasion he has, with a few deft nudges, pushed me into new paths and given me the enthusiasm to walk them. My contacts with researchers at the University of Tromsø and Tromsø Museum in Norway have broadened my grasp of the Saami situation in general.

The editorial assistance of Mr. Neil Tomkinson has been invaluable. It is thanks to him that my manuscript has been metamorphosed into a book. His competence has given me courage throughout the labor of publication. My thanks are also due to Mr. Pelle Lindström, who has drawn the maps in the text.

My brother, Dr. Edward Beach, has perused the entire work and has made penetrating comments everywhere. His grasp of ethical issues has been so sharp that he has at times caught me committing errors which I had previously exposed. A number of the major arguments of this study have taken form during our conversations. My parents have provided unflinching support throughout my studies, as always, and have developed a personal interest in Lapland. They have contributed heavily to cover the costs of this publication.

Oddly enough, Mr. Hubert Schuurman deserves mention for taking me away from Jokkmokk. He gave me the opportunity to compare herd management in Jokkmokk with that in Kautokeino, Norway, while on a filming assignment for the National Film Board of Canada and the Saami Institute. I shall never forget the time we had on migration and his protein disks.

A number of American friends are to be remembered: Mr. Ben Moulton for the shared dreams which brought us both to Lapland in 1973, and my college room-mates, Mr. Jake Rogers and Mr. Dan Wolff, for their patience with my Saamish *jojka* recordings and their critique of my manuscript many years later. Another American, Mr. Tim Senften, has come to rest in Jokkmokk, where we bumped into each other, to our mutual delight. Throughout my field work, he provided me with a dark room and the benefit of his professional photographic advice to copy old pictures for use in my research.

My sojourn at the desk in Uppsala has been brightened by the occasional company of Mr. Lars Walkeapää, a former Tuorpon herder, who is now living in Stockholm. He is himself involved in research into old

Swedish Saami migrations into Norway, and his knowledge of herding affairs, especially from his own experiences in Tuorpon, have stood me in good stead when I have been far from the field.

In Jokkmokk, I have many friends who have helped me in various ways, besides the active herders. I cannot name them all but trust that they will find something of themselves in the book and accept my appreciation. I must mention, however, Henrik and Susanna Kuhmunen, Lars and Astrid Pirak, "Suorva-Lasse" (Sven Larsson), Amanda and John Andersson and the inhabitants of Lillselet and Berghem. Besides these individuals, the Saamish Folk High School in Jokkmokk has shown me great hospitality.

With all the financial backing in the world, I could never have lived in Sweden without the Mära. In Jokkmokk, they have given me a true home. Without them, I could never have been more than a stranger passing through Lapland. It was through the efforts of both Johan and Gunborg that I came in contact with the Jokkmokk Saamis and found a place with the Tuorpon herders, with whom Johan grew up. Gunborg has not simply been another piece in the jigsaw puzzle of people who have contributed to this effort. More than anyone else, she has been the key-piece which has helped to bring the other pieces together. Johan straddles two worlds. No one could better help an outsider toward an appreciation and knowledge of Saamish culture and life in the north. It may surprise them to learn this, but the Mära children, Gunnlög, Annika, David and Gunilla, have increased my ability to work by allowing me to play.

This book can be viewed as an expression of gratitude to the Tuorpon herders for my life with them. I hope that in some way it will help them. The Parffas and the Henrik and Birgitt Blind family especially have opened their homes to me in the mountains. Through the Tuorpon herders, I have come to find home everywhere in these mountains. My final thanks goes to them all, my friends in the corral, who smiled at my camera and notebooks and then handed me a lasso.

Abbreviations

AB	Aktiebolag	Stock corporation
BD	BD Län	The County of Norrbotten. In Sweden, each county is given an alphabetical code.
cr.	Krona	Crown. The basic unit of the Swedish currency. Currently, one American dollar is equivalent to approximately 4.30 cr.
Dnr	Diarienummer	Chronological record number
DsJo	Departementskrivelse, Jordbruksdepartement	Departmental written report from the Dept. of Agriculture
DsH	Departementskrivelse, Handelsdepartement	Departmental written report from the Dept. of Commerce
JoU	Jordbruksutskottets betänkande	Department of Agriculture committee report
K	Första kammare, andra kam- mare	The Upper and Lower Houses of the Swedish Riksdag (Parliament). Until 1968, the Swedish Parliament had two Houses, designated I K and II K.
KA	Kammararkivet	In 1922 much of the material in the archives of the Crown Lands Judiciary Board (Kammarkollegiet) was transferred to the National Archives (Riksarkivet) in Stockholm and forms the archives known as Kammararkivet within the National Archives.
KB	Kungliga Biblioteket	The Royal Library in Stockholm
LBS	Lantbruksstyrelsen	The National Board of Agriculture
LKAB	Luossavaara – Kiirunavaara Aktiebolag	Sweden's largest mining corporation

M	Motion (sometimes Manuskript)	A motion presented by one of the members of Parliament for the amendment of a bill. When used with reference to a handwritten document in the archives of a library, M is used in the catalogue to indicate manuscript.
MW	megawatt	1,000 kilowatts
MWh	Megawattimme	1,000 kilowatt-hours
Prop.	Proposition	A governmental bill presented to Parliament for scrutiny.
RNL	Rennäringslagen	The Herding Act of 1971, SFS 1971:437
RSV	Riksskatteverket	The National Swedish Tax Board
SFK	Svenska Fjällklubben	The Swedish Mountaineering Club
SFS	Svenska Författningssamling	Swedish Statute-Book
SGU	Sveriges Geologiska Undersökning	Swedish Geological Survey
SIND	Statens Industriverk	The National Industrial Board
SNF	Svenska Naturskyddsföreningen	The Swedish Society for the Protection of Nature
SNV	Statens Naturvårdsverk	The National Environment Protection Board
SOU	Statens Offentliga Utredningar	The Swedish Government Official Reports
SSR	Svenska Samernas Riksförbund	The Swedish Saamis' Parliamentary Organization
STF	Svenska Turistföreningen	The Swedish Touring Club
TWh	terawattimme	one billion kilowatt-hours
ULMA	Uppsala Landsmålsarkiv, now known as Dialekt- och Folkminnesarkivet	The Institute of Dialectology and Folklore Research in Uppsala
UUB	Uppsala Universitetsbibliotek	The Uppsala University Library

Introduction

We now have the beginnings of a general theory of process and change, adaptation and pathology; and in terms of the general theory, we have to reexamine all that we thought we knew about organisms, societies, families, personal relationships, ecological systems, servo-mechanisms, and the like (Bateson, *Naven*, 1958:vii).

Chapter 1

The Saamis

The Saamis or Lapps¹ (also known earlier as *finnar* or *skridfinnar*) are familiar to a broad public throughout the world. An enormous amount of written material has been devoted to them since the time of Tacitus from the first century A.D., and yet most people know little more about them than that they herd reindeer in four countries, Norway, Sweden, Finland and the Soviet Union. Many Swedes have told me that their knowledge of American Indians far exceeds that of their own Saami minority. They are shocked to learn that only a minority within this minority are reindeer herders and that Stockholm hosts Sweden's second highest concentration of Saamis.

Most likely the Saamis came to the Scandinavian region from the east, maybe from around the Ural Mountains. It is not known when they reached Scandinavia or where the specific Saamish culture originated. These issues are still hotly debated. Wiklund (1947:4) suggested that the Saamis had "wintered over" during the last interglacial period along a narrow, ice-free, coastal strip by the North Sea. Like many another people, the Saamis have even been called a lost tribe of Israel. Much of the physical-anthropological work concerned with the Saamis—much of it carried out in Sweden during the period from the last few years of the 19th century to the 1930s—is tainted with prejudice. An institute of human genetics (Rasbiologiska Institutionen, literally the Institution of Race Biology) discussed the threat to the Swedish race and spoke of the Saamis as being of inferior value. Nonetheless, one cannot deny that the Saamis *as a population* demonstrate some special physical characteristics. (Beckman, 1964; Eriksson, A., 1967, 1968). Modern studies of blood types, for example, indicate that the Saamis have undergone a long period of racial isolation. (Beckman, 1959:175-76; cf. Nickul, 1977:xii). On the basis of such genetic studies, biologists have tried to determine the length of time

¹ *Lapp*, which is not a native term, has been replaced almost entirely in Fennoscandia by the indigenous minority's own name for itself: *sámme* or dialect variations thereof. In Swedish the word *same* is used, but this encounters obvious difficulties in English with mispronunciation and confusion with the adjective *same*. Many alternatives have been employed in English: *sámi*, *same*, *sami* and *saami* (cf. Anderson, M., 1978:179). In this study, I shall take the usage suggested by Korhonen (1976): *Saami*, pl. *Saamis*, adj. *Saamish*.

Fig. 1. The Saami settlement area today, as divided between different states (from Rönner, 1960).

the Saamish population must have been relatively isolated. Linguists have studied the degree of deviation of the Saamish language (a Finno-Ugric language) from proto-Finnish, in order to try to determine a date for Saamish separation based on the rate of language change. The hypothetical age of the Saamish population derived by the biologists is much greater than that calculated by the linguists, which suggests that the Saamish language was a later acquisition and replaced an earlier, now lost language (Collinder, 1949:36). It is certain, however, that the Saamish hunters, fishermen and herders inhabited the area long before the Christian era and the formation of the various nation-states (Fig. 1). Poul Simonsen (1959) suggests that the appropriate question to ask is not where the Saamis came from but rather when the various peoples in the north coalesced into Saamis with a Saamish identity.

Collinder (1949:34) classes the Saamish language as belonging to "the western division of the Finno-Ugric branch of the Uralic family". Ruong (1975:202) divides the Saamish language into three basic subgroups: eastern, central and southern Saamish. These so-called dialects are not mutually intelligible. With reference to the dialects within Sweden, it is

Fig. 2. The Jokkmokk parish and area of the Jokkmokk municipal authority.

common practice to utilize a somewhat more refined grid. The central dialect, which is spoken from the Skellefte River in the south to Enare Lake in Finland in the north and east, is further divided. One frequently speaks of northern Saamish, which refers to that major variety of central Saamish spoken in Karesuando and throughout northern Norway and Sweden, and Lule Saamish, which is spoken throughout the Jokkmokk parish (Fig. 2). Mutual intelligibility even between northern Saamish and Lule Saamish is a difficult matter. Today, all the Saamis in Sweden can speak Swedish and, in the northernmost areas especially, a knowledge of Finnish is also common.

Not long ago, the Saamish language was suppressed in Sweden. It was not to be spoken in school, even on the playground, except in specially designated schools for nomads. Recently, government policy has altered on this score. Largely due to new laws designed to cope with the great influx of immigrants to Sweden, the Saamis have been given increased support for the maintenance of their language. Books, newspapers and teaching materials are printed in Saamish. There are Saamish radio programs. A number of excellent researchers have done remarkable work in preserving, developing, analyzing and coordinating the different dialects of Saamish.

It has also been common to categorize the Saamish people according to occupation or ecological niche. Thus we have mountain Saamis, forest

Saamis, herding Saamis and fishing Saamis, though these seemingly clear distinctions can be most misleading. Categories overlap and legal distinctions have later been superimposed upon ecological variables, so that, for example, an official forest herder, especially in the past, may have in fact practiced a mountain herding form all the year round. With the evolution of the different nation-states, the Saamis were divided according to international boundaries. Indeed, it is hard to think of a people who have had more lines of division imposed on them from without, and it is therefore important to try to grasp the reality underneath an often clumsy terminology or inappropriate administrative ideal.

The most commonly cited figures given for the Saamish population today claim that there are about 35,000 Saamis, of whom 20,000 are in Norway, 10,000 in Sweden, 3,000 in Finland and 2,000 in the Soviet Union (for example, Ruong, 1975:11). It is very likely that the numbers should be considerably higher. The size of the figures, however, depends on the definition of Saami used, and this presents a difficult problem.

Like other circumpolar peoples, the Saamis practiced a form of shamanism. With the help of a drum (Manker, 1950), the Saamish *noai'di* or shaman could fall into a trance, whereupon his spirit might assume the form of a bird and fly to the upper world or as a fish swim to the lower world (Schefferus, 1704 ed.). Animals and even places, mountains and lakes had spirits. There was also a wide gallery of gods and a number of complex sacrificial rites (Bäckman, 1975; Mebius, 1968).

Many components from Nordic (Germanic) religion have been found in Saamish religion and ritual and, as usual, difficulty arises at times in attempting to discern whether a particular element has been borrowed from other Scandinavian peoples or is of older circumpolar origin. Attempts to convert the Saamis to Christianity began as early as around 1050 A.D. In the 14th century the Saami woman Margareta sought help from the rich and influential in the south for the conversion of her kinsmen. The Swedish Queen Margareta wrote a letter in Latin to all Saamis, admonishing them to give up their pagan ways. By the mid 1500s, priests were active along the northern coast of the Baltic. Large-scale missionary work did not begin until the 17th century, however. Shamans were persecuted and the drums were burned. The Crown's missionary campaign went hand in hand with other measures to bring the Saamis under central control for trading and tax-collecting purposes. Missionary policy was contained within an overall colonial program. Churches were built in central, inland locations, and the Saamis were ordered to attend at certain times or at least a minimal number of services (P. Laestadius, 1928:I, 117). Frequently taxes were collected at the same time. Today the Saamis are as Christian as the Swedes at least. Still shamanic elements linger, and there is reason to believe that shamanism was actively practiced in secret long after the date that the Church chooses to acknowledge.

Ever since Pehrson's (1957) classic analysis of social relations in the

Könskämä Village¹ in northern Sweden, it has been common to designate the Saamis as having a bilateral kinship structure. Pehrson himself (1957:17) suggests that, for the Saamis, bilateral and lineal organizations are correlated with extensive and intensive reindeer-herding respectively, as seems to be the case with other reindeer-herding peoples. It would be interesting to seek an explanation for this correlation, to demonstrate possibly how a looser (extensive), herding system demands a more flexible (bilateral), kinship system. However, I believe that other, more dominant influences, such as greater contact with Swedish society and mores, have obscured the possible effects of herding-form transition alone on kinship structure.

Sameätnam or Saami land (Lapland) provides the Saamis with a great diversity of ecological niches. The Saami have survived on the Arctic and sub-Arctic taiga and tundra largely through the use of a broad base of resource exploitation, of which reindeer-herding was and is but a part. The Saamis have fished, herded, hunted wild reindeer, traded, trapped, etc., and some have done all of these together in seasonal succession. Today Saamis can be found in any walk of life. The course of development of traditional Saamish resource utilization can be characterized as going from a multi-faceted economy toward a so-called "monoculture" (Ruong, 1975:79), in which for each individual one form of livelihood, such as reindeer management, becomes dominant. Later, even within each particular form of livelihood, one variable, such as meat production, is maximized.

Of the Saamis in Sweden today, only about 2,500 are directly engaged in reindeer management or to some degree dependent upon it. There are only about 900 active herders. Yet, as noted, reindeer management must in many ways be regarded as the cradle of Saamish culture, an essential part of it, and a part which, if lost, would pull the foundation from under this small minority.

The Saami herders in Sweden are divided into different Villages, today known as Saamebys (in Swedish, *sameby*) (see Fig. 3). Currently there are 52 Saamebys (the number varies from time to time) divided into three basic types: (1) mountain Saamebys with long, narrow, grazing lands running from the Norwegian—Swedish border toward the southeast, (2) forest Saamebys, with a territory smaller and rounder in shape, situated in the lowlands and mainly east of the Agricultural Line (see p. 75) but west of the Lappmark Line (see p. 75), and (3) concession Saamebys in the Torneå area and east of the Lappmark Line. These concession Saamebys are similar to the forest Saamebys but are operative only on a ten-year,

¹ Not wishing to make a point of distinguishing any one particular legal period from another, I have used the term "Village" to indicate the social group of herders and the specific grazing lands they utilize. The word "Village" is the closest approximation to the Swedish word *by*, as in "Lappby" and later in "Saameby".

Fig. 3. Map from Manker's book, *De svenska fjällapparna* (The Swedish Mountain Saamis).

renewable lease from the State. The total area of land open to reindeer-herding in Sweden is about 240,000 km², but because of the natural impediments, lakes, high mountains and other areas without grazing, the net area of usable pasture land for herding has been estimated at 137,000 km².

In a court case, the Skattefjäll Case, currently before the Swedish Supreme Court, the Saamis are contesting State legislation restraining their rights to land and water. The outcome of this challenge is vitally important for the Saamish minority. In the wake of the Skattefjäll Case, I believe that the time is not distant when Sweden will once again confront the task of composing a new Reindeer Herding Act to replace that of 1971 and that then it will be necessary for many of the points raised in this study to be taken up for discussion.

Chapter 2

Plan and Field Methodology

This study concerns the changing pattern of reindeer-management methods in the Tuorpon mountain-Saami Village (Lappby, in 1971 restructured into Saameby) in the Jokkmokk district of Sweden. Its most general purpose is to uncover the reasons for and the direction of herding-form evolution in Sweden, as exemplified by Tuorpon. The approach of this work is holistic, for the evolution of herding form is determined by an interrelated totality which includes a wide spectrum of relations, ranging from those between grazing and reindeer, reindeer and herders, herding Saamis and Saamish culture to the Saamish – Swedish colonial encounter.

There are a number of specific questions to be discussed within this general framework, as follows. How in fact should we understand the so-called different herding types, intensive and extensive? What are the determinants which have been active in the progression from intensive to extensive herd management? What were the herding effects of northern-Saami relocation to Tuorpon? What is rational management, why and how have its principles developed? What factors stimulate a transition toward rational herd management and what factors inhibit such a transition in Tuorpon? None of these questions can be answered without reference to the others. Through application of the concepts of Gregory Bateson and others, such specific questions can be tied together within a larger analysis of stability and change.

This work is divided into an introduction and three major parts. The introduction presents a brief orientation as to subject, time and place. The concepts, terms and sketch of basic-determinant relations in herd management needed for an understanding of the following parts are provided in the introduction. Part I contains a diachronic micro-analysis of Tuorpon herd management. Few attempts have been made to diagnose the herding-form changes of a specific area step by step over a broad period of time. In Part II, I depart from the micro-analysis of one particular Village to investigate Saamish – Swedish¹ relations and to discuss the evolution of the Swedish rational-herding program in general. Once the basic structure of current Saamish – Swedish interaction and herding

¹ "Swede" is often used in opposition to "Saami", though technically all Saamis in Sweden are Swedish citizens.

control has been derived and the factions within these larger groups have been considered, we can return to Tuorpon in Part III. In Part III, the focus is again on Tuorpon in particular. The contributions of Parts I and II are brought together so as to explain the most recent restructuring of herding-group organization and alterations in herding form in Tuorpon. The differential compliance with and resistance to various aspects of Sweden's official rationalization ideology on the part of Tuorpon's herding groups become clear.

A closer look at the subject matter of the three major parts composing this study and an explanation of how it is thought they should complement each other will be helpful here. In Part I, I shall trace Tuorpon herd-management transitions from the rise of intensive herding through extensive development and on into the modern, so-called rational period. Terminology, therefore, presents a major point of interest in such a study. Terms such as "intensive" and "extensive", when referring to herding, have been used in various ways over the years. I have found it necessary to fix definitions for these terms from the start (see p. 34), in such a way that they can be used diachronically. The reader who desires a detailed account of the different uses of these terms, their historical development, the conceptual problems and a justification for my choice of definition is referred to the Appendix.

The first chapter of Part I (Chapter 7) will present a brief explanation of the evolution of Tuorpon as a mountain-Saami, herding Village with defined boundaries and a herding system which is becoming increasingly distinct from that of its forest-Saami neighbors. Three major points will be dealt with: the rise of the specialized herding livelihood, intensive (milk-ing) herding and whole-nomadism—the most essential ingredients of the classic, Jokkmokk, intensive-herding form.

Chapter 8 will set the stage for the coming "extensive revolution", a term introduced by Hultblad (1968). This chapter will present Tuorpon as a stabilized territory around the turn of the century before the arrival of the first northern Saami in the early years of the present century. Major Tuorpon grazing zones will be considered in relation to the major Tuorpon herding groups at that time. The early Jokkmokk herders will be introduced with their family relations and contemporary group membership.

Chapters 9–14 will trace the history of Tuorpon herd-management transitions from 1910 to 1970 in considerable detail. Many factors combine in the choosing of the periods for most detailed analysis. Most importantly, the period around the turn of the century marks the beginning of the great transition in herding form in the Jokkmokk district, the trend toward extensivity. A study which seeks an understanding of extensification rather than a description of it must analyze carefully the transition from intensive to extensive forms. The period of my most active field work, 1973–77, found the herding forms of Tuorpon greatly di-

vided, and one of the groups very far toward the extensive limit of the intensive—extensive continuum. Within these limitations of time and place, there is every opportunity to observe the workings of major herding-determinant relations and with them to give a good explanation of the extensification process in Tuorpon. This in turn permits us to understand and confront the question of the transition to “rational herding”.

An analysis of the extensification process in Tuorpon suits admirably the requirements of the questions proposed concerning the effects of northern-Saami relocation and the development of rational-herding ideals. Tuorpon herders demonstrate great differences and changes in herd management, and it is precisely the changes and differences in form which enable us to realize the causal determination of certain factors. There have traditionally been two or three major herding groups in Tuorpon, and their similarities and marked differences give a unique opportunity to observe the working of certain variables against a background largely similar for both groups. To give an explanation of the differences between these groups has been one of the guiding purposes of this study. Part I Ends with a chapter concerning land encroachment.

Part II concerns primarily the current herding ideals and the structure of modern herding law. Few studies, as yet, have been able to confront the monumental restructuring and redirecting of herding under the rational-herding program resulting in and caused by (via feedback reinforcement) the new Herding Act of 1971.

In the opening chapter of Part II, I hope to trace the essential premises and logical problems which have together led to the Swedish rationalization policy. Current herding ideals must be understood as part of a long, historical development which has passed on, unresolved, an imbalance in the complementary tendencies toward self-assertiveness and systemic integration (see p. 20) from the time of the initial, colonial encounter. I hold that the rationalization program and the Herding Act of 1971 are the logical culmination (to date) of premises which were operative when the Saamis were forcibly given a new, sub-system status with respect to the larger, inclusive organism, the Swedish Kingdom.

In the second chapter (Chapter 17), special attention is directed to § 1 of the Herding Act of 1971 (retained from the earlier act of 1928), which restricts herding eligibility (reduction of consumer category). The following chapter seeks to describe various rational-herding methods and to explain the reasoning behind them. In Chapter 19, attention is focused upon § 9 of the Herding Act of 1971. In this section the resource-consumption abilities of the herding category are heavily checked. Chapter 20 explains the State's ideal form for the modern Saameby and exposes areas of confusion and dilemma. The closing chapter takes up the difficult topic of Saamish identity management and minority struggle. Rather than even attempt an exhaustive, theoretical treatment of these issues, I have sought

to illustrate by a number of concrete examples, relevant to the Jokkmokk area, the forms of alliance and conflict between various interest groups within the larger categories of Saami and Swede. Such topics can be quite inflammatory and, in order to minimize misrepresentation, I have chosen examples largely from my own field observations and/or based upon debates carried on in the Swedish Saamis' own newspaper, *Samefolket*.

Part III, which returns us to Tuorpon in particular with the benefit of the legal background of Part II, begins with a chapter relating the ecological, legal and economic web of determinants to Tuorpon, in order to account both for the creation of a third herding group and for the efforts to re-intensify herding methods. The different reactions of Tuorpon's herding groups to the extremely variable winters of 1973–77 will be examined. After accounting for the present state of affairs, I hazard some speculations as to future herding developments. This chapter is followed by one which explores the economic and cultural reasons for the resistance to the government's rational-herding ideals in Tuorpon. Finally, in a summary and analysis, a dynamic model for intensive – extensive oscillations and overall progression towards rationalization is proposed, in keeping with the "economics of flexibility".

I spent four years, 1973–77, with the members of Tuorpon Village, participating in their work as much as possible and learning to help as an apprentice herder. Even since this time, my contacts with Tuorpon have been close, and I have made repeated visits to the Tuorpon area. I am fortunate in that Jokkmokk is only a day's journey from my desk. Tuorpon is the Saameby I am best acquainted with and is therefore the logical choice for my work.

As a herding participant, I have gathered, lassoed and separated reindeer and migrated with them. I cannot pretend to compare in skill to a herder in any of these activities, but, after some time, even the help I could offer was often actively enlisted. Where I could not be of positive value, I believe at least that I have succeeded in not being of negative value. In the herder's life, there is no easy middle ground between these poles, and simply to be along without being a burden can be very demanding. I have never forced my company upon any herder or bought my way through a migration. Nor have I allowed my notebooks or camera to exclude me from any work in which I might lend a hand. During the five summers I have spent with the herders in Staloluokta (Stalo), I have been privileged to have the use of a *káta* belonging to Nils Tomas Parffa. Like many herders, I have lived in Jokkmokk during the winter months. My winter home has been with the Mäarak family. Pastor Johan Mäarak grew up in Lillselet and is of old Tuorpon-Lapp ancestry. Through Johan and Gunborg Mäarak, I was able to make a wide range of valuable contacts. Although I have made a point of trying to cover herding developments in Tuorpon from the perspective of each of the different groups and families, my herding bonds have been most strong with the Viri Group (the mem-

bers of which winter in Stenträsk). Regrettably, not all herders have been shown the same amount of attention in this study. Still, all Tuorpon herders have been my comrades and my teachers, as have many Sirkas, Jákkákaska and Luokta Mavas herders, as well as many non-herding Saamis and Swedes in the area.

My perspective on Tuorpon has also been influenced by a brief encounter with herding in an entirely different area. In 1976, I was fortunate enough to be able to accompany a Norwegian-Saami family (the Mikel Haetta family) on both spring and autumn migrations across the Norwegian Finnmark, to and from the Öksfjord peninsula. The herding form, topography, herd-tameness grade, migration techniques, etc. which I observed in Norway have helped me to realize the enormous scope of diversity in the variables I have been dealing with in Tuorpon. Some relations which I thought natural and fixed turned out to be arbitrary.

It would have been impossible to make sense of the intricacies of past herding developments without a personal experience of the Tuorpon grazing land. Shared work situations, migrations and fireside chats gave ample opportunity for discussions of reindeer management in both past and present. Such discussions were by no means always provoked by the ethnographer. I had merely to listen and gradually to take part. To a great extent, therefore, questions and discussions grew from natural circumstances. When, after a few years, the information that interested me especially became well known to both the herders and myself, conversations could be instigated more directly, often by the herders. During my last winter in Jokkmokk, I was able to record a number of interviews with herders on tape.

The old pictures and records of meetings between officials and herders of earlier generations which I could obtain from museums and libraries were greatly appreciated by the herders and sparked off endless memories. The herders themselves often have a unique store of private pictures. I have been able to copy many of these and, when permitted, have used such pictures to stimulate and check information from other herders. In showing copies of old records to the herders, I have found that these recorded reports give what the herders claim to be slanted views. Fascinating information lies hidden between the lines. The herders are often able to put such documents in their proper context, and I have found it of the greatest interest to get the herders' own side of the official story.

Of course, for any single herding event, there may be as many versions of the story as there are herders. It is only after a long time that one can begin to assemble the pieces and regard each version with a critical eye, knowing the informant's situation, social relations and personal interests. Every piece of information divulged is also a test of diplomacy; this is part of the game. Anyone in this society, and especially anyone who was originally an outsider, must know enough not to be duped. As an audience, one must command honesty and be well attuned to meta-commu-

nication, while at the same time one must demonstrate that one is capable of handling sensitive information carefully.

A great deal has been written about reindeer-herding, and some of the literature, even extending back many years, concerns Tuorpon specifically. There is also a wealth of unpublished material in the archives of the herding authorities and museums. Frequently the reports of travelers and researchers have proved to be grossly oversimplified, if not positively wrong and contradictory. Of course, one cannot ignore these data, but it is preferable to obtain information directly from the first-hand sources, the herders. It is still possible to find informants who can recall events that occurred around 1910. For an account of Tuorpon's history before that time, I thankfully defer to other sources, notably Filip Hultblad's (1968) most thorough presentation.

With the aid of church registers, reindeer-count lists and the herders' own accounts, I have compiled rough family charts of the people actively involved in herding in Tuorpon from 1910 to the present day. The purpose of these charts, however, is not to produce lengthy genealogies as ends in themselves. It is vitally important to grasp each herder's social niche, in order to understand his choice of herding partners and his group (and land) loyalties. As this study is to a great extent a diachronic micro-study, I have introduced the early Tuorpon herders and then followed up their families, adding new charts with each wave of Karesuando herders relocated to Tuorpon, so that, at each point, Tuorpon's membership is accounted for. With these charts, the reader can identify the social background of each herder and note the profound importance this background has for herding development.

The basic source material for Part II is the vast number of government investigations (SOU), Bills (Prop.), reports of committees (*utskott*, such as JoU, Jordbruksutskottet), Parliamentary motions (M) and official legal texts (SFS) concerning reindeer management and the Saamis. I have discussed herding law in general and Tuorpon's situation with various members of the Swedish Reindeer Herding Administration. A local office of this administration is to be found in Jokkmokk, but I have also conferred with herding authorities in both Luleå and Umeå, where larger, central offices are located. I have obtained valuable information and insights from the Saamis' ombudsman Tomas Cramér.

I should point out that I am neither a Saami nor a Swede. Had I been the one or the other, rather than an American, my attempts to achieve an unbiased assessment of the situation and its problems could have been severely hampered. On the other hand, without the expertise of the Saamish herder, many areas of understanding have been closed to me. And, while I have been privileged to be raised speaking Swedish, this can never compensate my inability to speak Saamish. Similarly, had I grown up in Sweden, many of my difficulties in "learning the ropes" of the Swedish bureaucracy might have been avoided. Much of my research into State

documents and my contacts with administrative authorities would have been simplified. My position has been a help and a hindrance. Undoubtedly I have made errors and oversights, and I hope future researchers will correct them for me. Saamish researchers especially have much to contribute to this field.

Chapter 3

Epistemology

Early studies of Saamish pastoral nomadism had little choice in the matter of regarding form before process. There was little on which to build the basis of diachronic analysis, and the explosive changes triggered by contact with the colonists, the anthropologist's society, were relatively recent and unrecognized. Today, by contrast, changes occur so quickly to traits once considered invariant to the culture that a study of the process and models of determinant analysis is obviously called for. The study of process before form increases analytic power greatly when applied to reindeer-herd management and supplies a much-needed counter-weight to the static-models approach so commonly applied to herding change in Scandinavia, where the explanation of form change has frequently been regarded mainly as a matter of description of types and diffusion.

The relatively recent development of cybernetics and systems analysis has increased greatly our ability to understand feedback loops and processes and to see the similarities in circuit relations throughout nature, in the animal and the machine (Wiener, 1948). Gregory Bateson, a noted anthropologist, has applied a systemic approach to fields as diverse as the study of primitive tribal ritual, art, schizophrenia, dolphin communication and biological mutation. He has been a pioneer in the application of holistic principles to the study of culture, and it is to him that the theoretical approach of this present work is most immediately indebted.

The purpose of this chapter is to introduce certain basic concepts of what might be termed systemic holism and then to orient the study of herd management to them. The three key concepts I shall discuss here are hierarchical systems, the "economics of flexibility" and the relations of systems and structure. As will be seen, none of these three principal themes can stand alone, but each necessarily implies the others. When the three are brought together, what emerges is a scientific approach and a philosophical framework of staggering proportions.

Hierarchical systems

It is important to understand precisely what Bateson means by "organism", "cybernetic system" and "unit of survival", all of which he equates

with mind. In using the word “system” in this study, I (following Bateson) mean *self-correcting* systems, so that any change in the system is *information-bearing* for it. There is an essential difference between forces and impacts and their added effects, on the one hand, and the recording of the *difference* which such forces and impacts may make to a living organism, self-corrective system or unit of consciousness, on the other hand (Bateson, 1972:456).

According to the Second Law of Thermodynamics, the universe of matter is always moving from a less probable to a more probable state, i.e. its energy is always randomizing, dissipating or running down. In the case of living matter, system or mind, however, the situation is very much the reverse; the more developed the circuitry and ability to store energy of a system, the more open it is to information and the greater is its power to organize, energize and act in a self-corrective manner. In fact, information can be defined as negative entropy or negentropy. All such systems are *purposeful*. A biological organism is survival-oriented. A furnace with a thermostat is oriented to maintain a certain temperature. In such a system, the reaction to any stimulus will depend largely upon the structure of circuit loops and the energy stored within the system. Although one might speak in terms of the mind – matter dichotomy, the above observations in no way imply that such a distinction is in the end absolute. On the contrary, the Batesonian philosophy would argue their necessary unity (Bateson, 1979), despite all manner of organization differences in degree and logical type.

This is a situation quite different from that obtaining in the physics of particles in motion. When one ball hits another, its force is transferred directly and its effect does not rely on the second ball’s “learning” or purposefulness. Should the same ball be hit by yet another ball moving in a different direction, its effect will be simply additive to the motion already existent. Should one kick a dog, however, the physical principles of force and motion will be of little help in determining the dog’s subsequent motion and behavior. The kick transfers more than just energy to the dog; it also transfers information and causes an effect which is not at all simply additive (Bateson, 1972:481).¹

Such self-corrective or, in other words, trial-and-error systems depend upon *closed-circuit* structures, though these can be highly complex.

When an operator acts on a set of operands it may happen that the set of transforms obtained contains no element that is not already present in the set of operands, i.e. the transformation creates no new element . . . When this occurs, the set of operands is *closed* under the transformation. (Ashby, 1976:11.)

¹ Various proponents of reductionistic theory are constantly trying to explain away the informational exchange on higher hierarchical levels as “nothing but” lower-level responses. Taken to an extreme, reductionist thinking would explain the dog’s behaviour by the physics of his atoms alone.

Of course, no living organism or cybernetic system can forever or fully maintain the struggle for such closure. In the end, they are always *open* to the larger, hierarchical system. The homeostatic mechanisms break down; organisms grow old and die; furnaces run out of fuel or wear out their parts. We eat food and excrete waste. But it is the temporary effect of such homeostatic relations to establish closure, to bear information, to define a temporary or partial independence, to create an identity, to draw a boundary and to form a purpose which constitutes a unit of survival and thus a unit of mind. Bateson gives the following formal exposition of the *minimal* characteristics of a system and thus a unit of mind:

- (1) The system shall operate with and upon *differences*.
- (2) The system shall consist of closed loops or networks of pathways along which differences and transforms of differences shall be transmitted. (What is transmitted on a neuron is not an impulse, it is news of a difference.)
- (3) Many events within the system shall be energized by the respondent part rather than by impact from the triggering part.
- (4) The system shall show self-correctiveness in the direction of homeostasis and/or in the direction of runaway. Self-correctiveness implies trial and error. (Bateson, 1972:482.)

Not only is the living world and Nature in general composed of such self-corrective systems, but these systems are each of them enmeshed in a larger hierarchy of systems (actually many such hierarchies at once). Each system of relative autonomy in its own right is at the same time a part or sub-system of a larger, encompassing system. The terms "system" and "sub-system" become relative, for in fact each is both at the same time. The hierarchical relation of systems is analogous to the branching of an infinitely large tree. Systems can be related as twig to twig, twig to branch, twig to trunk, etc. of one tree as well as intertwined with each other, as is the foliage of many different trees in a forest (Koestler, 1978:23 ff.). Koestler uses the term "holon" to indicate the system – sub-system in its dual nature:

... each member of this hierarchy, on whatever level, is a sub-whole or *holon* in its own right—a stable, integrated structure, equipped with self-regulatory devices and enjoying a considerable degree of *autonomy* or self-government. Cells, muscles, nerves, organs, all have their intrinsic rhythms and patterns of activity, often manifested spontaneously without external stimulation; they are subordinated as *parts* to the higher centres in the hierarchy, but at the same time function as quasi-autonomous *wholes*. They are Janus-faced. The face turned upward, toward the higher levels, is that of a dependent part; the face turned downward, towards its own constituents, is that of a whole of remarkable self-sufficiency. (Koestler, 1978:27.)

The term "hierarchy" is often used to indicate a ranking order of individual entities frequently even of the same logical type. In this context, however, the term indicates the infinite expansion and regression of concentrically ordered units of different logical types. One might say that the holon at one level encompasses those below it and certainly cannot

survive independently of its constituents. At the same time, the constituents of a holon are dependent upon its survival for their own survival. The holon must assert itself to survive and to varying degrees be able to orchestrate the interactions of its constituents, but it must also in turn show the proper humility towards *its* encompassing whole. This self-assertive tendency and integrative or self-transcending tendency of each holon must be more or less balanced. If the balance is tilted, then survival is jeopardized (Koestler, 1978:57 f.). The manner in which such balance is maintained or the consequences if it is not maintained bring us to the next major theme to be presented here.

The “economics of flexibility”

A study which relates the rate of heat production of a furnace to the temperature in a room without considering the effects of a thermostat will obviously be inadequate. A larger, encompassing system dependent upon the information from such a study would eventually fail. If, however, the room were as large as a football stadium, the rate of temperature rise very slight, and the thermostat set at a very high figure, then the feedback loop of the thermostat might be ignored *almost* indefinitely. But in time, even in this case, the thermostat would come into play and be determinative for the furnace and the larger system. Thus there are long and short periods before feedback loops become determinative, depending upon how much flexibility the system has left at any time T_i , where *flexibility is defined as the range of variation within which a system can maintain itself in a state of relative homeostasis*.

Within the critical limits for a system, there is a certain amount of flexibility, which changes in response to numerous variables. But, in the same way, the state of each of these other component variables exists within a range of flexibility determined by its own critical limits. Therefore, the range of flexibility for any system owes its breadth to the intersecting flexibility breadths of all of its component parts. Any change in a component variable will have an effect (though this effect may be negligible in some cases) on the range of flexibility of the larger system. The model which emerges for any system shows the same kind of relation to changes in its components as does the evolutionary history of a species of animal in relation to environmental and genetic change. As Bateson has pointed out, the cumulative effects of alterations in systemic determinants may be more than simply “additive” and may actually be “multiplicative”.

But the somatic price of a given change must depend, not absolutely upon the change in question, but upon the range of somatic flexibility available to the organism at the given time. This range, in turn, will depend upon how much of the organism’s somatic flexibility is already being used up in adjusting to other

mutations or environmental changes. We face an *economics* of flexibility which, like any other economics, will become determinative for the course of evolution if and only if the organism is operating close to the limits set by this economics.

However, this economics of somatic flexibility will differ in one important respect from the more familiar economics of money or available energy. In these latter, each new expenditure can simply be *added* to the preceding expenditures and the economics becomes coercive when the additive total approaches the limit of the budget. In contrast, the combined effect of multiple changes, each of which exacts a price in the soma, will be *multiplicative*. This point may be stated as follows: Let S be the finite set of all possible living states of the organism. Within S , let s_1 be the smaller set of all states compatible with a given mutation (m_1), and let s_2 be the set of states compatible with a second mutation (m_2). It follows that the two mutations in combination will limit the organism to the logical product of s_1 and s_2 , i.e. to that usually smaller subset of states which is composed only of members common to both s_1 and s_2 . In this way, each successive mutation (or other genotypic change) will fractionate the possibilities for the somatic adjustment of the organism. And, should the one mutation require some somatic change, the exact opposite of a change required by the other, the possibilities for somatic adjustment may immediately be reduced to zero. (Bateson, 1972:349—350.)

Regardless of the kind of system involved—biological organism, social group or machine—certain of its behavioral principles can be generalized for all. Remarkably enough, yet naturally so, these principles apply throughout the living world and the world of “mechanical”, trial-and-error, cybernetic systems. Basically, two kinds of principles are involved, those of stability and those of evolution.

Just as the method used for the growth and replication of the DNA molecule is essentially the same throughout all cells on earth, despite the evolution of all manner of complex, cellular organisms with intricate modes of growth and replication of their own, so there may exist certain, general, underlying principles at the root of all self-corrective-system formation and change, no matter how elaborate. The ensuing complexity may have evolved to preserve certain, more primary or dominant relationships intact.

Basically these systems are always *conservative* of something. As in the engine with a governor, the fuel supply is changed to conserve—to keep constant—the speed of the flywheel, so always in such systems changes occur to conserve the truth of some descriptive statement, some component of the *status quo*. Wallace saw the matter correctly, and natural selection acts primarily to keep the species unvarying; but it may act at higher levels to keep constant that complex variable which we call “survival”. (Bateson, 1972:429.)

But why must conflicts develop between interrelated systems, between parts and whole or between the flexibility ranges of different mutations? Why cannot a grand equilibrium be established, so that the needs of every holon are met without conflict? The constant change and evolution of systems demanded by survival stem from the precarious balance between the assertive and integrative aspects of each holon. Where there is a vast range of “unoccupied” flexibility, that is, where there is an unused niche or unutilized resource, it makes excellent survival sense for a holon to

assert itself and move into this "room". It will have no good reason to stop its assertiveness until required to do so by the larger, encompassing whole of which it is a part. An animal population, for example, might go into reproductive "runaway", but, like the rising temperature in a huge room with a thermostat, eventually the flexibility range will be "consumed" and some kind of homeostatic mechanism will make itself felt to curb population runaway. In short, a holon cannot help but upset its assertive—integrative balance when in the short run there seems to be no good reason or demand to curb self-assertiveness.

If flexibility "room" is available (and, as we shall see, the structural change or creativity of any holon can open up ever-new realms of flexibility), it will inevitably be consumed, even if its consumption does not seem absolutely necessary at first—unless expansion of this sort is controlled by higher-order, regulatory principles encompassing the lower sub-sets for both its and their own equilibrium requirements. The regulating of DNA replication by the cell is one such example of raised, systemic self-regulation. The Club of Rome's program (Meadows, 1974) for world equilibrium outlined in *The Limits to Growth* is another effort to raise systemic consciousness, but on the planetary level. While such new consciousnesses overcome the over-assertiveness of their sub-systems, the same potential problem accompanies such self-correctiveness to this higher level.

Once a holon's assertiveness has led to the overcrowding of its flexibility room or near-elimination of its flexibility "cake", that is, when "it" or rather each member of its population is approaching its critical limit, then survival demands a new strategy. The holon now *needs* greater flexibility and must demonstrate its integrative ability. The very evolution of Nature occurs along a successive spiral of expansion *into* flexibility room, creating new needs which demand adaptation by a corresponding increase or readjustment *of* flexibility room, followed once more by expansion into the newly created flexibility etc. For long-term survival, the trick is to have your cake and eat its regenerative capacity too, that is, to maintain adequate flexibility room and guard against expansion into it. One can live on the regenerative produce of a resource in equilibrium as long as one restrains the consumption of the capital resource. As soon as such a restraint or homeostatic mechanism has evolved, a new unit of survival or identity has been born. It is entirely possible for people to raise their agricultural production and decrease starvation by regulating *their* population. But, in so doing, a homeostatic mechanism has been established for the survival of a higher-order entity, a society, inclusive of the lower-order individual's survival.

As Bateson has suggestively expressed it (1972:483), the unit of evolutionary survival turns out to be identical with the unit of "mind". And, just as species together form larger *eco-systems*, so also is mind concentric or hierarchical.

The individual mind is immanent, but not only in the body. It is immanent also in the pathways and messages outside the body; and there is a larger mind of which the individual mind is only a sub-system. This larger mind is comparable to God and is perhaps what some people mean by "God", but it is still immanent in the total interconnected social system and planetary ecology. (Bateson, 1972:461.)

Eventually, be it in the human form or in some other, consciousness must take the step of limiting its own success in surviving—paradoxically, for the sake of survival. In taking this step, consciousness has not only survived but has also advanced, if, in so doing, it has proceeded with systemic "love" for the survival of lower-order mind, all sub-systems as well. With the tragedy of the commons already fully extant in many relations, and numerous systems already irrevocably pitted against each other for survival close to their limits of flexibility, the ecology of mind presents an immense moral dilemma.

This problem of determining the "fair" balance of assertive—integrative relations amongst the various sub-systems and between the various systemic levels permeates the entire development of Swedish reindeer-herding law. It is in fact the essential problem for the survival of any organism. The problem of balance does not simply disappear because an organism refuses or is unable to confront it "intentionally". In that case, the establishment of the *status quo* is simply left to other, more dominant, homeostatic mechanisms. The hierarchically higher systems, for the sake of their own survival, must make (if necessary) regulations compatible with, *not* necessarily optimal for, each of its sub-systems. It might even be argued that such regulation is the evolved purpose of the larger system. But once higher-order homeostats have evolved, forming more encompassing systems, the survival of these higher-order systems can demand evolutionary change from their lower-order constituents.

It remains for me in this section to discuss the manner in which a system can survive the decrease of its flexibility "room". In what way can it adapt to survive the pressures of an increasingly stressful environment? Obviously, an organism with a very narrow flexibility range must have lots of "room" within that range—a wide area providing the exact, perfect conditions or a huge availability of specific food resource—if it is to survive. Once its self-assertiveness has consumed this room, then its narrow flexibility range makes it extremely vulnerable. The organism must widen or re-adjust its flexibility range; it *needs to renormalize*.

Moreover, all major adaptive changes in any ecosystem tend to trade short-term survival value for long-term counter-adaptive value so long as the adaptation continues to operate within the original "phase-space" (i.e., a spectrum of multiple and interdependent variables) which allowed the original change. As long as the adaptation is an extreme and not a mean, that is, as long as the phase-space in which it occurred has not been shifted or *renormalized*, the adaptive and behavioral flexibility of the system is reduced. (Wilden, 1972:205.)

The term "need" proves quite slippery because of its use in different ways. If, for instance, I "need" food (ordinary discourse), then I have got to have

it, even at the possible expense of other sub-systems who might need it more. In the technical sense used here, as in the need for flexibility expansion, however, nutritive "need" would entail an expansion of one's gastronomic flexibility. My "need" would be to learn to eat different kinds of food or to go without for long periods of time. My species would need to evolve another kind of stomach (technical discourse). In the one sense, "need" signifies the pressure to increase consumption of a resource to whose consumption the organism in question is already adapted. In the other sense, "need" is the pressure to adapt to new resources (or to the lack of old resources), to consume resources of a new, qualitative nature, precisely because the quantity of the old resource has become depleted through the commons dilemma. The two concepts, however, are intimately related, for it is only once the flexibility room of a species with respect to one resource is over-reached by quantitative reduction of the resource/consumer ratio that the need arises for the species to renormalize its qualitative range of consumable resources. Note, however, that renormalization or structural change in a system's circuits does not always derive from the pressure of need. Chance, innovation or creativity can play major roles.

Observe also that it can be very difficult to distinguish between true renormalization and the expansion into flexibility room which had always been possible within a current flexibility range but was unactualized. Should I come to live comfortably at attitudes which cause me to faint now, this will not necessarily mean that I have evolved a new pair of lungs. As a change in the flexibility range of a constituent can have a multiplicative effect on the flexibility range of its larger, encompassing whole, it can also be extremely difficult to localize the site of structural renormalization which produced a given result. As Bateson illustrates the point, the giraffe may have had all the genetic flexibility necessary for long-neckedness in its "neck genes" long before this potential could be expressed. The giraffe's "heart genes" may not have contained the flexibility range to grow big enough to accommodate a long neck. The neck may have been able to grow to its full potential only after a mutation on the "heart gene" (Bateson, 1972:346). The same kinds of problem relate to the Saamish minority struggle. What is Saamish cultural identity? And if Saamish culture shows changes, what makes it still Saamish rather than Swedish?

System and structure

Bateson's quarrel with the common approach to scientific inquiry is that it operates with what it claims to be more or less independent variables, whose interrelations generate certain effects. But, by ignoring the feedback effects that these effects have upon the original variables, only arcs

of the total circuit of relation have been recognized. In certain situations, the omission of total circuitry seems to have little bearing upon the predictive and explanatory success of this procedure. The feedback in question may be negligible with regard to the so-called independent variables, so that it may indeed be ignored without risk of inaccuracy in the desired understanding of the effects that these *set* variables generate.

In certain situations, however, failure to recognize feedback loops will lead to highly inaccurate, predictive models. When operating close to the limits set by its flexibility, a system will be but poorly described by a non-systemic model. When a system operates safely within these limits, a structural model can be useful, but *never* indefinitely so. As noted, the assertive—integrative spiral of evolution will often bring a holon to a point where its old range of flexibility is no longer adequate for continued survival. It needs to renormalize. In other words, self-corrective restraints from higher-order systems assert themselves and can pressure the lower-order system to change its structure. Every system has a structure, and every structure is open to or part of an encompassing system.

I do not mean to imply that what one might call a simplistic, structural approach is simply wrong and should preferably not be used. Rather, it must be used, but used in a constantly critical and revisionary manner, so that it becomes part of, not a substitute for, a constantly expanding, holistic understanding. In a situation in which the presupposed set determinants of a model cannot adequately generate the desired predictive ability, then, subject to the limitations of Occam's razor, the model must be expanded. Such refinement, however, generally involves the recognition of feedback loops previously ignored. With the current reindeer-management situation in Sweden as it is, I argue that a revision of old typologies and the use of a systemic approach to study becomes increasingly necessary. Even so, conceptualization and communication demand the drawing of boundaries which are not epistemologically "real". The trick is always to try to recognize linkages to the extent demanded by the desired applicability of the model. Naturally, a diachronic study will call for the revision or expansion of determinants and their structured relations contained within a synchronic, explanatory model.

Structure may be linked to the assertive, self-conserving aspect of a holon, while system may be linked to its integrative aspect. When structure and system are related according to the economics of flexibility along hierarchical levels, the one *must* imply the other, if the whole is both to exist and to change. Thus, within the changing, "living" holon, there is indeed structure (composed by the relations of what I have called dominant determinants) maintained on all survival levels. These structures themselves encompass systems which have a spectrum of permutations within any set structure. Of course, we cannot do other than analyze these structures and their permutations, and yet it must never be forgotten that these structures are themselves subject to change through the systemic

permutations of still-higher-order (more dominant) structures and systems.

On a limited number of piano keys, there is an infinite number of tunes which can be played, but there is also an infinite number of tunes which cannot be played. Moreover, the position of the pianist's hands at any one point in the melody limits further the sounds which he can produce next. At the same time, we must realize that the keys themselves are inconstant and change tone gradually.

Bateson has been called a generalist. His brand of systems analysis (system and structure) expands into a total philosophical framework. It generates an approach to cultural and social anthropology which, as one would expect, encompasses much of the so-called structuralist school.

For others again the object of the exercise is to show how any particular cultural institution, as actually observed, is only one of a set of possible permutations and combinations, some of which can also be directly observed in other cultural settings. These last offer structuralist explanations—using the term “structuralist” in the sense favoured by Levi-Strauss. (Leach, 1976:3 f.)

Like structuralist analysis, systems analysis sees as necessary and complementary both historical and structural-functional (synchronic linear-deductive) methods of explanation. In fact, it is the super-imposition of historical, i.e. diachronic awareness upon structural-functional explanation which generates the possibility of systems analysis. By comparing similar systems which operate on different time schedules or at different rates of change, we gain the ability to find a potential future of one system already expressed in the present of another system. Even the past of one system may be the future of another.

While Bateson looks with one Janus face from a point of structure to observe its constituents and the permutations they may generate, he also keeps a face turned toward the hierarchically higher systems and structures which may alter the structure of his original point of departure. He is interested in the entire structure-system and how it evolves and the place of our own minds in it. Man is an evolving structure and his culture and society are evolving structures. It is only logical that any approach to their study should include the capability of managing such changes within its methodology.

Chapter 4

Bateson's Principles Applied to Reindeer Management

In keeping with the concepts elaborated by Bateson, I have sought to pinpoint certain, fundamental, survival units basic to Saamish herd management. I have referred to the Saameby as an organism and, likewise, I may refer to Saamish society or culture as composing a holon of the nature discussed above. The very fact that there is currently a strong, pan-Saamish movement advocating a program of survival for Saamish culture and identity, a consolidation of Saamish idioms in the face of increasing pressures from the majority society proves that this is the case. Application of the terms in this way fits well with the formal exposition of the minimal characteristics of a system and unit of mind given by Bateson.

There are other, primary, survival units which, rather than being named in themselves, can be viewed as the relations between their constituents; for example, the grazing—reindeer relationship, the reindeer—herder relationship, the herder—Saamish society relationship. Each of these forms a self-corrective unit with its own code of communication. Each possesses a flexibility range and is responsive to information along its "own" circuits (feedback).

Should a reindeer-population runaway go unchecked, for example, grazing would disappear, and the population would become subject to Malthusian catastrophe. There is always a check somewhere. Actually, most checks come into play long before the situation has become critical. An organism which is not sensitive to homeostatic checks until threatened by total disaster would not be well adapted. Ingold (1976:30) demonstrates how certain checks set in to flatten the reindeer-growth curve before Malthusian catastrophe need occur (see p. 47). The homeostatic circuit embraces not just reindeer, but reindeer plus grazing.

As with the grazing—reindeer case, an essential aspect of the circuits relating the two major constituents of each of the survival units mentioned here is their obvious resource—consumer relationship. For any living system, a minimal resource—consumer ratio must be maintained for survival. This ratio can fall below the minimum either through a decrease in available resources or through an increase in consumer numbers. When, for either of these two reasons (or both combined), the minimum

ratio for survival is threatened, steps must be taken to increase resource productivity and/or decrease the consumer category. That is, in the short run, the organism needs (ordinary discourse) more food. In the long, evolutionary run, however, it may well need to renormalize its flexibility range. Within the bounds of the short-run situation, the former alternative, i.e. increase in resource productivity, concerns the rationalization of resource utilization; the latter alternative, i.e. decrease of consumer category, usually involves a basic reduction of consumer rights. This may occur in two ways: (1) eligibility requirements can be stipulated for the category, so as to cause this category to decrease in numbers, and (2) new rules can be introduced which diminish the consumption rights of the category, whatever its size, in an effort to decrease total resource consumption (which is a product of consumer numbers $\times$ their rate of consumption).

After pinpointing certain, vital, systemic relationships for Saami herd management and generalizing their possibilities of maintaining a relatively steady resource – consumer ratio within their critical limits, the next major step in the application of Batesonian ideas to Saamish herd management is to relate these different survival units or systems to each other. As noted, the evolution of herd-management form is determined by resource – consumer type relations, such as those between grazing and reindeer, between reindeer and herders, between herding Saamis and Saamish society, and between the Saamish minority and the Swedish State. It is important to note that these relations are mutually inclusive – the right-hand term of one pair becomes the left-hand term of the next. These pairs of relations, different holons, are concentric or hierarchical. For these different holons to survive, they must strike a balance with each other.

Of course, there are other social groups in Swedish society as a whole, besides the Saamish minority. There are other “resources” for Saamish society, besides the reindeer herders etc. These holons are not like buildings composed of uniform bricks. As a result, the larger whole may well survive even terrible imbalance in its dealings with a particular constituent. For the continuation of Saamish herd management, however, it is necessary that all of these relations are maintained within their critical limits. But, because of their hierarchical nature, the economics of flexibility of each holon is interlocked with those of the others in shifting patterns of conflict and compatibility.

It is important to note how the survival of an organism on one level interrelates with its survival on other levels. With the colonial encounter and the incorporation of the Saamish minority into the Swedish State, the balance of holon relations on all levels could not help but be jarred. The following short description of Saamish herding – holon relations is intended to demonstrate the problems of assertiveness and integration that they have with each other.

Grazing is a basic resource of reindeer, and reindeer are a basic resource of the Saamish herders. Thus grazing is an essential resource to the herders. The Saamis are a small minority in Sweden, and the Saamish herders are an even smaller minority (with family members, about 2,500) within the Swedish State. Reindeer-herding is thus one of the many economic enterprises of Swedish society. Grazing land is in this manner also a resource of the Swedish State. For Swedish society as a whole, moreover, these lands are a resource in many ways beyond that of simply supplying food for reindeer. The grazing lands are rich in mineral deposits, timber and hydro-electric-power potential. The compatibility of these resource-consuming industries is limited. Therefore, the State must impose some policy for resource allocation.

Within the confines of the lands available for grazing utilization (now controlled by the State), the Saamish herders must keep their herds, and, as grazing is limited, the reindeer resource is limited. As the number of reindeer is limited, so must be the number of active herders. Furthermore, reindeer-herding is the basic core of Saamish culture. Herders can be considered a resource of the Saamish culture, so that limitations in their numbers affect the strength and quality of Saamish culture. On all of these levels of resource dependence, allocations made on one level have a permeating effect on all the others. Because of this chain of relation, for example, the Swedish State's policy concerning the uses to which common State lands are put affects the evolution of herding form as well as the strength and quality of Saamish culture. What motivations tend to determine the assertive-integrative balance sought at each level? In any resource-consumer relationship, the balance which best seems to guarantee long-term maintenance within its critical limits is the so-called *rational state*.

The rationalization of any industry consuming a particular resource implies maximization of gain through the highest efficiency of resource utilization without endangering the regenerative capacity of this resource. If we define "commons tragedy" as a condition occurring when the rate of resource consumption exceeds the rate of resource regeneration, so that survival is threatened, then rationality in the utilization of this resource can be defined as the state of maximal efficiency of resource utilization at a rate brought to the brink of commons tragedy but not past it.

A commons can be any jointly owned resource or one used by a number of people. The name comes from the pasture ground often located in the center of old New England towns—the Boston Common, for instance—where herdsmen once grazed their animals. In those days, the common resource was grass. But the commons may also be the oceans, the air we breathe, the world supply of fuel, or even something as small and mundane as the coffee pool in the office. (Edney, 1979:80.)

It would be decidedly irrational to kill the goose that lays golden eggs. But, should this goose be capable of reproduction, should these young geese

lay golden eggs at a faster rate than the old goose, and should there not be enough goose feed to go around for all the geese, then certainly it would be rational to kill the old goose and make room for the young. It would also be rational to seek means of improving goose-feed capacity, to breed geese that demand less of it and in proportion produce most gold. With modifications and elaborations, these principles are basic to rational, reindeer-herd management, with its emphasis on calf-slaughter, selective breeding and use of artificial fodder. While market developments and technical innovations have enabled production to be increased and the "commons tragedy" brink to be extended, there is nothing essentially new in the underlying principles which direct these new methods. Herders have always been attuned to maximize satisfaction, although limitations in their means and knowledge have limited their success.

The tragic aspect of the term "commons tragedy" derives from the short-sighted, individual interests of commons members, as they drive the total system past the rationality brink into the utilization of capital resources and inevitable disaster for the entire group. Unless runaway systems are regulated by some form of negative feedback which opposes spiraling consumption, the survival of an individual sub-system must eventually threaten the homeostasis of the larger system. Thus, in order to prevent the reindeer-population "explosion" from endangering grazing reserves, for example, governments with herding commitments frequently establish so-called *rational*, herd-size limits for each grazing district. It seems that the only way to prevent the ills of "commons tragedy" is for a systemically conscious and effectively powerful organization, such as the State, to set limits to the competitive consumption of resources. Of course, from the perspective of Nature as a whole, the ills of the "commons tragedy" constitute just such a regulatory, negative-feedback loop as will guarantee its survival, though the survival of the whole will not necessarily involve human interests. To generalize, what is rational for a system is not always rational for its sub-systems and vice versa. As I intend to demonstrate, the program of rational herd management, as expressed by the Swedish State in the current Herding Act of 1971, goes far beyond the ideals of simple meat maximization into *herder* rationalization and, in so doing, devises a system which can be distinctly irrational from many viewpoints.

If the herders wish to combat a "commons tragedy" with respect to their reindeer, it is reasonable that they should wish to maximize herd size and herding profitability. By maintaining a total herd size in a grazing district at the maximum level, at the brink of "commons tragedy" for reindeer with respect to grazing, herders obtain the best chance of fulfilling their needs without sacrificing the regenerative capacity of the herd size that they are dependent upon.

Similarly, the Saamish culture and minority movement, which put a high premium on the herding population, wish to stop its assimilation into

the majority Swedish society, with probable relocation to the south at a rate faster than *its* regenerative capacity. The survival of Saamish culture, therefore, necessitates the maintenance of a herder population at the brink of "commons tragedy" with respect to reindeer when the rate of assimilation into Swedish society is high and the regenerative capacity of herders is low.

The Swedish State would be most efficient and able to provide the best living standard for its entire population if each of its industries were operating rationally. Moreover, the resources distributed to the frequently competing industries should be allocated so as to yield the highest *total* efficiency. While the State should desire to promote the rationality of the herding that it *does* allow, it might well wish to reduce the herding enterprise itself and transfer grazing-land resources to other industries, such as the timber industry or the hydro-electric-power industry. As a result, while the State's rationalization program for herding meets with approval from herders and leaders of the Saamish minority movement on some points, on other points, such as the reduction of the resources which the herders command and the reduction of the herder population, the different sub-systems are entirely opposed.

Not only is State policy in part opposed by many herders and in certain aspects by the Saamish minority movement, but Saamish cultural interests and the interests of the herders are also in part antagonistic. The herders wish to secure the maximal resource — consumer ratio per herder. That is, each wishes to have a big herd or at least enough reindeer to maintain a comfortable living standard. While the Saamish minority movement shares these goals to a great extent, it is also interested in a high herder population and a large number of Saamis sharing Saamish legal rights and resources. The more people dividing the cake, however, the smaller each person's portion. It becomes apparent, then, that, although the various sub-systems are interrelated and co-determinant, their relations are to a considerable extent those of conflict (see, for example, the debate over Saameby supportive members in *Samefolket*, 1976, pp. 23 & 62). Because of these hierarchic relations, the simple profit maximization of reindeer production per regenerative grazing unit is an insufficient description of Swedish, rational, herd-management policy.

In each of the resource — consumer relations mentioned with regard to herd management, one can speak of critical limits, homeostatic mechanisms and tendencies to runaway (over-assertiveness) or dissolution (over-humility). Critical limits can be recognized with regard to herd size for each herder's continuation in the herding profession, and a critical limit with respect to the number of herders can be conceived for the continuation of Saamish cultural development. The bottle-neck effect of winter-grazing capacity and the effect of predation (human as well as animal) on herd size can be seen as homeostatic mechanisms controlling herd growth. One can also speak of runaway systems or vicious circles (or

spirals), such as the "extensive spiral", a term I use to indicate the situation in which decreased herding-work investment leads to decreased herding profits and to further decreased work investment etc. Due to runaway population growth and industrial development, coupled with a colonial process of resource redistribution and land encroachment, herding, *as we know it today*, is rapidly approaching its critical limit. It may survive at all only by a process of renormalization (for example, a change in its legal structure). These same concepts and terms can be applied to the Saamish minority struggle.

Thus anyone who wishes to apply Bateson's principles to an analysis of natural systems must try to identify the various, interrelated, hierarchical systems, examine their circuits, note their critical limits and bottle-necks and then uncover the actualities or latent possibilities of both runaway and homeostasis. I have attempted to demonstrate some of these principles in a chapter in this introduction devoted to basic, herding-determinant relations. I have limited myself to a brief look at some of the most important variables and relations which have been and, on the whole, continue to be applicable today. The structure of many determinant relations has changed with time, and many of these changes and determinant additions form the subject matter of this study as a whole.

Having noted the modes of determinant interrelation, I shall be interested in explaining not only what has been or what is, but also what might be, according to the *structure* of these determinant relations (within the bounds of reasonable determinant variation). Or rather, to put it negatively, in keeping with cybernetic principles, I am interested in why certain things do *not* happen. If we posit equal opportunity for everything, only certain possibilities are selected, because the others have been inhibited or *restrained*.

In our approach to history, however, we must not be content to establish determinant relationships and examine their permutations. We must confront the very formation of such structural relations, i.e. find the system that determines the determinants. I hold that the greater the crowding or rather the competitive conflict over resources between Saamis and Swedes, the greater the eventual legal splintering of Saamish categories, with discriminatory treatment to counteract the swelling of the previous categories to the point of intolerable conflict. As colonial confrontation gradually caused herding to narrow its flexibility range, the pressures of conflict were extended to nomadic herding Saamis, as opposed to hunting and fishing Saamis, followed later by division between herding Saamis and herding-and-farming Saamis. Constraints were imposed to limit the herding involvement of farming Saamis. As pressures mounted within the category of herding Saamis, this category was further subdivided, with accompanying constraints delegated to the different classes of herding members in the Saameby.

Thus the historical material presented here and the data from my own

field observations serve a kind of double purpose. It is through the actual diachronic material concerning herd-management formation that we can put together a model which can then be subjected to various, hypothetical, determinant changes to observe its own circuits and behavior. Given the interrelations of ecological determinants plus an understanding of the structure of herding laws, it is possible to test a variety of potential situations.

I am, however, also concerned with the explanation of the variable determinations of ecological factors and the reasons for the formation of such laws themselves, the system behind the structure of determinant relationships. Part I is not to be read simply as a storehouse of test cases. Were its purpose merely to establish the structural components of a systems program, a fraction of the historical material would have sufficed.

A larger purpose of the historical presentation of Part I is to preserve the context, so that at each point in the temporal progression the reasons for the choice of what did happen, as opposed to what could have happened, and the reasons behind the actualization of certain restraints and the dormant character of other potential restraints become clear. As I have indicated, the basic reasons behind the formation of specific herding laws are revealed. A legal pattern can be observed. The important point to bear in mind is why, and in what contexts, the survival of one level is emphasized more than others; and why, and in what context, smaller divisions of a unit are punctuated with favorable — unfavorable, legislative distinctions.

A few words may be appropriate here about the kind of predictive ability sought in this study. I am concerned with establishing the importance of and analyzing the interactions among the feedback loops vital to reindeer-management formation, especially those in Tourpon during the present century. But establishing important causal relations and demonstrating the structure of the behavioral effects which variation of these relations will have on the system are not the same as predicting exactly when and where any such effect will occur and how great its magnitude will be. It is one thing to say that a rapidly increasing herd size will eventually cause herders to adopt a more extensive herding method, and quite another to predict how much the reindeer will tend to scatter as a function of herd size. For this latter type of predictive ability, variables must be strictly quantified and effects calculated and expressed quantitatively. One would have to be able to measure (that is, to *compare*) grazing conditions, weather and topographical conditions and even find ways to quantify such things as the tameness grade of reindeer, besides simply counting them before gaining even remotely the predictive capability to estimate the increase in herd-grazing area with increasing herd size. Such calculations are not my aim. Instead, I am interested in building what might be called a behavioral model of understanding.

... the model's feedback loop structure is a much more important determinant of overall behavior than the exact numbers used to quantify the feedback loops. Even rather large changes in input data do not generally alter the *mode* of behavior ... Numerical changes may well affect the *period* of an oscillation or the *rate* of growth or the *time* of a collapse, but they will not affect the fact that the basic mode is oscillation or growth or collapse. (Meadows *et al.*, 1974, p. 127.)

Reindeer-Management Terms

Intensive and extensive

A more complete discussion of the two terms “intensive” and “extensive”, as applied to reindeer management, can be found in the Appendix. The historical development of the terms’ usage and the conceptual problems such usage illustrates are presented there. In this short, introductory chapter, my purpose is merely to provide the reader with term definitions, as tools for the work ahead. I am fully aware that the simple criterion I use to distinguish these terms does not conform to precedent (cf. Pehrson, 1957:4) in all respects. A kind of conglomerate definition has been most common. I believe, however, that much of the misunderstanding which comes from comparing herding forms through time arises from the fact that the constellation of criteria once firmly assembled in a clear definition for synchronic analysis can no longer remain intact. The different criteria of the old compound definitions mix and conflict in time. What is needed for diachronic analysis is a set of definitions based on *one* logical opposition freed from historical contingencies.

I have chosen, therefore, in keeping with current, common parlance, to distinguish the two terms on the basis of the closeness of the reindeer – man relationship. “Closeness” can be considered a product of (the inverse of) the physical distance separating a herder from each of his reindeer $\times$ time. The epitome of intensive herding can be characterized by a total, high, closeness product (in proportion, of course, to the number of reindeer a herder owns), that is, close, intense, reindeer – herder contact. The extensive herding extreme is thereby characterized by little contact and a lower, proportional, closeness product, caused either by wide, physical separation or by the short duration of the few periods of intense contact. Frequently, but by no means necessarily, the intensive herder spends more time actively herding than the extensive herder. The reindeer belonging to an extensive herder are frequently spread over a wide area and have a lower tameness grade than those of the intensive herder.

Probably the best definitions of intensive and extensive herding can be derived from herders. Torkel Tomasson, a Saami and once a herder, has given the following usage, the earliest stated definitions I have been able to find:

Extensive herding—in Saamish called *luopos pãtsãi*—means that the nomad puts

less control on the animals, which with more freedom during a longer time can spread themselves to adapt to the grazing conditions as they please. This does not, however, mean that care of the reindeer stops, is put aside or neglected. The opposite, *intensive herding*, is called in Saamish *tjuonkes pãtsãi-suikto*. (Tomasson, 1918:88.)

Note that these Saamish terms suit admirably the need for a single logical criterion without historical contingencies. The usage of the terms that I suggest conforms well with these Saamish definitions. I have merely tried to satisfy the natural desire to obtain some kind of quantitative measure for what Tomasson calls "control", although I am well aware that the calculation will never be more than a theoretical exercise.

It is important to conceive of these two terms as comprising a continuum. At one pole is the most intensive herding form, for example, that practiced in Jokkmokk during the 18th century, in which the herds were constantly gathered, guarded and milked daily during most of the bare-ground period. The families lived and migrated with their herd all the year round. At the extreme extensive pole lies the activity not far removed from hunting (cf. Hatt, 1919; Ingold, 1976). In fact, the distinction between hunting and the most extensive form of herding rests only in the earmark, the mark of reindeer ownership. In this extensive-herding case, herders may gather their scattered reindeer for marking, castrating (separating) and slaughtering tasks only. The rest of the time the reindeer wander freely within large zones. The herders and their families may live a good distance from the herd, often so far that contact approaches that of a warden on a game reserve. Obviously, there is a wide spectrum of herding forms between such extremes. It is common, even amongst herders, to use these terms in a relative manner. One group, for example, may be more intensive than another group, although in relation to historical precedent both groups lie very far toward the extensive pole. Still, the first group might be referred to as the intensive group.

Another important point to bear in mind is that the degree of intensivity (or extensivity) depends almost always on the season. With the demise of the milking economy, summer became a period of extensivity, while winter has generally remained an intensive period. The terms are applied to specific seasons as well as being applied to a herder's or group's all-year-round, herding cycle. In the latter case, it seems common for herders to consider a kind of relative average, that is, winter intensivity will not necessarily keep a herder from being termed an extensive herder if he is highly extensive most of the year. If, however, all the other herders are quite extensive all the year, even in winter, then the first herder might be called intensive or at least certainly more intensive. Such usage is not of my own making and presents problems. But, where there is no absolute scale and no reason for herders to compare their current herding forms with those of 200 years ago, this usage is quite natural and fully adequate to convey what is desired, as long as the context is understood. It is the

anthropologist or the historian seeking to establish a broad, comparative context who has trouble in applying these terms.

I should also make it clear before ending this discussion that the extensive herder is not at all necessarily a lazier or less efficient herder than his intensive counterpart. He may well be, but he can just as well be a highly successful, conscientious and hard-working herder. As we shall see, there are many reasons for the practice of extensive form. It may well be necessary or more advantageous to release a herd to extensivity than to keep it gathered intensively. Extensivity can be of great benefit to the herding enterprise itself and not merely for the time it gives a herder to engage in other jobs. Herd size may increase and herding profits may rise even for a herder whose herding activity is very slight. But, especially where there are strong intensive pressures, such as high predator concentration in an area, extensivity can also lead to a drop in herd size and decreased herding profits. Although the concrete herding form may not have changed since the days of great extensive prosperity, under the present circumstances it may be termed "over-extensive" to indicate that it would be better to intensify. Over-extensivity, if prolonged, leads into what I have already termed the "extensive spiral".

Herding and husbandry

Many studies of reindeer management frequently use the two terms "herding" and "husbandry" interchangeably (see Paine, 1964a). Paine, however, draws clear lines:

Herding is concerned with the herd/pasture relationship as directed to the welfare of the animals, and ideally, to the exclusion of the comfort of the herders themselves. Husbandry, on the other hand, is concerned with the herd as the harvestable resource of its owners. While the tasks of herding, then, are those of the control and nurturance of animals in the terrain, husbandry may be conceptualized as the efforts of the owners in connection with the growth of capital and the formation of profit. The problems of herding are those of economy of labour and they may usually be solved by owners in conjunction with each other; those of husbandry concern the allocation of capital and here each family herd is usually wholly responsible unto itself. (Paine, 1972:79.)

In order even to approach an understanding of reindeer-management form transition, it is necessary to keep these concepts distinct.

Paine points out the over-simplification in packaging concepts of herding control and husbandry efficiency together on the same intensive-extensive scale. Is it correct to assume that intensive herding always implies intensive husbandry, that is, high efficiency, or that extensive herding implies extensive husbandry, that is, low efficiency? Contemporary reindeer management shows that actually the herding-control scale

and the husbandry-efficiency scale can function quite independently and be combined in a large spectrum of variation.

Scandinavian ethnographers of Lapp reindeer pastoralism (Hultblad, Ruong, Vorren and Manker) frequently contrast "intensive" (or traditional) with "extensive" (or modern) herd management. The distinction is an important one, but only when used in conjunction with the other between herding and husbandry as integral processes of herd management. In the course of a year, the same animals may be herded intensively *and* extensively, and different tasks of intensive *and* extensive husbandry performed. Further, at a particular time of the year, one of these processes may be on an extensive and the other on an intensive basis. Only when both are carried out in an intensive or extensive way, can we speak of intensive, or extensive, management. (Paine, 1972:81.)

While Paine's point is well taken and intensivity or extensivity of herding and husbandry should not be lumped together, one might argue that he has disentangled two sets of variables only to remain entrapped in a similar tangle, that between control and diversity of utilization. Indeed, Paine's coupling of intensive herd management with traditional and extensive herd management with modern indicates that he has not fully broken away from a term usage confused by its foundation upon historical precedent (see Appendix) to one based on logical, comparative criteria. As I have chosen to define the terms, both intensive and extensive herding methods have been used by herders from the earliest times. Admittedly, intensive herding was more common and of a higher degree in the past. Although extensive husbandry may be the predominant form in modern times, this does not mean that intensive husbandry is confined to the past. But what exactly does Paine mean by intensive and extensive husbandry?

Intensive husbandry indicates diversity in utilization of the reindeer and its products: use of draught animals, milking, reindeer foods and clothing; and careful selection of animals for slaughter. *Extensive husbandry* indicates that the primary allocation of herd capital is to the sale of animals "on the hoof," i.e. alive. (Paine, 1972:81.)

In more general terms, we can say that intensive husbandry is geared to a natural economy, while extensive husbandry is geared to a cash economy. There are, of course, all kinds of combinations of husbandry form. Yet there are problems with Paine's definitions of intensive and extensive husbandry.

One must note that the usage of the terms "intensive" and "extensive" shifts somewhat with respect to their couplings with herding and husbandry. When related to herding, the terms convey degrees of control (besides traditional or modern associations), but, when related to husbandry, they tend to refer to diversity of utilization. Historically, the reduction in efficiency of reindeer utilization and the growing use of the reindeer primarily as a slaughter animal implied a reduction in the husbandry control necessitated. Herders did not need to have as much herd knowl-

edge as before, when they were interested in information pertaining to the milking and transport uses of reindeer. This transition has contributed to the development of over-extensivity in the management of many herders, in that the reduced need for herd knowledge and control with regard to milk and transport caused poor control over husbandry (and herding) even with regard to meat profitability.

The sizable husbandry knowledge and *control* of herd composition, size and selective breeding stock demanded by rational methods with its principles of meat maximization (see Part II) have caused many to view this as an intensification of modern husbandry in keeping with the use of the word when applied to herding. As Paine uses the term "intensification" with regard to husbandry, however, it refers only to the *diversity* of reindeer utilization. For him, it seems rational methods would mean a growing control of *extensive* husbandry.

One might go on and on refining one's tools, but their purpose is to help to describe reality and not to form an abstract typology for its own sake. One should be aware of the limitations of one's terms, but, once one is fortified against the dogmatic attitude into which they might draw us, too much fussing over them can become counter-productive. Many of the same cautions must be exercised with regard to husbandry terms as with regard to herding terms. The advantage gained in distinguishing the two elements of herd management, herding and husbandry, however, is readily evident. The two are closely interrelated and with a knowledge of the one we are in a far better position to explain the form of the other.

Chapter 6

Basic-Determinant Relations

A problem develops in using an approach which makes a point of recognizing the co-determination of all parts, when anything short of total omniscience means imprecision in any model's explanatory abilities (for example, Hutton & Cohen, 1975:127-28). In the abstract world of total predictability, there can really be no such things as two completely and constantly independent variables. The scientist's margin of error in the success of his model's predictions rests largely upon his choice of the variables to which he attributes independent status. Actually he is simply ignoring minor dependences which he finds unimportant in the establishment of his predictive categories. Such minor dependences, however, are not necessarily minor in all herding situations nor throughout all time.

On the other hand, a complete set of determinants which would do justice to the extremely intricate variations of herding form, the unique qualities of time and place, and the individuality of each herder would soon become so unwieldy and complex as finally to be no more than a descriptive analysis of each, specific, herding situation with new modifications for every case. A middle ground must be sought between the uniqueness of historical context, on the one hand, and the structuring and analysis of general determinant relations, on the other. I believe the best understanding can be attained through this interplay of the particular and the universal.

It is obvious that even the most essential, determining variables of herding form are numerous, and their effects relate to far more than merely the intensive – extensive continuum. Yet it is with regard to this axis of herding form that I am most interested in analyzing determinant relations. I shall consider certain factors as forming intensive or extensive pressures or possibilities. Climate, topography, predators, the increase of communication facilities, law, hydro-electric-power dams, the timber industry, tourism and market developments exemplify the great diversity of elements affecting herding form. The same sort of difficulty as was encountered in trying to define terms so that they could have diachronic application confronts us here with the choice of which determinants to give general, out-of-historical-context attention.

The following determinants and their relations are under discussion here: the reindeer, herd size, grazing, predators, natural and artificial

boundaries, and climate—certainly not an exhaustive list of herding determinants. Yet these determinants have been basic to herding-form determination *at all times*, and it is for this reason that they have been singled out. Many other determinants of more short-lived, minor or regionally confined influence will be discussed within the historical context in Part I. The treatment of herding law in Part II can also be recognized as a part of this determinant approach. In this chapter, I wish to emphasize the *principles* involved in different kinds of relationships. For this purpose, it is not necessary or desirable to confine myself to consideration of Tuorpon material alone. It is when we consider the possible range of a determinant that we can realize its influence. A specific case may not acquaint us with this breadth or range or, if it does, it may be embedded in such a complex historical context, with so many elements undergoing change, that it becomes difficult to discern the pressure of any one determinant alone.

Of course, these determinants do not work alone. The idea of any self-sufficient, deterministic variable which interacts with others in a kind of additive vector model producing a certain result is at root faulty. In fact, it is the *whole* system which determines the prime determinants. Not only does the whole system determine which determinants are of prime importance to reindeer-herding (for example, quantity of winter grazing as opposed to quantity of water; see p. 491), but it is the same holistic system which determines the variable characters of these determinants. Thus to speak of the reindeer as a given object or determinant whose fundamental behavior can be described once and for all, regardless of the intensive or extensive herding form to which it is subjected, is inherently limited and leads to often groundless categorizations of different reindeer strains (see Appendix). A new road, for example, might at first be considered negatively from a herder's perspective, as it renders a certain grazing area unusable, but then it could suddenly become a tremendous asset with the introduction of large, reindeer-slaughter, transport trucks.

Herding itself was a system evolved from a prior, larger system and its continuing course of evolution is still steered by this all-inclusive, larger system. This system, the system of the whole, brought herding into being and may bring it to an end. The same can be said of all the herding determinants discussed in this chapter. Not only is each itself a product and co-determinant of the whole, but its part in the evolution of herding form is constantly re-adjusted by the whole. Given the scope of this study, however, these determinants remain basic, structural elements of herding form, and it is important to acquire a feeling for how they can interact, even if the following treatment is far from methodically complete in its consideration of possible structural permutations.

The reindeer (Rangifer tarandus)

Hatt (1919) has attempted to show the symbiotic relationship of man and reindeer, but, although he points out the arguments for the reindeer's own intensive drives, i.e. benefit from human control, the reindeer-man relationship is certainly not a balanced, symbiotic one always. It is true that the reindeer can derive some benefits from contact with man. Man may, for example, guard it from predators and maybe alleviate its sufferings from insects. Under the herder's intensive care, herd size will grow beyond that allowed by more "natural", homeostatic mechanisms. Be this as it may, however, the individual reindeer, unless extremely tame, and then only rarely, actively seeks the company of man. The herder derives much benefit from his herd, but the reindeer in turn, unlike some other domesticated animals, can usually survive very well and sometimes better without their herder. Reindeer-herding control is therefore something a herder must impose, usually with considerable coercion, upon his herd, and not something originally required or necessarily appreciated by his herd. Thus there is always a constant leaning toward extensivity, a pull like that of a rubber band, as soon as the herder loosens his grip. Extensivity is a process which can roll of its own accord, whereas intensivity must be built up slowly and maintained constantly. This point may seem obvious, but it is nonetheless important. Briefly stated in cybernetic terms, herd control and tameness grade involve the passage and storage of information.

Where the dependence of animal on man is high, maintaining intensivity will not require so much effort. Moreover, this dependence can be conditioned to remain to a certain degree even after the need for dependence has disappeared. Still, the tameness grade of a reindeer can deteriorate drastically in a relatively short time. In fact, a difference in tameness is noticeable even between seasons, should the summer herding, for instance, be more extensive than the winter herding.

Extensivity is thus itself one of the most decisive determinants of further extensivity. Intensivity will not always (if at all) call forth yet greater intensivity but might at best stave off an extensive progression. Herders realized this condition and would engage in tameness-grade "investment" for their herds in an effort to maintain intensivity. They spent more time with their herds than herding and husbandry chores would require during one period, in order to make the reindeer more used to human presence and control later on.

The reindeer is not an animal of constant characteristics. Climatic changes affecting its mobility will alter the pressures it imposes on the herder. Changes in grazing concentration and quality will also affect its behavior. Ruong (1968:294) states that the "cohesive power" or "herd instinct" increases with increasing tameness. Moreover, the reindeer goes through certain physical changes which affect such things as tameness

grade and cohesive power radically—changes based on its reproductive cycle and thus different for the different sexes. With the approach of the mating season, for example, the bull reindeer will frequently draw away from the main herd and become much more difficult to control. In the spring, the pregnant reindeer cows have different behavioral demands from the rest of the herd. Herd composition, that is, its age/sex composition, can also affect tameness grade and cohesive power. Although it might not be economical from the meat-producing viewpoint to keep old oxen in a herd, herders claim that it can have quite a stabilizing effect on the younger animals. Thus different slaughter policies can have marked effects on the herd's behavior. Herding management must take such changes into account and intensify or extensify the method accordingly.

Herd size

The matter of herd size must be considered with regard to a wide array of different factors, such as husbandry form, security, work force and wealth storage, all of which are interdependent.

Milking requires (and conditions) a high degree of tameness and is thus one of the most powerful influences in intensive herding. A milking form of husbandry usually demands a small herd. Too large a herd is impossible to control within a limited grazing range. Should a herder have a large work force, however, he can control effectively quite a large herd and still practice milking. The higher the ratio of the number of reindeer to the available grazing, the higher the reindeer's own extensive drive will be. If grazing is very good, it is possible to keep a large herd gathered in a relatively small area. The ways in which herding variables interact seem almost endless. It is the job of the herder to work all the factors into a functioning system. The herder will be able to change or mitigate the influences of some variables. He may avoid others, but some he will simply have to accept.

Although a herder can, within bounds, regulate his herd size, it is to a great extent beyond his control. By taking as given a certain herd size, we can speculate as to the consequences this will entail for herding form.

Given a very small herd, a herding family will be unable to sustain itself, either by milking or meat consumption, on the herd alone. Other sources of livelihood will be necessary. As intensive herding demands a large investment of time and commitment, it is doubtful whether such a herd will be herded with great intensivity (unless in the case of division of labor between family members, a system practiced by forest herders of old and even by many modern, mountain, herding families). On the other hand, should a few reindeer be kept mainly for use as transportation animals,

intensivity must be maintained, but in this case other sources of livelihood claim predominance, and the reindeer are fitted to the necessary way of life more than the life style being made to revolve around them. This is a distinction Wiklund (1918:270) and Hultblad (1968:54) indicate by their usage of the terms whole- and semi-nomadism. Unfortunately, concepts of the degree of herding livelihood specialization have thereby become linked with the degree of mobility, a linkage which does not stand diachronically.

Given a small herd and the necessary predominance of reindeer management over other sources of livelihood, intensive herding is usually necessary, as is the milking form of husbandry. Given a big herd, the milking form of husbandry becomes less necessary or even impossible (cf. Ruong 1964:53 and 1968:296). A big herd can supply a herding family with enough food in the way of meat without suffering a steady decline in numbers. All slaughtered reindeer will be replaced in the course of reproduction, a resource not available to the small herder. The small herder would consume more meat per year than his herd could reproduce—he might well be forced into milking husbandry.

Milking not only becomes increasingly unnecessary for the big herder but will also usually be prohibited by the extensivity a big herd tends to demand.

It was characteristic of the Arvas Saamis that they did not milk their reindeer. As a rule they are wealthy Saamis, and just as the large size of the herds hinders milking, so perhaps the failure to milk the animals is the reason why the herds are so large, in that the calves that suck their mothers the whole summer thrive and grow so well that they are better able to stand the winter . . . (P. Laestadius, 1928 ed., vol. 2:223.)

This does not, of course, mean that the big herder will never milk but that his form of herding will become increasingly divorced from the obligation to milk. Should his herd be brought into the corral for autumn separations, he may very well take the opportunity to milk, but he will not gather his whole herd daily for the main purpose of milking. It seems to be a general trend throughout the circumpolar area, especially before the disruption of colonization with the introduction of cash economies, for big herding, meat consumption (of tame stock) and extensivity to go together, whereas small herding, milking and intensivity tend to form a unit (cf. Eidlitz, 1971:178; Ruong 1968:295 and 1975:81).

With these tendencies in mind, we can re-introduce the aspect of human agency for a discussion of herding policy with regard to herd size. The small, intensive herder cannot simply switch to extensive herding with meat consumption. This requires a large herd, and at a certain point an increase in herd size might endanger the essential milking economy. The need to milk or the ability to do without it is therefore of major importance in herding policy and can be seen as one of the "abrupt gradations" Ruong

(1968:296) speaks of on the intensive – extensive scale. One cannot simply regard the relationship of small herd size and milking as being based on lineal cause and effect. A small herd may necessitate milking, but milking can in turn impose limits on herd size. Each cause is also an effect and we are confronted with a feedback system.

Under certain circumstances, herders have been known to limit their herd expansion in order to maintain intensive method. Ruong (1968:296) quotes Johan Turi, a herder from Jukkasjarvi, and Hultblad (1968:137-8) quotes Anders Olsson Sarri, also a herder from Jukkasjarvi, to make the same point: over-intensive herding, in which the calves are deprived of almost all milk, leads to sickness and high calf mortality. Herds which are herded too tightly become unhealthy. The chances of contracting a sickness, like the dreaded hoof disease, would increase. Such a disease might spread throughout the entire herd in no time, resulting in heavy losses. To try to avoid this, herds must be released into extensivity in the face of disease, and such a measure effectively stops any milking husbandry.

To say that these “over-intensive” herders simply did not know any better is to underestimate them. Strong, intensive pressures lie at the root of the practice. When these methods changed, it was not simply because the over-intensive herders were taught the evils of their ways; it was largely because many of the intensive pressures were eased.

That the realization of these risks (from over-intensivity) should have come so suddenly is not very probable, and other reasons have probably also made themselves felt, first of all the reduction of the wolf and wolverine population with more effective weapons and expert marksmen, as well as the chance for barter as a result of the spread of settlements by which the need for self-sufficiency diminished (Hultblad, 1968:139).

Strong, intensive pressures can, therefore, limit herd size. Extensive herding and a husbandry based on meat consumption, however, do not of themselves tend to stipulate an upper herd limit until the herder is confronted with a grazing shortage. On the whole, extensive herders with large herds can be “richer” than very intensive, milking herders. Under certain circumstances, extensive herding may be the more “efficient” herding method, but, where intensive pressures are high, due, for example, to frequent predation, extensivity must be tempered by adequate guarding, a shift toward intensivity, though not of the degree required for milking. Moreover, the big herder has more prestige than the small herder and had more even in those times when it was not possible to make so many conversions of “wealth on the hoof” into other forms of capital.

The best position for a fully nomadic herder is to have a big herd and, whether or not herders were always in a position to follow a policy of herd expansion, it has always been the acknowledged goal of all.

Leeds (1965:111) views Chukchi reindeer pastoralism, for example, as “functioning to produce rich men,” and it seems to be quite clear that this is also their

self-conscious goal; Leeds (1965:101–2) finds “sociocultural institutions rather than only ‘natural’ means operating to maintain optimal herd sizes . . .”; and my own field work among the Lapps leaves me in little doubt about the self-conscious manipulation of many of the institutions to which Leeds is referring (Paine, 1971:164).

Another vital factor to consider in this respect is that of herding *security*. The small herder is always in danger of going under the subsistence level in reindeer. Through starvation due to a “bad” winter or through predation, a herd can be severely reduced. Of course, the big herder is equally prone to these calamities, but he is at the same time more secure against going under the subsistence level. The drive for security also contributes to the drive for large herds accompanied by its extensive pressures.

Because of the prestige, wealth and security factors favoring large herds, many herders chose to combine the husbandry forms of meat and milk consumption even when not strictly necessary. By sustaining himself partially by milking, a large herder could thus cut down on the number of reindeer he needed to slaughter for food and thereby help his herd increase. To do this, the big herder would sometimes divide his herd into two parts, one being kept for milking and therefore intensively herded and the other allowed to roam more extensively. Or he could turn to the milking of goats (also to provide a more balanced diet), while the herd was kept extensively. The large herder might be able to find other methods to aid the increase of his herd, that is, to cut down his own consumption of it. One method might be by trade, as in the Arvas – Bartute example (Ruong, 1975:80). The Bartute Saamis with small herds traded cheese for meat with the Arvas Saamis, who had large herds. The Bartute herders received a more balanced diet without consuming the regenerative capacity of their herds, and the Arvas Saamis also balanced their diet while favoring herd increase. Another similar method was to loan out transport oxen or cows for milk to small herders in return for cheese.

. . . in the year 1842 a Saami from Tuorpon died who had 1200 reindeer, the richest in Jokkmokk’s Lappmark; in later years the Saamis here have become richer, many have 150-200 cows, he who has 80-100 is considered well-to-do, poor is he who has 20 or 10 cows . . . (Drake, 1918:24).

It is interesting to note in the above quote that, in the case of the richest Saami, the unit of measurement is reindeer, while in other cases it is reindeer *cows*, thus emphasizing milking capacity.

The factors affecting herding size and husbandry policies have altered enormously in recent times. With the rise of the cash economy linked to the larger Swedish society, new taxation systems based on individual income and laws limiting herd expansion for the protection of grazing lands, herders have been forced to form (and attracted to form) their herding policy in response to new factors outside of the traditional Saami framework.

Grazing

One of the most vital factors in the determination of herding form is the reindeer/grazing land ratio. An increase in herd size raises this ratio and brings with it extensive pressure. The more the ratio rises, the more the reindeer will be forced to scatter in search of adequate grazing. It is obvious that the ratio can also be raised by a decrease of the grazing variable.

The difficulties which Paine (1971) alludes to from following a policy of herd maximization result from the eventual depletion of grazing land.

... herd expansion is a basic pastoral value, and is often practised whether or not there is opportunity for corresponding expansion of pastures, so that ... it is in this adaptation ... that overexploitation of the natural range is most likely to occur (Paine, 1971:168).

One may well speculate, therefore, whether intensive herding was not doomed from the outset to evolve into more and more extensive forms. For, with the depletion of grazing lands, rich herders are no longer able to keep their herds gathered under tight control.

Torkel Tomasson (1918) presents an excellent example of this case in his defense of what was looked upon as the degeneration and sloppiness of the Härjedalen Saamis' herding methods in the last few years of the last century and the early years of the present century. At that time in Härjedalen, the so-called degeneration and loose control of herding gave rise to many disputes between farmers and herders. Crops were often destroyed by the "wild" reindeer. The conflicts between herders and farmers grew so numerous that the government had to take measures. The situation in Härjedalen was a major inducement to the organization of the new Saami *fogde* or sheriff administration, dedicated to turning herding back to its proper level of strict control.

Few determining factors were recognized by the authorities as influencing herding form, other than the herders' willingness to work and do their job properly.¹ Even in the 1940s, when extensive herding had become a full reality almost everywhere, the Village Herding Rules (*Byordning*, 1946) composed by the Saami administration still demanded a return to intensive form. Tomasson effectively exposes the folly of this narrow approach:

When the quality of the moss land in the high mountains was still such that the reindeer could find enough grazing for its livelihood within a rather limited area, then the nomad could for a large part of the year—aside from the winter—carry on with his herding within his traditional area. The rich concentrations of reindeer moss made it so that the reindeer were less mobile. These natural factors helped the herder practice a more intensive herding ... (Tomasson, 1918:87.)

The earlier intensive herding has now with the passage of time resulted in over-grazed and worn-out pastures in the high mountains.

¹ The same kind of conflict resurfaces again and again with the same arguments. For a recent example, see *Samefolket*, 1980, n. 3:31.

It is a definite fact that our mountains, with few exceptions, are currently in a more than miserable condition with regard to grazing. In some areas one cannot find even a semblance of reindeer moss. (Tomasson, 1918:87.)

What one might expect from such a situation is a Malthusian catastrophe, resulting in the death of many reindeer, so that the balance between reindeer population and grazing land is re-adjusted. Such a situation has occurred, for example, on St. Matthew Island (D. Klein, 1968).¹ However, a Malthusian catastrophe might be avoided by a number of measures which begin to limit herd size before the most drastic situation is able to arise. Ingold's (1976) discussion of the post-war growth of reindeer herds, resulting in a ceiling level of herd population in the 1960s, fits the situation described by Tomasson in Härjedalen fifty years earlier. Ingold explains the reasons for a flattening of the reindeer-growth curve rather than a necessary steep decline:

Firstly, the immediate effect of undernourishment is to lower birth and calf-survival rates without significantly increasing adult mortality. Where formerly at least 60 per cent of cows would be expected to calve annually, ratios of 20 per cent or less have been typical over the last decade, whilst in poor years an almost complete dearth of calves has been recorded.

Secondly, grazing conditions vary from one year to the next according to climatic factors . . . Although famine in one year may subsequently be compensated by more favourable conditions, fostering the impression that losses may be explained by temporarily adverse freaks of climate rather than by a permanent situation of overgrazing; heavy pressure on pastures in fact leads to a depletion of reserves, which becomes critical only when a proportion of the pasture area is rendered inaccessible. As a result, "bad years" follow one another with increasing frequency, having the effect of periodically reducing total stock before expansion can proceed beyond the ultimate carrying capacity of pastures.

Thirdly and most importantly, the natural response of deer to increasing population density on inadequate pasturage is for herds to fragment into ever smaller and more widely scattered, social units (Wynne-Edwards, 1965). The pastoralist is consequently no longer in a position to keep his herd together. He is compelled to allow his animals to disperse in search of pastures of their own accord, lacking both the power and incentive to stop them. This has led to the progressive coalescence of the formerly distinct herds of winter coalitions. Deer have scattered far and wide throughout the region, mixing and intermingling at random, thus making it impossible for pastoralists to provide the security for their animals and exercise the strict selectivity that underlay the symbiotic relationship. Control over natural reproductive increase therefore breaks down before the concentration of deer on limited grazing becomes so great as to bring about a Malthusian catastrophe. The deer, for whom an attachment to man ceases to hold any advantages, revert to fending for themselves effectively, as their wild counterparts did, becoming less domiciled and responsive as their contacts with herders diminish and alter in character. (Ingold, 1976:31–32.)

The breakdown of intensive herding seems to have been inevitable, considering the reindeer population and the pasturage relationships alone.

¹ Note that on St. Matthew Island and other islands exhibiting an animal-population crash, the animals had been introduced into the ecosystem by man.

Such a trend toward extensivity, however, might be, and frequently was, slowed down or halted by homeostatic devices, such as predation by animals and man, which served to keep reindeer numbers at a wide range of possible steady levels before the other homeostatic mechanisms mentioned by Ingold could set in. Where maximization of meat production in modern times strives to eliminate the homeostatic mechanisms which kept herd numbers at lower, steady levels, the exponential potential of the reindeer-growth curve emerges more and more clearly, necessitating greater extensive method and pushing toward a flattening of the population curve at a high level, either through administratively dictated, maximal-herd-size limits or homeostats, such as the raised mortality and increasing frequency of "bad years" mentioned by Ingold.

A basic goal of the pastoralist is to maximize his herd size, but each herder is not merely a separate entity to himself with no effect on his fellows. As the rise in reindeer population causes a strain on the reindeer/grazing ratio, "bad years" will become more and more frequent and, because of their lower security factor, small herders will be forced from the field. Even under plentiful grazing conditions, the possession of a large herd is a pressure for greater extensivity. Combined with a poor grazing factor, it becomes a far more powerful pressure. We can thus distinguish two related factors, individual herd size and total reindeer/grazing ratio, for all herders in the area. These factors can function as herding determinants separately, but they are also linked in a circular causality with combined effect.

Hultblad (1936) states that reindeer moss requires a 20–30-year, re-growth period before grazing land is restored after heavy use. The tendency to over-graze, with its inherent pressure towards a breakdown of intensivity, seems to have reached the critical stage a number of times in the past in different places. If pressure on grazing lands is relieved for a long enough spell, intensive herding has the possibility of blossoming once again.

In his refutation of the authorities' accusations that herders had become degenerate, Tomasson (1918) explains why it is necessary to give the reindeer more freedom during bad times. This, he claims, has always been true, even when the grazing lands were far from over-grazed. Ingold, as noted, points out that the over-grazing situation fosters the *impression* that losses are due to adverse freaks of climate. Certainly both situations, a bad winter *prohibiting access to grazing* and simply a *lack of grazing*, have the same immediate effect—the reindeer are unable to obtain food. But it is very important that we distinguish between such temporary, poor grazing, where grazing is restored as soon as the "freak of climate" has passed, and long-term, poor grazing due to over-grazing. The distinction is necessary in confronting the probable duration of extensivity and thus the degeneration of intensive herding skills motif.

When poor grazing is temporary and not frequent, a herder may not

suffer more than a minor, temporary setback. When grazing is restored, many of the extensive pressures are removed. He can return to his more intensive herding form. Where good grazing is never fully restored, or only after 20—30 years, and bad times seem to be frequent, a herder will have to go extensive frequently. He may well suffer a decline in herd size. A small herder may be forced to seek income elsewhere, even if he continues to herd. It is to be expected that, faced with long-term, necessary extensivity, herders will lose intensive expertise, especially in the generation shift, and, whether herders are lazy or not, intensive-herding abilities will degenerate.

The *distribution* of the grazing capacity within a Village district is also of great importance in influencing seasonal shifts in herding form. Certain types of grazing are more periodic in availability and more concentrated geographically than others. Some grazing areas can be utilized during a number of different seasons. Others are limited in their usefulness. A herder cannot always afford to allow his herd to utilize pasturage in a certain spot to its fullest extent. Herding form cannot simply be patterned on the existing grazing conditions at any one time and in any one place. The herder must constantly be aware of grazing possibilities for the whole year at once, maybe for even a number of years at once. For example, should a Village have ample, summer-grazing possibilities but little autumn and winter pasturage, herders may find it necessary to ration out grazing to their herds along the eastward migration route, so that winter grazing is spared, but also so that the autumn lands are carefully used to ensure that the herds have enough grazing left in strategic spots for the return migration in the spring. Planning of this nature may demand an intensivity of herding form (or at times an extensivity of form) beyond what grazing conditions at any specific place and time would seem to call for. Not only do the numerous encroachments on grazing territory reduce the bulk of available grazing, but they also alter the old pattern of grazing distribution. The effects of different kinds of encroachment will be discussed elsewhere.

Predators

The five main predators on reindeer in Lapland (besides man) are wolf, wolverine, lynx, bear and eagle. In combination, these predators kill thousands of reindeer each year and constitute one of the main hindrances to herd expansion and husbandry profits. Not only do predators cut herding profits by consuming reindeer, but they can also cause panic and scatter herds far and wide, so that herders lose control of many reindeer and must spend much time and effort re-gathering them. If he is to protect

himself against such losses, the herder must guard his herd carefully, especially in the spring and winter, when the reindeer are most vulnerable. Predation is, therefore, a very definite, intensive pressure.

The strength of this pressure, of course, varies according to region. Besides the topographical considerations which favor or hinder predator success, the number of predators in a given area is an obvious variable. In the past, the number of predators has declined steadily with the introduction of firearms, as well as with the added incentive of a bounty. As extensive herding pressures rose to overpower the intensive pressures, the need to effectively keep down the number of predators became all the more crucial. A scattered herd is hard to protect.

Much has happened in recent times to alter man – predator – reindeer relations. Detailed laws regulate the extent to which these predators can be hunted, how they must be hunted and if it is at all permissible to hunt them. These predators have become endangered species (in Sweden, at least) and, rather than see them reduced even further, the State has taken to offering them legal protection, while attempting to compensate the herders for their reindeer losses.

As one might imagine, the predator debate between herders and conservationists has grown very inflamed. This is especially true in Tuorpon, which has suffered the worst reindeer losses to predators in all of Sweden. This is not the place to grapple with this problem; it will command far greater attention later in the local Tuorpon context, and I refer the reader to p. 228 in Part I and again to p. 437 in Part III.

My main point here is to fix absolutely the intensive pressure of predation on herd management and to assure the reader that, despite all manner of legislation and compensation payments, this is still the case. There are those that claim that the effects of predation have been overdramatized by the herders, that they suffer from a traditional mis-evaluation of and hatred for predators, that compensation payments erase the intensive pressures of predation and that science has proven that the wolf, for example, is good for maintaining the health of the reindeer stock. I shall meet these arguments elsewhere as noted, but, setting all arguments aside, I have never yet seen a herder accept the presence of a predator with a shrug of the shoulders.

Natural and artificial boundaries

The topographical boundaries within an area, and in contrast the lack of such boundaries, that is, the brokenness or openness of the land, are important, contributory determinants of herding form. The reindeer adapts its movements to the lay of the land, and so the herder must adapt his herding form in response to these factors. There is no specific type of

topography, however, which dictates absolutely either an intensive or an extensive herding method. The topography of a Village presents the herder with both rigid guidelines and elastic possibilities.

Natural hindrances—what Ruong (1964:51) refers to as *oaggeh* or *oag'ge* in Lule Saamish—may, on the one hand, facilitate intensive herding or, on the other, may just as well enable a herder to decrease his attentiveness and control and become more extensive by letting the natural hindrances in effect do some of his work for him. In Lule Saamish, one distinguishes between *oag'gas aednan*, “land with natural hindrances”, and *loumokis aednan*, “land without natural hindrances” (Ruong, 1975:83). A herder may even say that a river or cliff “tends” the herd. But the herder does not simply suit his herding to the land; he uses the land formations to his best advantage for the herding form he wishes to or must practice.

A herder who wishes to keep a tight control of his herd for milking purposes will seek the aid of natural hindrances to keep his herd from spreading. He may also utilize naturally attractive spots for the reindeer, like mountain sides with large patches of snow in summer to diminish the insect plague. On the other hand, a herder who can afford to let his herd spread over a large area may release them into a wider, natural “pocket” and set up camp in a strategic location at its mouth. Before the new border regulations, many Karesuando Saamis utilized the islands along the Norwegian coast in the Troms district for summer pasturage. After swimming his herd to an island, the herder could relax his herding method all summer. His herd would remain on the island with no chance of straying too far. Indeed, this is one of the main explanations of the summer-extensive form of herding these Karesuando Saamis brought with them to Jokkmokk. The islands alone did not force the Karesuando herders to be summer-extensive, but the islands helped to give them that possibility.

Of course, the topographical character of the land changes considerably with the seasons. In the spring, small streams can flood so as to be almost impassable. In the winter, fences which once hindered reindeer movements can be completely snowed over and be of no effect. Lake chains, which are important barriers between herding groups and grazing territories during the bare-ground period, become major thoroughfares once they have frozen.

The type of landscape, its openness or brokenness, is a significant factor in the formation of collective herding entities of various sizes. The names given to the various *sita* groups or “big groups” (see p. 142) often reflect the natural divisions of the land put upon a social grid. Thus the smaller, *sita* herding units most common in the intensive days could carry names demonstrating a most detailed and finely divided use of grazing territory. As these small units merged together to form larger “big groups” during the development of extensivity, the grazing lands were divided according to coarser or more prominent natural divisions. To the highly tamed

reindeer of the intensive herders, used to the confines of certain, specific, grazing areas, less pronounced, natural hindrances probably had a greater significance than to the more free-roaming reindeer of the extensive era.

Those natural barriers, which herders invest with special, intra-Village, political significance, will tend to be coarser and more obvious, the fewer the herding entities, that is, the larger the collectivity of each entity or, in other words (usually but not necessarily), the greater the extensive development. Natural boundaries sometimes over-rule even the politics of Village boundaries. Herders from different Villages may form a single herding unit upon occasion.

Over the past fifty years or so, herders have gained increasing power to add man-made hindrances to the natural topography. The availability of wire fencing, along with the much easier transportation methods in the mountains to carry such heavy material, have enabled the herders to set up their own hindrances as they see fit for best herding advantage. Actually this is a very old Saamish practice, but it is only in modern times that it has been necessary or possible to develop this technique to such a great extent. Fencing can be used, for example, to separate the grazing districts of two Villages, but it can also be used by a Village internally to separate summer land from autumn and winter land, for instance. This may facilitate herd separations, markings or slaughters.

Some claim that it has been largely on account of fencing (and other modern innovations, such as snowmobiles, helicopters and walkie-talkies) that herding form has become increasingly extensive. Others say that, with the aid of wire fencing and other innovations, the difficulties encountered by the development of extensive herding methods were largely overcome. Each statement is simply one end of the same spiral of change. Which came first becomes insignificant—again we face a feedback relationship.

To say that fencing has played an integral part in the extensification process is quite correct, but there is nothing whatever to prevent fencing or any of the modern innovations from contributing to an intensification process, should the herder wish to utilize them to that end. Intensive herding does not exclude modern technology. The herding in the Soviet Union is a case in point.

Hindrances are not only constructed for the benefit of herding, however. Most of the marks which man has left upon the reindeer-grazing lands serve other purposes and many are to the detriment of herding. Useful migration routes may be blocked by dam construction or new possibilities of mobility may result which are undesirable from the herding point of view. The more the land is cut up and criss-crossed by the railway and road networks, and the more grazing lands are cut up into an uneven patchwork by the timber industry, the more difficult it becomes to stabilize the reindeer's movements.

During the winter, when the reindeer are in the lowlands, their move-

ments tend to be somewhat confined by deep snow. A herder can leave his herd in one area and, if the grazing is decent, he can be fairly sure of finding them there the next day. The presence of a road, however, presents the reindeer with a cleared path which they are very prone to follow. They will spread along the roads and tracks (especially when grazing is poor) and not only cause difficulties for the herder by straying and mixing, but also greatly increase losses through traffic accidents. Changes in the character of the land are occurring today at an accelerated tempo. Any such change which tends to break the formation of a strong, habitual, grazing and migratory pattern for the reindeer contributes to the extensification of herding.

Each Village encompasses unique topographical relations and grazing conditions, and the herders make use of the broad possibilities offered in different ways. Even the divisions of a Village territory into spring, summer, autumn and winter land can change significantly. Such divisions are not entirely prescribed by the determinism of natural conditions. Group politics within a Village can be very determinative of the way in which grazing lands are utilized. Relations between herders and farmers have also had a bearing upon land use. A brief glance at Tourpon's history shows that the same grazing areas have been incorporated into varying grazing systems calling for utilization during quite different seasons. Topography will affect herding-form determinism, but herding form will also to some extent determine the system of land utilization.

Climate

As the last of the determinants to be surveyed here, climate has already been under discussion in relation to many of the preceding factors. One must recognize that seasonal changes affect the reproductive cycle of the reindeer, that bad winters can affect herd size (independently or in conjunction with poor grazing), that grazing quality and type as well as quantity are controlled by the seasons, that loss of reindeer to predators is largely dependent upon climatic conditions, that climate determines the severity of the insect plague and that the character of the landscape changes drastically with the seasons. The seasonal shifts of the arctic and sub-arctic climate hold the key to the reindeer's life rhythm, the natural cycle in general, and thus the life of the herder. There is hardly a single herding factor which does not in some way alter in response to climatic shifts. Through the loose regularity of the seasons, these variables have become highly orchestrated and interdependent. Climate affects the reindeer and the herder through an infinity of factors, many of which man is unaware of.

Of course, it is the herders who are most aware of the climatic determination of herding form. Pirak (1933), Turi (1910) and Skum (1938, 1955) provide invaluable descriptions of the seasonal variations of herding form in Sweden and the life of the herder in general. Moreover, the Saamish language presents a most refined terminology for coping with those climatic variables that are important to the herding life. The systematic part of the dictionary compiled by Nielsen and Nesheim (1956) in the northern-Saamish dialect contains a wide spectrum of climatic terms. Ruong (1964) defines a number of such words from the Jokkmokk area and presents the important variables these words denote. For snow terminology alone, for example, Ruong (1964:76) lists 13 major categories of words.

As noted, herding form varies along the intensive—extensive continuum considerably during seasonal shifts and, in speaking of herding form, it is frequently the entire year's herding cycle, taken as a single entity, which is referred to. So that, although extensive herders will very likely have periods of intensivity, it is the overall, total (one might say the yearly average), herding form which often gives rise to the usage of the terms common in the literature. However, even predominantly intensive herders have been termed extensive on the basis of their summer herding alone, for the sake of quick comparison with other, more intensive herders. Unless the herding form referred to is presented in detail, such blanket categorization can lead to serious misunderstanding. While seasonal fluctuations in intensivity can be considerable, overall, the yearly herding form will vary along the intensive—extensive continuum at a far more gradual pace. A change in the seasonal cycle of change itself would be required to shift a herder's total herding form year from year. Of course, even if such a change in the usual, seasonal cycle persists only a short time, it may have permanent consequences after the norm is re-established.

In the 1890s, when the forest Saamis of Pite Lappmark began to give up milking their reindeer, and the herds were becoming less tame, the final blow was given to milking by a couple of bleak summers with very few mosquitoes, because it was not possible to round up the reindeer herds and keep them together . . . (Ruong, 1968:295).

Climate can make rigid demands; it can also impose mild pressures. For instance, Skuncke (1958) presents a survey of the types of grazing utilized by the reindeer in different seasons, but Manker states that: "About grazing it can be said in general, that the reindeer is very choosy and eats only that which is fresh or which he likes best" (Manker, 1947:78).

When faced with a wide variety of possible foods, the reindeer naturally will pick what it likes best, but when the climate reduces its choice, it will be forced to pick a less choice diet. Its possible range, however, is often very wide. This observation is significant, for it shows that the reindeer is

not an animal of narrow, ecological flexibility. It is not always simply *driven* on migration by the dictates of a harsh climate. Comparison of mountain reindeer with the reindeer of the forest herders demonstrates this ability most clearly.

It is vital that the herder know the possible range of behavior of the reindeer under different climatic conditions. He must be able to predict the reindeer's behavior during the shifting interplay of climate, grazing and landscape. He must adapt both his herding and his husbandry to these conditions. As with the reindeer, the way in which the herder can respond to a given situation can vary enormously. Drake supplies an excellent example of climatic conditions leading to a drastic divergence of herding method between big herders and small herders:

However, early in *tsuoptsa-vare* (mountains with constant snow) when there is little grass, so that both reindeer and people starve, the rich still migrate there during the *kârma* time (the *kârm* is a fly pest which burrows into the reindeer's hide to lay its eggs), while on the other hand poor Saamis must stay down in the forests in order to obtain milk, and as a result their reindeer get a terrible case of *kârm* (Drake, 1918:29).

The small herders could not afford to release their intensive hold; they were dependent upon milk and cheese. The big herder, however, could forgo milking and live on meat, in order to ensure the well-being of his herd.¹ As Drake mentions, it was not easy for the big herders in the mountains at that time, but, because of the greater flexibility of their husbandry forms, the big herders could meet the weather conditions with a more extensive option. Of course, one should not assume that all the moves of the reindeer nomad reflect a herding motive. The herder may wish to exploit some resource in a fixed location and only available at certain seasons. If exploitation of this resource is compatible with his herding, the herder may move to combine the two.

The determination of intensive – extensive degree is but a fragment of the total interplay between herding form and climate. It is unnecessary here to develop the theme of climatic determinacy, as this is a steadily, recurring theme of the material to come. The reader will have ample opportunity to acquaint himself with climatic determinacy in different historical settings. A brief sketch of some of the most general aspects of the seasonal, herding cycle is presented in the chapter immediately following.

¹ We may also speculate that, to the bigger herder, the sale of reindeer hides in the past was an important source of income and for this reason as well he sought to protect his reindeer from the *kârm* fly.

Part I

Tuorpon Yesterday

Tuorpon and the Rise of Classic, Intensive, Herd Management

The old sita

The name Tuorpon, or actually Tuorponjaur with a broad range of spelling, is first mentioned in tax records dating from the 16th century (see Qvigstad and Wiklund, 1909, II, pp. 231 — 33, 495; T. I. Itkonen, 1966, no. 67, p. 27). A *tuorpon* in Saamish is the weighted end of a slapping paddle used to scare fish into nets or traps (for a detailed account of the word, see Collinder, 1964:237). The word “tuorpon” is of ancient Finno-Ugric origin and has a wide distribution in both Saamish- and Finnish-speaking areas. *Jaur* or *jaure* is the Saamish word for a lake. Thus one would assume Tuorponjaur to be a lake named after this fishing method. On a map made in 1643 by the surveyor Olof Tresk, a Saami village is marked by the shore of Lake Tuorponjaur, situated north of Randi in the Jokkmokk district (see *Map A*). There are two other lakes in the vicinity, however, which bear the name Tuorponjaur, but Tresk’s map with its demarkation of a Saami village certainly adds most credibility to the supposition that it was the group of Saamis encamped by the lake near Randi who came to be called Tuorponjaur Saamis after the lake. I shall, however, present an alternative hypothesis.

According to most Saamiologists, the early *lappby* (Saami village), such as that of the Tuorponjaur Saamis, can be compared to the *sita* model of the Suenjil Skolt Saamis or the early Kemi Saamis, as reconstructed by Tegengren (1952). That is, in rough sketch, a family-clan organization, which spread out during the summer but came together during the winter. The words *sita* (Saamish) and *by* (Swedish), as used here, have entirely different meanings from the later forms of *sita* and *by*, which developed with nomadic herding.

A *lappby* encompasses usually about 10 families as well as a more or less wide-stretching land area . . . The name *by* is historically conditioned and misleading, in that the *by* members now as a rule never gather to a collective village (village being the primary meaning of *by*). From the *lappby* must be distinguished the nomadic team (Swedish *flyttlaget*), which is also often called *by* but usually only encompasses two or four closely related families. . . The word *sit*, in the form *sita*, occurs even amongst Swedish Saamis but signifies nowadays partly the nomadic team (*flyttlaget*), that is, the group of nomads who migrate together and at stops

have their *kåtor* (Saamish homes) at the same place, and partly the group of *kåtor* itself. This meaning of the word *sita* agrees with the word's original meaning, which is identical with our *by*. Earlier, however, even in our lappmarks *sit(a)* has been used about the entire lappby. In accounts from the 1500s (*Norrlands handlingar*, KA) there occur occasionally such names as "Arffwis Jaur Sijit" (1570), Luocht sijtte (1565), Lochs Sijtt (1570), Semitz Jaur Sijtt (1570) and Lais sijtte (1565) in the *byar* (pl. of *by*) in Pite lappmark, and Sjöcksjöcksby in Lule Lappmark was even in the beginning of the last century called Vuollesita (Lower Village) in the church books. The fact that *sit(a)* as meaning lappby has in this way occurred in all parts of Lapland but was later confined to the areas where *byar* with winter *by* settlements were to be found in late times is decidedly a strong support for the surmise that even the *byar* in Swedish territory were from the start firmly organized *by*-teams (*byalag*) of Skoltish type. The connection seems completely clear. Oddly enough, however, in the literature (Whitaker, 1955:54) the wider Skoltish *sit*-concept is interchanged with the narrower *sit*-concept amongst contemporary Swedish Saamis, which is completely bewildering. (Hultblad, 1968:69–70.)

To me, the connection seems anything but completely clear. If anything, the above statements demonstrate abundantly that the usage of *by* and *sita* has not been so very precise. Surely tax collectors and clergymen had no reason to be ethnographically accurate and, if Whitaker has contributed to the confusion, many more might have done so before him. The strength of Hultblad's argument rests on the assumption that the accounts have stuck to common parlance, which he assumes again to retain significant, critical distinctions for word choice. At best, then, he might be justified in finding support for the idea that the Swedish Saamis came together in winter villages, *byar*, the original old style of *sita*. But it is a long way from a group of *kåtor* to firmly organized *by* teams of Skoltish type.

Hultblad (1968:69) maintains further that, as little is known of the old Saamish *by* life in Norway and Sweden, it must be studied in Finland, especially amongst the Skolts, who, he claims, have escaped most colonial influence—a debatable issue. He continues with a description of the Skolt *by*, its communal nature, system of justice and allocation of resources which belonged to the *by* collective, etc., all of which would apply equally well to the early Swedish Saamis' *byar* (cf. Ruong, 1975:60). As I have indicated, Hultblad's arguments for a kind of pan-Saami, *sita* organizational form in precolonial times can hardly stand on their own. One might well contend that Sameätnam (Lapland) could have hosted a number of *sita* organizations of various types, and that comparisons must be made with caution lest dogma come to cloak ignorance. Despite these cautions and the recognition of local differences, however, the penetrating work of both Solem (1933) and Bergsland (1975) indicates that the *sita* organizations of pre-colonial times shared certain, basic, Saamish characteristics. Their work supplies the academic rigor that is lacking in the dreamy visions of Wiklund (1929:60 ff.) and helps to counteract the poorly researched and possibly biased claims of Holmbäck (1922) (see p. 279).

Unfortunately, the issue of the Saamis' pre-colonial organization has been clouded by ulterior political motives, racism, and a kind of Germanic cultural centrism described as Haeckelianism by Tomas Cramér during his final plea to the Supreme Court on March 19, 1980. The content of this ideology and its circulation in Sweden will be discussed elsewhere (see p. 278). It is important to recognize here, however, in dealing with concepts of the old *sita*, that these concepts have not only had a bearing upon Saamish rights in the past, but also are of the utmost importance as regards Saamish legal rights today. Thus the topic has been and still is subject to efforts to twist historical data one way or the other to help or to hinder the Saamish minority.

With regard to the old Tuorponjaur *sita*, there are numerous reasons which cause me to disagree with Wiklund when he concludes that "The Saamis who migrated along the South River or Little Lule River in Jokkmokk used to live by the little Lake Tuorponjaure 6 miles northeast of the present town of Randijaur. After this little lake, Tuorpons lappby has therefore gotten its name." (Wiklund, 1929:62.)

The significance of finding a Saami *sita* marked out by Lake Tuorponjaure on Tresk's map is diminished by the further hypothesis that the location of a winter village would have to be moved every ten years or so, as wood, game and grazing diminished in the immediate vicinity. From the first mention of Tuorponjaur Saamis in the 16th century to Tresk's map of 1643 is a considerable time. It seems likely, therefore, that the category of Tuorponjaur Saamis already existed independently of the lake and village on Tresk's map. In fact, there is evidence indicating that Tuorponjaur was already by that time considered a district, not just the group of Saamis at a particular village and lake. Hülphers writes in the 18th century that "Turpen is called also Turpenjaur, a piece of which was transferred in 1640 to Pite Lappmark and Arjeplog church. See v. Stiernmans Oec. S., vol. 2, p. 298." (Hülphers, 1922:86.) Petrus Laestadius cites the minutes of the church meeting in Arjeplog on February 2, 1657: "The Saamis who are living *in* Torpenjaur were seriously admonished by the well-trusted commander Daniel Jonsson . . . that they without fail come and present themselves in Arjeplog two trips a year . . ." (Laestadius, P., 1928 ed., vol. I:117; my italics).

The above statements indicate that Tuorponjaur was already conceived of as a rather widespread area, not just a place.

Moreover, 32 years before Tresk made his map, Andreas Bureus completed a Lapland map in which he also marked Saami *sitas* by a *kåta* symbol. But on Bureus' map of 1611 we find a Torpajaur¹ and a *kåta* symbol by an entirely different lake branching from the Kalix River rather than the

¹ Note that in Tresk's own *Relation* in 1640 (Ahnlund, 1928:24) he spells the name of this *sita* once as Torpejaurby and later as Torpenjaurby on the same page. I find it odd that Wiklund and others obviously acquainted with Bureus' map could ignore his Torpajaur.

Map A. A section of Olof Tresk's map of Torne Lappmark dated 1643 (from Ahnlund, 1928).

Map B. A section of Andreas Bureus' Lapland map of 1611 (taken from an original print in Uppsala University Library).

Lule River. Add to this the fact that by the Tuorponjaure Lake, northeast of Randijaure, there is also a Tuorpunjåkkå (Tuorpon stream), Tuorpunmyran (Tuorpon swamp) and even a Tuorpunåive (Tuorpon mountain), it becomes all the more improbable that any of these, including the lake, should have been named after a fishing method *directly*. I suggest that the lake, the stream, the swamp and the mountain instead received their names from the Tuorponjaur Saamis who inhabited the area rather than the reverse.

Interestingly enough, if one looks carefully at Tresk's map, it becomes clear that he has labeled most lakes, as was customary, with a "T", an abbreviation for *träsk*, a Swedish word for lake. On the map, a "T" appears to the right of the lake. This tends to indicate that the name Tuorponjaur was meant to indicate the *sita* under whose symbol the word was written, that is, an established name already independent of that particular lake. Otherwise Tresk would have labeled Lake Tuorponjaur with a "T", which would have meant "Tuorpon Lake Lake"—a kind of redundancy he avoids everywhere else. Thus Peuraure is marked Peino "T", and Vajkijaure is marked Weicka "T", etc. (Tresk's map was reprinted with a commentary by Ahnlund in 1928). I suggest, therefore, that the Saamis of the already established category of Tuorponjaur Saamis (with a name deriving from a wide possible range of localities) happened in Tresk's time to be situated by a lake, which, because of this fact, has come to be called Tuorponjaure.

This is not to say, however, that I believe Bureus is anywhere near correct in placing Torpajaur above the Big Lule River on a branch of the Kalix River. Surely the most logical place to find the camp of Tuorpon Saamis would be somewhere in or at least nearby the area now designated Tuorpon Saameby. On Bureus' map, where one might expect to find Torpajaur, one instead finds a camp entitled Sijtovuoma. The word *vuoma* is of Finnish origin and is completely out of place so far south. It would be perfectly at home north of the Big Lule River, however, where Finnish colonization had swept over the area. Linder (1850:222) has remarked upon the lack of Finnish place-names south of the Big Lule River, and the linguist Olavi Korhonen has confirmed for me that Bureus must simply have made a mistake. It is interesting to conjecture that Bureus may have mistakenly switched the names Torpajaur and Sijtovuoma. Elsewhere in his map, he has made similar errors. A number of zones seem to have been broken away from their contexts and shifted north or south. If some kind of mistake of this nature was made, then indeed the Tuorpon Saamis may already have been camped where Tresk shows them to be in Bureus' time. Torpajaur simply cannot be so far north as Bureus claims. This does not disprove my earlier suggestion that the Tuorponjaure Saamis may have acquired their name from another lake than that marked by Tresk.

Moreover, the nature of the *sita* labeled Tuorponjaur by Tresk is not

certain, for the winter *byar* which are supposed to have formed the roots of the evolving lappbys may themselves have come heavily under the influence of outside trade relations with regard to localization. From early times, merchants had established regular trading expeditions with specified, seasonal, market places (see Hjort's report, Jokkmokk, February 13, 1606, in *Norrlands lappmarker*, Kammarark., referred to by Hoppe, 1943). By the time the Tuorponjaur Saamis are first mentioned in tax records, such trading relations had, in all likelihood, been going on for hundreds of years and certainly not only with Swedes. Öström (1978:9) points out that Swedish colonial interest in the north dates at least as far back as the 14th century. Sweden hoped to hinder Russian expansion after the Peace of Nöteborg in 1323. But even before this time trading relations with Finnish merchants had been going on for hundreds of years. East – west trade was well established by the time southern interests imposed themselves (Lundmark, 1971:10 f.). Hoppe (1943:83) says that "The norm seems now to have been that trade up in the lappmarks already before the establishment of the (official) market places occurred at certain fixed locations, and each one composed the central point for a lappby."

The question which no one seems able to answer but which many tend to ignore (Wiklund, 1918:270) is, what was the difference between the early lappby with its supposed, communal, winter camp and the fixed trading location which composed a central point for it? Did an already existing system of communal, winter-camp settlements come to accommodate trading relations, possibly by shifting settlement location, just for a time during actual trading? Did trade possibilities help to bring about winter congregations in the first place?

Whatever the answers, by the 16th century at least, if not from time immemorial, Saami families were congregated during the winter at places they referred to as *talvatis* (winter gathering-place). Within Tuorpon Saameby territory, there are three places which still bear the name *talvatis*, the town of Jokkmokk itself, a place near the present Luvos and a place near the present Maitum. Frozen river and lake chains enabled traders and tax collectors to reach these places without much difficulty.

The rise of the milking economy

It is difficult to say anything about the early forms of reindeer-herding before the invasion of settlers. Hultblad (1968:67) refers to a form of arctic reindeer-herding, semi-nomadic (*halvnomadism*) and combined with the hunting of wild reindeer, a form which he sees as having been squeezed out gradually from the late Middle Ages onwards by the development of intensive, milking whole-nomadism (*helnomadism*), a form Hultblad derives from the diffusion of the goat and cattle husbandry of the expanding

Nordic peoples. Wiklund hypothesized that the formation of a collective winter village, such as that found at Tuorponjaur, can only reflect at most a semi-nomadic, herding method (Wiklund, 1918:270).

By semi-nomadism, he (Wiklund) meant that migrating between a few stopping places which is characteristic of the forest and lake Saamis who lived by hunting and fishing; by whole-nomadism the reindeer-herding, mountain Saamis' more active nomad life with frequent and usually longer migrations. He saw in semi-nomadism an older developmental stage, in which all Saamis were once found, and he has on this point never been gainsaid. (Hultblad, 1968:54.)

As soon as pressure arose from increasingly main or specialized herding, that is, where herding constituted the main form of livelihood, so that individual herders owned many reindeer and not just transport and decoy animals, the Saamis were pushed toward whole-nomadism, and the collective winter village had to split up (Wiklund, 1918:270; Hultblad, 1968:73). The argument for this supposition is that big herds cannot be concentrated around a single camp for a long time, for the grazing will run out. The big herd would have to be split up and even the smaller herds moved from time to time. To protect their interests (their herds), groups would find it necessary to split into smaller entities.

Moreover, once members of the old *sita* began making the transition from minimal partial herding to main herding, with its accompanying competition for grazing land and adaptations to herding determinants, it was necessary for them to begin utilizing the mountain grazing lands in the summer more and more and to scatter throughout the forest lands in the winter. As winter grazing is in Sweden the weakest link in the yearly grazing chain, it is best utilized by small herds (cf. *Renutredningen*, 1960:33). Whereas large herds would tend to scatter, smaller herds would not demand as frequent moves and could be kept together with more ease and thereby guarded against predators.

It is important, then, to consider the factors which gave rise to main, specialized herding in preference to semi-nomadic, arctic herding, with greater emphasis on hunting and fishing. On this point, most sources agree that main herding, with its resulting whole-nomadism, became more economically efficient or necessary for the Saami than their old, diversified livelihoods due to the colonization of the north. By causing a depletion of wildlife and by encroaching upon the hunting and fishing of the Saamis, the Swedish settlers and tax collectors, compounding the influence of early plunderers and licenced trade companies, pushed the Saamis into a more and more developed dependence on reindeer-herding.

Hultblad (1968:59) goes much farther than this, however. According to him, there is much evidence to prove that whole-nomadism radiated from a central area including Lule (and thus the Tuorpon area), Pite and Ume Lappmarks. Hultblad not only sees the rise of whole-nomadism as possibly necessitated by environmental changes or influenced by the spread of Nordic animal-husbandry, but also regards contact with Norse farmers

as an essential, evolutionary stage in the development of this new herding form.

From later centuries, it is known that Saamis were often hired by Nordic farmers as livestock shepherds . . . and this is possibly an ancient tradition. What could be more natural than that the clever, north-Norwegian farmers, who ruled over wide areas from their isolated farms, should utilize the excellent mountain grazing by leaving their small livestock in the care of Saamis during the snow-free season . . . ?

But if sheep, goats and reindeer are grazed in the same herd and herded by the same people, the transfer of Nordic livestock-care methods to reindeer-herding becomes easily understandable. Once the reindeer proved itself superior to Nordic livestock as milk and meat provider in the mountains, the essential emphasis could have been shifted to reindeer-herding quite quickly . . . As the tame reindeer-herds became larger, it must have enforced such a change in the Saamis' way of life that the livestock care inherited from the Norsemen had to be abandoned during the winter. (Hultblad, 1968:69.)

While it is well known that the Saamis picked up many dairy techniques from Nordic settlers and almost their entire milking vocabulary (Qvigstad, 1894; Hatt, 1918; Wiklund, 1947), I do not believe that this can in any way constitute grounds for attributing a separate origin to whole nomadism with intensive milking husbandry. Hultblad's speculations are built upon diffusionistic theories about changes in economic form which, however, can only give a very partial kind of explanation.

Hultblad (1968:61) argues that reindeer-hunting is "a more primitive and less effective form of livelihood than reindeer-herding". Similarly, he argues that the whole-nomadic, intensive, milking form of herding was bound to replace the arctic, semi-nomadic, herding form with hunting, because the whole-nomadic form "did not only provide more security against starvation, but also utilized better Nature's resources" (1968:62). Such arguments are very similar to those used to account for the spread of agriculture and "higher civilization" at the expense of herding. Unless some explanation is given as to why it becomes increasingly necessary to exploit Nature's resources more efficiently (rationalization, see p. 481), these arguments imply some vague predeterminism which regrettably has frequently been invoked to condone the worst moral crimes in the name of "progress" or "development".

In accounting for economic changes, Hultblad always seems to place innovation before need. While whole nomadism did indeed become more efficient than semi-nomadism, this is not an automatic, *a priori* truth. If game were so abundant in the forests that starvation was unheard of, herding might never have developed. Some of the earliest Swedish settlers in Lapland, the Granström family in Tuorpon, for example, became "Saamified", quit farming and began herding. As with the question of the origins of Saamish reindeer-herding itself, the question of the origins of Saamish reindeer-milking is still undecided. But, regardless of how it was developed or from whence it was acquired, the knowledge, however obtained, is not a sufficient explanation of the rise of intensive herding

based largely on milking husbandry. The rise of large-scale, Saamish, reindeer-milking husbandry and the arrival of settlers seems to coincide. Each group influenced the other toward an adaptation to their mutual presence and, where possible, to their mutual benefit. But Saamish intensive herding with milking might well have evolved under the circumstances, even if the Saamis had never seen or heard of a cow or a goat.

Many of the same pressures which encouraged the rise of a specialized herding economy also encouraged its intensive herding form. The wild-reindeer population was diminishing rapidly. Hultblad (1968:59) even suggests that wild-reindeer herds may have been purposely decimated in order to avoid the disruption of and to allow more room for the increasing tame stock with its more efficient supportive capacity. By milking reindeer, a larger population of herders could be supported by fewer reindeer. In order to ensure the availability of the means of production, reindeer and grazing, it became necessary to raise a domestic stock or put wild herds under ownership and increasing control. A herder actually occupying a tract of land with his herd establishes a far better claim over the area than would a herder with his herd spread thinly everywhere. Likewise, the increased intensivity of farming over herding and its constant rather than occasional occupation of land formed the basis of Swedish, colonial, land-ownership principles. Concentrated, intensive use of a grazing zone is the most elementary way of laying claim to it. Similarly, intensive control over reindeer is the surest assertion and guarantee of reindeer ownership.

Moreover it is my belief that in the Jokkmokk district, by 1600 at least, the intensive pressures and possibilities were greatest. Mountain grazing was largely unexploited and therefore excellent. The terrain gave ample opportunity for the guarding of separate herds. The intensive pressures included very great danger from predators and, of course, the compensation payments which exist today were unheard of. Herders needed to be in close touch with their own herds for food (milk and meat) and for transportation purposes as well. Obviously each herder would have wanted to protect and manage his own interests as much as possible.

If a big herder, not under the necessity of carrying on milking husbandry, had attempted to go totally extensive in the summer land at that time, it would have been very likely that he would not have had a herd or been unable to gather his herd by autumn. Extensive herders need each other for gatherings and separations. The individual herder cannot afford to be too much at odds in his herding form with the herding forms of his comrades and neighbors. As will be seen in the example given by Eidlitz (1974:88) from the Kola peninsula, a strong, intensive tradition can force extensive herders to comply. On the other hand, for a single herder to try to maintain intensivity in an area where large-scale extensivity is the rule can be equally hopeless. Despite his efforts, his herd will be swamped, mixed and spread by the free-roaming, extensive reindeer.

There is little information concerning the evolution of herd forms before the 18th century in the Lule Lappmark. Rheen (1897:58—60), writing in the 1670s, cites trade with Norwegians as one of the essential reasons for the migrations of the Jokkmokk Saamis all the way to the Atlantic coast. These Saamish "merchants" sold Swedish produce as well as their own hunting, fishing and herding products in Norway and brought Norwegian goods east to be sold at the winter markets. To what extent this trade was a primary or a secondary motivation for such migrations is unknown. Rheen (1897:59) indicates vaguely that these trading trips of the Saamis were essentially supply runs for their own consumption. This would support the interpretation that these Saamis were already rather specialized whole nomads, who were therefore already dependent upon long migrations. Supply possibilities in Norway and at the Swedish winter markets were undoubtedly of great consequence for them and could easily have inspired a limited mercantile role for certain Saamis who served as middlemen over great distances in combination with their usual herding. On the basis of records of herd composition which for some herders showed a large proportion of oxen (useful for transport), Hultblad (1968:127) concludes that long migrations may certainly have occurred with trading as the major *raison d'être*. The relative importance of herding and trading probably varied between Saami families and over time.

Thus, while the use of the reindeer as transport animal for the nomadic family's immediate needs is well known, almost nothing is known about its use for purposes removed from or alongside the immediate herding context, except for the forced transport of mineral ores (for example, Bäärnhielm, 1976:12). The possible combinations of a reindeer herd's transportation and meat- and milk-producing functions seem numerous and could have enabled herders of varying means to occupy a broad spectrum of economic niches.

There is no evidence of a collective winter *sita* of Tuorpon Saamis after the mid 17th century, an observation which corresponds well to the invasion of colonists and the rise of whole-nomadic reindeer-herding. Specialized (main), intensive herding at this time, although it may have denied the possibility of maintaining a collective winter camp, did not necessarily stipulate whole nomadism. Before the 18th century, Hultblad (1968:58 and 127) claims that there was little ground for separating herders into mountain- and forest-Saami categories. Shifts and mixed forms were common, as were their correlations along the semi-nomadic-to-whole-nomadic scale. Herding in the Jokkmokk region in the 18th century, however, witnessed the crystallization and distinction of two basic nomadic poles, that of the mountain Saamis and that of the forest Saamis, whole nomads and semi-nomads respectively.

It must be noted that the description of semi-nomadism formulated by Wiklund mixes mobility concepts with historical precedent. With the rise

of an intensive, milking-reindeer management, semi-nomads could certainly be specialized herders with far less dependence upon hunting than in the earlier, pre-milking days. Thus semi-nomadism need not necessarily be coupled with the partial herding which Wiklund describes and which Hultblad might term "arctic herding".

The sliding scale from semi-nomadism to whole nomadism is an important axis of comparison for the discussion of herding form. But, as with the intensive—extensive scale, it must not be bound by contingent historical associations. Moreover, any such degree of mobility (see Appendix) must not be taken to imply any certain, corresponding degree of intensivity or extensivity. In a similar way, no point on either of these two scales necessarily implies a certain position on the partial—specialized herder scale. Each of these three sliding scales, intensive—extensive, semi-nomadism—whole nomadism and partial—specialized herding, can vary and merge with the others as an independent variable, even though in each concrete case they are all closely interrelated. There is probably no permutation of all the possible combinations of these variables which has not existed somewhere at some time in reality. A herder can be partial, intensive and semi-nomadic, specialized, intensive and semi-nomadic, specialized, extensive and semi-nomadic, etc. and anywhere between the limits of each scale. It is only when we examine the context of any one specific time and place that we find forceful pressures towards the formation of certain herding trends, culminating in the predominance of specific form permutations.

As pressures from settlers and competition for grazing amongst herders grew, herders began extending their grazing into the high mountains and thus subjecting themselves to an even wider spectrum of geographical and seasonal herding determinants. Whole nomadism was a necessity to many herders but by no means to all. One may expect to find herders covering a very broad scale of degrees of nomadism. The different groups within various herding Villages have always shown quite different degrees of nomadism in both extent of move and timing of moves. The sharp division between mountain and forest Saamis found later is more than just a logical response to different environmental niches. What began as environmental response was then largely molded by law and the determination of Village boundaries and later even by rules concerning migration-scheduling. It is the mountain-Saami form of specialized, intensive herding which concerns us here in the example of Tuorpon.

In the 18th century in Jokkmokk, there seems to have been a majority of rather small (under 200 head), milking, intensive herders (Hülphers, 1922:111; Hultblad, 1968:148). As noted previously, small herds, milking and intensive herding tend to form a constellation, although there is much room for variation.

The new sita and the new Village

During the 17th century, incorporation of the mountain grazing lands led to the development of a new administrative and social grouping of herders. The old, winter *sita* organization of more or less rounded, cellular shape without defined direction (Hultblad, 1968:73) was superseded by the *vuoma* organization, with boundaries following the new migration routes in the northwest—southeast direction. This *vuoma* organisation laid the basis for the determination of the areas of the modern mountain Saamebys, as demonstrated by such Saameby names as Saarivuoma and Lainiovuoma. The *vuoma* group's territory became a rather long and narrow strip, readily observable today in the shape of so many mountain-Saami Villages.

In comparing archival usage of *vuoma*—equivalent to the administrative "Lapp District" (Sw. *Lappby*)—we see that Lappish sociological thought differs from Swedish official conception, for to the Kōnkāmā Lapps *vuobme* has two meanings: (1) a geographical meaning: "woodland" (as opposed to bare mountains) (Nielsen 1938:783) and (2) a sociological meaning: "area of migration jointly used by a number of bands".

To the reindeer nomads, the band (Lp. *sii'dā*) is the highest level of local organization, whereas the *vuobme* or its Swedish equivalent, *lappby*, is a geographical area seasonally occupied and migrated through by several bands and without the connotations of village life of the Swedish term. In fact, the whole administrative concept of Lapp District strikes the Kōnkāmā reindeer nomads as somewhat alien and artificial. The social anthropologist may regard it as one aspect of external political social structure imposed by a national state on an internal, native, social structure . . . (Pehrson, 1957:1—2.)

Herding developments may have stretched the movements of the Saamis in the northwest—southeast direction, but it was largely taxation policy (along with topographical hindrances) which lay at the root of the specification of *vuoma* boundaries. It was also with the rise of the whole-nomadic, intensive, herding form that the newer, narrower concept of *sita*, the *sita* as nomadic herding unit rather than as an entire Village, came into prominence.

The taxland system, which began in the early years of the 17th century and existed down to 1886, spans most of the intensive era in Jokkmokk. It constituted the legal framework of land distribution on which the intensive era was built. According to Hultblad, Holmbäck and many others, a taxland was a land area of specific dimensions, the *use* of which was delegated to an individual in return for *rent* or tax paid to the Crown. However, this point is still highly debatable, for there is strong evidence that the Crown acknowledged the individual's right of *ownership* over his taxland. This issue is currently being discussed in the Swedish Supreme Court in connection with the Skattefjäll Case (that is, the "Tax-Mountain" Case), in which for the past 14 years the Saamis have contested their land and water rights.

As a matter of fact, according to contemporary usage, words like *lappskatteland* and *skattelapp* (the Saami tax-payer) strongly suggested an analogy with the *skattebonde*, the independent peasant proprietor, as opposed to the *kronobonde*, i.e. a tenant who paid rent to the Crown (Mörner, 1979:89).

Ideally, taxlands could be inherited, but, in early times at least, not partitioned amongst the "tenant's" descendants. As with the Village boundaries, it is a thorny problem to attempt to unravel how much the taxland divisions were based on Saami forms of allocation and how much on the administration of the Crown.

Already in the mid 16th century individual Saamis used specific land areas with traditional right. They had in short been sitting on these lands for such a long time that it had become tradition and habit. This tradition was so strong that all, even the courts, acknowledged that he who used the land had private right to it. But for this right he must pay tax to the Crown. (Ruong, 1975:61.)

The taxland divisions and accompanying tax policies form one of the major steps in the crystallization of Tuorpon as a specific herding district. The development of the taxland system reveals much about changing methods of land use, and this changing use was not only a result but also a cause of pressures toward an intensive herding form.

A herder in possession of one or more such taxlands was referred to as a tax-Lapp. Those who could not afford such holdings or who were unable to obtain access to taxland titles were called sprintar-Lapps. As the crowding of herders increased in the mountain regions as well as in the forest regions, more and more ground was incorporated into the taxland system. Not all land areas, however, were divided into taxlands. As was noted, the taxland divisions followed to considerable extent the already accepted land divisions of the Saamis. Large land areas were, of course, important for the community at large and could not be assigned to any individual. Such land was called "commons" and was available to the herds of the sprintar-Lapps.

Hülphers (1922:86) writes that in 1766 the Jokkmokk parish contained 187 tax-Lapps and 18 sprintar-Lapps. Hultblad (1968:121) has made graphs of the tax-Lapp numbers in Lule Lappmark from 1660 to 1867. In his graphs, distinctions are also made between tax-Lapps belonging to (or whose taxlands belonged to) the different Villages. Thus there is a separate entry for Tuorpon, and, though figures may not be exact, the overall trends are readily visible.

This is not to say, however, that only those Saamis actually in contract with the Crown drew benefit from the taxlands. Much was left to the discretion of the formal tax-Lapp. Should he desire to sublet part of his land to a sprintar-Lapp or even grant partial rights of use, such as fishing rights, only on his taxland, this was largely his privilege. All kinds of transactions could be made between different tax-Lapps. A herder with land in one place might form an alliance with a herder with land in another, so that both would benefit during migrations. A tax-Lapp might

allow any number of family members or friends to use his land. He could thus build a *sita* herding unit with sprintar-Lapps as well as with other tax-Lapps. He could even hold taxlands in more than one Village territory and thus be a tax-paying member of more than one Village. Family ties, marriage ties and social manipulations were of major importance for each herder in organizing the optimal availability and distribution of grazing lands and fishing waters.

The exact, early system of taxation is poorly understood. By the time Rheen was writing in the 1670s (Rheen, 1897:60), tax-Lapps apparently contributed to the Village's tax payments according to how much taxland they held or the value of this portion. In even earlier times, it seems that a number of different tax forms (under constant reform) had been established which could exist side by side with the land tax. There was, for example, a basic tax for the use of fishing waters and a specific salmon tax (cf. Lundmark, 1971:14 f.), but also a personal tax for all Saamis over 15 years of age (I. Fellman IV, pp. xxx f. and xxxii; Almquist II, pp. 329 ff.) (cf. Hultblad, 1968:73). The rise of the taxland system can be seen as an elaboration of the principle of taxation according to produce or benefit derived from the use of the land, regardless of the ownership debate, but this does not mean that with its rise all other taxation forms immediately disappeared. It seems that even sprintar-Lapps were subject to certain forms of tax (Hultblad, 1968:86).

Much the same interest as that which motivated King Gustav Vasa to put a tighter control on the Birkarls and assert the Crown's own tax-collection administration led to a tax reform in 1695. The noticeable decline of tax-Lapps in the latter half of the 17th century in Jokkmokk was undoubtedly a reaction to the enforced hard labor they were subjected to for the transportation of silver ore from the mountains (for example, Schnitler, 1929, II:149). In the Jokkmokk and Arjeplog district, there were no less than three mines in operation during the 17th century, Kedkeware (Kerkevare or Silbotjokko), Alkavare and Nasafjäll. Saamis were made to place their transport oxen at the disposal of the mining companies. The transport of ore from the mountains to the smelting plant was extremely strenuous for the reindeer and could kill them. Those Saamis who refused to cooperate were cruelly tortured. Many fled their taxlands in order to avoid this impressed service (Hultblad, 1968:74). Many left for Norway, but even if they did not leave Swedish territory permanently, they could change their taxation allegiance to come under foreign protection. The national borders were not fixed at this time, and the herders migrated through different spheres of influence. The Swedish Crown could ill afford to estrange "its" Saamis.

To combat this loss, a new tax law of 1695 fixed at a certain sum the tax to be paid by each Village.

Each so-called Lappby, that is to say, those that use the same grazing district, have their District Clerk (*länsman*) . . . The clerk should, in conjunction with the sheriff,

yearly decide and divide amongst the neighbors the fixed tax sum which is required of the Village and compose a type of Tax Committee in the Lappmark. As for those Laplands which in later times have been completely removed from the Saamis and taken over by settlers, these latter are responsible for the basic tax. (Linder, 1850, no. 16:159.)

By fixing the sum due in tax from each Village, the Crown insured the Saamis against repeated tax raises. But, most importantly, it also provided the grounds for prohibiting Saamis from leaving their districts. Moreover, this prohibition was created so as to be internalized by the Saamis themselves. Now, if one Saami were to leave his tax district, he would be adding to the tax burden of his fellows left behind. In the Saami Sheriff instructions of 1695, it is stated in § 3 that

... each Saami, wherever he may be in the Lappmark, should pay his tax to the Village under which he is once registered; to which end the Lapp sheriffs correspond with each other about those who move out of the one sheriff district into the other, that they might be taken back again to that Village where they are registered and should pay their tax. (SOU 1975:100, p. 391.)

As part of the new taxation system of 1695, a special kind of property register called the Land Register (*jordebok*) was started. This book listed the names of all the tax-Lapps, their taxlands and that portion of the total Village tax which fell to each tax-Lapp in relation to his holdings (cf. Linder, 1850, no. 16:159).

The nature of this Saamish tax system has direct parallels with various models of trade taxation to which the contemporary Swedish farmers and merchants could be subjected. With variable success, the merchants of the Baltic towns managed to obtain trade monopolies in relation to the farmers in "their" respective districts. These town merchants exacted a trading tax, which in turn enabled them to meet the tax demands placed upon them for further trade with Stockholm. For hundreds of years, merchants in the small, northern-Baltic towns were not permitted to trade with towns other than Åbo and Stockholm.

The tax reform, which imposed a permanent tax burden and which in turn demanded stability of Village membership, also resulted in the need for stability of Village territory and thus the further specification of Village boundaries.

The tax reform completed in 1695, by which the tax was fixed at a certain sum for all time, meant that the Villages' limits thereafter could not change. In order that the balance of tax burdens in the different Villages should not alter, it was stipulated that tax-payers were not allowed to leave one Village for another. In spite of this, considerable changes in Village boundaries occurred during the 1700s. (Hultblad 1968:79.)

Court records of 1733 (Dombok 10/2) and surveyors' records of 1745 (Qvigstad & Wiklund, 1909, II, p. 17; cf. Hultblad, 1968:81) show that Tuorpon Saamis and their northern neighbors, the Sirkas Saamis, mingled in quite a random way in the summer land. It seems that Village

membership was at first more a matter of the place at which one paid taxes rather than where one practiced one's herding. Obviously, however, with increased crowding and the inability to change Village membership, it would not do for herders of one Village to exploit grazing from another, when the tax burdens for each Village had been regulated according to what was deemed its production capacity. As winter-grazing capacity in this area is the "bottle-neck" of the grazing cycle, and summer grazing is relatively plentiful, it is understandable that the mixture of Saamis from different Villages in the summer land may have been more easily tolerated than in the winter land at this stage.

This same surveyors' report mentions that by 1745 the great lake Vastenjaure had constituted an informal border between the two Villages of Sirkas and Tuorpon. Concrete dividing lines were drawn between these Villages a few decades thereafter. The southern border of Tuorpon was established earlier, for it follows the District boundary separating Jokkmokk from Arjeplog, which happens to be the same as the boundary separating Lule Lappmark from Pite Lappmark. This southern boundary derives, therefore, from the early, tax-collection jurisdictions of the Birkarls, long before the Crown intervened (see Wiklund, 1929:56, and Olofsson, 1962, in *Övre Norrlands Historia* I:136).

While the Norwegian – Swedish border, once established, set the westernmost limit to the Swedish Crown's taxation jurisdiction and thus the western border of the Swedish mountain Villages, until the early years of the present century this border was of relatively little significance to the herding Saamis. The border between Norway and Sweden in the northern districts was not specified until 1751 as a result of field investigations by the Norwegian Major Schnitler from 1742 to 1745. Until then, the border was one between spheres of influence, constituting a diffuse line which could be (and apparently was by Schnitler) manipulated to some degree for political ends (see Bergsland, 1975:417; Klockhoff, 1979:12). Even today the two countries have agreements allowing certain Saamis limited herding privileges on foreign soil.

To the east, the Lappmarks were bordered by the "Lappmark border", which separated the coastal and most heavily colonized zones suitable for agriculture from the wilderness. Later, in the latter part of the 19th century, a similar line, the Agriculture Line, was extended to the west of the Lappmark line. The area west of the Agriculture Line was to be out of bounds for farming. Farming continued its westward spread, however, so that the Lappmark border and the Agriculture Line, while limiting Saamish rights to the east, lost power to protect Saamish rights to the west. These lines have been incorporated into various administrative grids. For example, the essential, mountain-Saameby zones in the north lie west of the Agriculture Line, as has been mentioned.

While certain rights, such as hunting and fishing, for Village members are limited to their Village territory, grazing rights based on traditional

usage are more open-ended to the east. Tuorpon herders, for example, can graze their reindeer well east of the Agriculture Line and, should conditions require it, almost as far as the Baltic coast. Thus, the eastern and western borders of a mountain Village such as Tuorpon have from the historical perspective been far more open-ended than the northern and southern borders, once whole-nomadic, intensive herding set in, with long migrations in the west – east direction. As for Tuorpon as a geographical area, therefore, I believe it fair to say that by the mid 18th century Tuorpon had assumed a definite physical form, more or less its modern form. It was to keep this form, with some minor adjustments, until 1945, when the Jákkákaska Village was created between Tuorpon and Sirkas, annexing lands from both of these.

From the tax era to the police era

While tax-Lapps were allowed much freedom in the allocation of their taxlands, such matters were not totally left to their own discretion. It was in the interests of the Crown to assure each herder sufficient lands and waters for his needs, provided he was willing and able to pay for these provisions and thus contribute to the Crown's tax revenues. A big herder with a large taxland might suddenly suffer a setback. If he then had far more land than he could use fully, the Crown could either revoke his contract and diminish his holding or lease the same taxland to someone else. If a herder could present a solid claim to the courts that he or his ancestors had of tradition always used a certain land area or fished a certain lake, then it was considered his legal right to gain access to that taxland, even if already allocated to others.

In the 17th century, court records show a pattern of one taxland per tax-Lapp. These taxlands were generally quite large areas and all of them were in the forest district. Disputes were at this stage mainly confined to fishing rights. With the drive for increasingly developed nomadism, based on herding specialization, grazing disputes begin to predominate in court records. Taxlands grew smaller, reflecting only seasonal use, and spread further and further west into the mountains. It became quite usual for one tax-Lapp to own a number of different taxlands situated so as to cover his seasonal needs.

With the end of the early mining period, there was an incredible increase of tax-Lapps and taxlands in the 18th century. Land disputes reached a peak in the 1750s. More and more of the Crown's commons were turned over to taxlands, until even the westernmost mountain regions resembled one huge jigsaw-puzzle of taxlands. Highly detailed regulations had to be composed, regarding the amount of time one herder could spend crossing another's taxland with his herd en route to his own territory.

Eighteenth-century court records (see Qvigstad & Wiklund, 1909; Wiklund, 1912; Hultblad, 1968:343 ff.) contain innumerable complaints against herders who encroached upon the grazing lands of others for just a few days during migration. So tightly organized and well utilized were the mountain grazing lands that even a slight transgression was brought before the court for a ruling. Such disputes afforded the early *lappfogde* or Saami-sheriff administration a well-informed view of changing herding conditions and needs, which, together with direct petitions and claims from herders, resulted in a very finely adapted and highly flexible, land-distribution system, based on individual rights tailored to individual needs. The apparent, even-handed justice of this system, though practiced by the Crown, must be recognized as stemming largely from the Saamis themselves.

From the mid 16th century, it seems that the Saamis as well as the Birkarls sat at the board at the *Thing*, which was led by the Saami sheriffs. During the 17th century they came to replace the Birkarls or the citizens, so that by the middle of the century, the board became completely Saamish. The Saamis obtained in this way great influence in the district courts, and old Saamish traditional rights sneaked into the court decisions. But even when this was not the case, the judge was dependent upon knowledgeable Saamis, expert in questions of localities and techniques of livelihood. (Hultblad, 1968:72.)

Under such a system of grazing rights and distribution, we can expect a wide spectrum of mobility and migration-scheduling based on individual access to taxlands. Each herder's entire herding system depended upon the size and placement of his available taxland(s). There was no room for large-scale, Village collectivity. Nor was there room for loose herding methods. Transgressions of reindeer onto "foreign territory" could be the cause of considerable trouble. This taxland system was one of the major factors directing herding form in Jokkmokk toward its most intensive era.

Had administration of "the Lapp Tax" been the only reason for the Swedish Crown to favor intensive herding, the intensive era might have ended earlier. As it was, however, intensivity came to be demanded by the administration not for the benefits it would bring if it were practiced, but for the trouble it would cause if it were not practiced. The taxation of herding was to give way to the policing of herding.

By the end of the 19th century, the set Village tax, which was instituted in 1695 and which was calculated from the income from the Village's taxlands, had become insignificant. Hultblad (1968:74) indicates that the insignificance of this sum was the result of inflation and, to support this view, he refers to SOU 1924:59, p. 18. Yet a perusal of SOU 1924:59 indicates that Hultblad's explanation is faulty. While it claims that the tax had become so small that it was not worth the effort to collect it, there is no mention that its small value was due to inflation only. Instead, SOU 1924:59 states that:

For certain Saami taxlands the tax has through time stopped, because these lands have through reported decision been removed from the Land Register (*jorde-boken*). In 1695 the total Lapp tax for the said districts' (Norrbotten and Västerbotten) lappmarks was 1,629 1/2 dollars. Currently the total sum in Norrbotten is 501 Crowns 57 öre. In Västerbotten the total sum is 133 Crowns 3 öre . . . (SOU 1924:59, p. 8.)

According to SOU 1924:59, p. 18, the trouble in collecting this small sum was caused by the difficulty of deciding who should pay how much, now that the private use of taxland had been done away with in the Acts of 1886 and 1898. As noted, it was the Land Register which was responsible for the registration of property and the allocation of the tax burden. While the removal of a taxland from the Land Register may have freed the tax-Lapp from the Lapp tax, according to Cramér, it also came to be interpreted as a denial of ownership rights—a manipulation by what Cramér refers to as the “Widmark – von Düben line”.

The survey north of Jämtland was carried out according to the 1873 survey decree. The Widmark – von Düben line had already by this decree a powerful influence, in that the Saami taxlands were not surveyed as abiding Land Register units, and the Saami taxlands north of Jämtland are therefore not in the property register . . . (Cramér, 1979*b*, Bilaga, *Samefolket*, no. 6, p. 6.)

Whatever the reason, the old Lapp-tax system of 1695 was archaic and no longer usable. Nonetheless, the old Saami-sheriff administration, which had been established in 1760 for the purpose of supervising taxation under the taxland system, lingered on until 1928. It was totally reformed, however, around the turn of the century, as the importance of tax collection dwindled. The transformation of this administration was largely a result of the spread of farming and the inevitable conflicts between farmers and herders. In 1882, a Saami Law Committee was appointed with the duty of ending such conflicts. Although the taxland period was characterized by many court cases regarding land conflicts—largely between herders—it was an institution devised basically to ensure fair, smooth-running, herding (tax-producing) operations rather than one devoted to the strict commandeering and inspection of herding to smooth herder—settler relations which was to follow.

Of course, the spread of agriculture and colonial settlement not only came into conflict with Saami herding, but also participated in the development of the herding system as well. The herding system, which came into increasing conflict with colonial contact, was in many ways fostered by it or developed as a reaction to it (see Campbell, 1948). Similarly, early settlement in the north was largely made possible by the Saami herding, with which it later came into such conflict (for example, Stenberg, 1920:28 ff.). To treat the two as independent variables is an error.

The Saami Law Committee believed that conflicts could be avoided by separating geographically the herding and farming systems as much as possible. The Committee's work, which resulted in the Act of 1886, con-

tinued and further solidified the administrative divisions of Villages. Grazing areas should be contained in *Lappbyar* (Saami Villages), but, as a set tax burden was no longer to be imposed on each Village, their boundaries could be, and in some cases were, somewhat adjusted. Moreover, it was no longer necessary nor desirable to preclude the possibility of redistributing herding members from one Village to another. In fact, such redistribution could be very desirable, and the new Act went beyond the point of not hindering the movement of herders to different Villages to the point of reserving the rights to impose such relocations, should overcrowding demand it. Overcrowding in the grazing lands was apparently recognized as one of the major reasons for conflict between herders and settlers. Reindeer without adequate grazing could not be kept to prescribed grazing zones but would instead spread, defy the geographical separation of herding and farming areas and damage the settlers' crops. By this time, a Saami tax was not considered vital to the Crown, nor was Saami herding so vital to the progress of colonization or international politics.

Under the new Act of 1886, leases on specific taxlands were abolished, and the Village members were left to utilize the land within their grazing territory according to their needs. If the taxlands had been fully owned by their respective tax-Lapps, such an abolition of property rights would have been a gross injustice, as the Saamish side has argued in the Skattefjäll Case. It is remarkable that the herding description presented by the Law Committee in 1883 makes scant mention of taxlands. H. A. Widmark, who led much of the Law Committee's work in 1883 and influenced greatly the Act of 1886 as County Governor of Norrbotten, had also collaborated with von Düben in the latter's book, *Of Lappland and the Lapps*, published in 1873. As Cramér has demonstrated (*Samefolket*, 1979, no. 6, and *Samernas Vita Bok* VI, 1979, as well as in his final testimony to the Supreme Court on March 19, 1980), both Widmark and von Düben were greatly under the influence of social Darwinism.¹ Until the defeat of Hitler, a common attitude to the Saamis in Sweden was that they were beings of a lower order, who should not be given the same legal status as Swedes nor stand in the way of higher civilization (see p. 311). There are strong indications that the failure to deal with Saami land claims in the legislation at the close of the last century does not reflect a lack of such claims but rather an unwillingness to acknowledge them. Such matters will be considered more fully in Part II.

As will also be more fully discussed later, it appears that one of the main motivations for the collectivization decree for grazing lands in the Act of 1886 was to give settlers the right to obtain compensation payments for

¹ Moreover, H. A. Widmark, as County Governor of Norrbotten, was most interested in ensuring that Saami rights would not stand in the way of mineral exploitation. He therefore opposed the drawing of the Agriculture Line.

damage done by reindeer from the Village as a whole (or from a so-called "compensation area") when there was any doubt of the guilty party's identity. Besides the issue of the Saamis' international grazing rights, the issue of damage by reindeer to the settlers' property dominated herding law until the current Act of 1971. Herding law during this interval was most detailed in the matter of proper consideration for farming. Officials of the new administration were to be well informed of all herding movements within the Village and even to keep them within bounds. In 1898, it was decreed that each Village be given a set of Village Regulations (*Byordningar*). These regulations stipulate the manner of control, size of work force, scheduling and many other aspects of herding operations, all justified by the need to stem the rising tide of conflict with farmers and most intensive in character.

The legislation on Village grazing collectivity, however, in no way meant that the Saamis themselves had dropped all distinctions concerning their traditional rights to specific grazing areas. The Act of 1886 simply returned this issue (for a very short while) to native agreement—to the extent that the administration would not have to intervene upon request or in case of trouble. A noteworthy feature of the Act of 1886 is also the continued use of the established, geographical divisions of Villages and, most importantly, the beginning of a series of fractional divisions of the Saamish category. It is here, at the close of the last century, that one first finds the legal definition of the category of "Lapp", a definition which in 1886 excluded fishing Saamis.

The desire for a simple maximization of tax from the Saamis (mining labor and aid for the colonial program) had evolved into a problem of open conflict for the survival of two, now competitive systems, herding and agriculture. The so-called parallel theory (see p. 280) was bankrupt. It is because of this and the Crown's commitment to the spread of agriculture (higher civilization) that one can derive the pattern of protective discrimination, with its successive re-division of Saami legal categories and respective legal constraints, from the police era of Saami—Swede relations.

The intensive period: Dynamic or steady state?

Schnitler, who wrote in the middle of the 18th century and who came into contact with Swedish Saamis who trafficked Norwegian territory and Norwegian Saamis who utilized Swedish territory at times, provides an interesting typology for these Saamis. His reports (Schnitler, 1929) reflect not only the variety of herding form, but also the fluidity with which

herders would move from form to form. He speaks of eastern-Saami herding, where eastern Saamis are those who graze their reindeer in the Norwegian coastal areas in the summer but in the Swedish forest during the winter. Eastern Saamis could be either Norwegian or Swedish, depending upon where they paid taxes. Some herders paid taxes in both countries; some herders switched back and forth, depending upon their herding fortunes. One had to have a herd of adequate size to embark upon or maintain a career as an eastern Saami, as this mode of life required considerable investment in the herding profession and this investment would have to yield adequate reinforcement in reindeer husbandry.

Schnitler differentiates these eastern Saamis from settlement Saamis. The settlement Saamis are those who do not have enough reindeer to be eastern Saamis, and who instead spend the entire year around the settled, western-Norwegian, coastal areas, engaging in hunting and fishing, part-time work for farmers and some partial reindeer-herding. The settlement Saamis either kept their reindeer all the year round in the coastal area or sent them along with the eastern Saamis to graze in Sweden during the winter. A settlement Saami might be successful enough to become an eastern Saami or, as was more often the case, eastern Saamis who for some reason lost their reindeer or could never acquire enough were forced to become settlement Saamis. For poor Swedish Saamis, the coastal area of Norway was a haven.

Schnitler's material contains sections (1929, II:137—157) relevant to Tuorpon in particular. It is plain from his records that not only were there numerous herding adaptations and shifts between them, but that different forms could become mutually dependent. Apparently Schnitler, who concentrated upon the Norwegian—Swedish border area, was not so aware of the different forms of herding and migratory patterns of the Swedish Saamis who never crossed into Norway.

Hultblad (1968:124 ff.) fills this gap by constructing a multi-faceted, migration typology for the intensive era in the Jokkmokk area. While Hultblad's categories may well be useful, they demonstrate the difficulty of specifying intensive mountain herding as a single conceptual unit (cf. Hultblad, 1968:135). Herding form has many attributes, of which migration pattern is but one. Preservation of migration pattern does not necessarily mean preservation of herding form. I postulate that the forms of intensive herding during the 18th and 19th centuries were every bit as flexible as herding forms today in the extensive era, if not more so. While we can with some justification see all these forms as variations on an intensive theme, this is a far cry from the proposition that during this period herding form hardly changed. A proper, comparative use of the terms "intensive" and "extensive" shows them to be wholly inadequate to classify herding form. The inability to note herding change can stem from improper concepts of measurement. I dispute, therefore, Hultblad's statement that

It is evident through a study of these sources and all the following sources up to contemporary Saami descriptions that mountain herding has not undergone noteworthy change from the end of the 17th century to the beginning of the 20th century, even though the Saamis were otherwise strongly influenced by the expanding pioneer culture (Hultblad, 1936:18).

One would expect a high degree of form variation in this intensive era rather than a static state. Indeed, if change should stand still, it would be just as incumbent upon us to explain this standstill as it is to explain its flow.¹ In a period of colonization, begun with the rapid rise of specialized herding and whole nomadism, are we to assume that change simply halts its career in full swing? Very likely it is our lack of knowledge, lack of sources and mis-evaluation of the ingredients of herding form which gives rise to this opinion. It is no mere coincidence that herding seems to come alive with detail, variation and change of form just as source material begins to increase and take on a more scientific nature near the turn of this century. Surely we can claim that these 200 years constitute an intensive era, just as we can claim that the last 60 years or so compose an "extensive revolution". Yet, within the last 60 years alone, more changes have occurred than one can find room to describe. No reasonable estimate would consider less for a period 3—4 times as long, especially as so many other monumental changes took place throughout Lapland at this time.

Moreover, early reporters were often far more interested in botany than in ethnography. We learn almost nothing of group formation, resource allocation, migration pattern and scheduling, individual herding techniques and yearly shifts. The tiny picture given is, with few exceptions, painted in the broadest strokes. There is yet further reason for caution in examining early sources. A prominent attitude in the last century was that the Saamis had, through the centuries of isolation, developed a highly specialized life-style, whose pinnacle (though low on the ladder to higher civilization and thereby unable to assert land-ownership rights) was the intensive herding of the fully nomadic Saamis. All other Saamish life-styles were frequently looked upon as degenerate forms. All too often, 19th-century reporters lift data out of context in an attempt to piece together the pure, old-Saami prototype. Obviously, this kind of approach tends to screen out difference and change.

In the next section of this chapter, the purpose of which is to serve as a background to the understanding of the extensive revolution in Tuorpon, I have compiled a summary description of certain intensive-herding

¹ In her study of the northern peoples of the Soviet Union, Eidlitz (1979:46 ff.) suggests reasons for their restrained development. The Tsarist regime wanted these peoples to continue as good taxpayers and providers of game and hides. The policy was to conserve, not to develop, their cultural and social conditions. This situation might well be analogous to the Saamish—Swedish situation between 1600 and 1900. While her point is well taken, the goal of cultivating good taxpayers does not necessarily exclude herding developments or stand incompatible with change. The same goals could induce change.

methods. I wish to emphasize that this treatment makes no pretense of thoroughness. Nor do I consider it possible to describe all intensive-management methods without jumbling together the material from different places and times. Rather than to give an exhaustive treatment of even one place or time, however, my purpose here is to exemplify the degree to which intensivity can be and was developed, to demonstrate the incredible closeness possible between man and reindeer, so that the later contrast with extensive form will be most evident.

Herd management in the intensive period

Descriptions of the early intensive herding from the close of the 17th century are almost exclusively the work of clergymen: Graan, Lundius, Nuirenus, Torneaeus and Rheen. Of these, Rheen's (1897 ed.) account concerns most directly conditions in the Jokkmokk district. Schefferus made extensive use of these accounts in his large work on Lapland published in 1673. First-hand sources concerning the intensive period in the Jokkmokk district are sparse. A number of travelers, notably Linné (1732, English ed. 1811), Swartz (1780, KB, M 205), Robson (1797, KB, M 200), Wahlenberg (1807 & 1810, UUB, S169b), Engström (1834) and Kihlstedt (1920) have written of their journeys amongst the Tuorpon Saamis. Their travel logs are most valuable, but it is unfortunate, though understandable, that such contact with the Saamis was almost without exception confined to spring and summer. Linder (1850—64), P. Laestadius (1831, 1833) and von Düben (1873) supply a far more complete picture of 19th-century Lappmark conditions in general and Saami forms of livelihood in particular. Material compiled by Hultblad, Ruong (himself a Saami), Manker, E. Bergström, Wiklund, Grundström and many others in the present century has shed much light on this past period of herding in the Jokkmokk mountains.

Of course, Saami herders themselves supply the most illuminating accounts of intensive-herding technique and, what is equally important, the reasoning behind such techniques. The works of Turi (1910), T. Tomasson (1918), Anta Pirak (1933), M. Utsi (1948) and N. Skum (1955) are invaluable in this respect. Of these, Pirak's material is especially pertinent here, for Pirak was once headman of Tuorpon. Each herder is a native scientist, whose holistic understanding of herding-form composition is more than any book can contain. Unlike the descriptions of so many outside observers, the explanations of herding form by herders are refreshingly free from dogmatic typologies.

It is impossible here to give more than a rough, general description of some of the most characteristic herding methods of this broad, intensive period. Emphasis will be laid especially on those subjects which have

undergone the greatest change with the extensive revolution. Although herders frequently speak of their herding year as divided into eight seasons—early spring, spring, early summer, summer, late summer, autumn, late autumn and winter—I have grouped these distinctions within the broader and more common categories of spring, summer, autumn and winter, on the grounds that the general nature of the material cannot accommodate more refined systematization (at least not by me).

Spring. There are many reasons why the coming of spring favors a move from the winter land to the low foothills near the birch-tree line or sometimes even farther west for the calving period in mid May. The first patches of bare ground appear on the southern, sun-exposed and wind-swept slopes of the treeless mountains, and the pregnant reindeer cows are anxious to reach a good calving land with plentiful and easily accessible grazing. Moreover, with the coming of spring, the reindeer begin to lose their winter fur, so that they become very vulnerable to the plague of insect pests. Windblown heights and snow patches provide protection from insects.

The return of the sun causes a crust to form on the snow from the partial melting followed by freezing. This can make grazing in the woodlands difficult, while at the same time it can also greatly increase the reindeer's mobility. The reindeer and their herders know that further west the bare ground has already begun to show through. Combined, these factors lead up to the spring migration to the calving land.

When the heavy spring thaw sets in, flooding rivers and streams will make travel difficult and dangerous for the newborn calves. Means of transportation for the herding family will also become more difficult. Realizing this, a herder may wish to bring his herd further west into the mountains and earlier than the necessary fulfillment of grazing demands might lead one to expect. In this manner, the herder may see to it that his calves are born within or near to the summer grazing land and thereby spared a difficult journey. Similarly, the family and all its provisions can be more easily freighted on snow cover by reindeer sled caravan, another reason why some families may favor an early and lengthy spring move westward.

Night travel was usually best, when it was cold and the snow conditions good for sled travel. If one waited too long, the lakes might begin to open. Families on migration westward might be "surprised by bare ground" before reaching the spring-camp location and be unable to go farther by sled caravan (Ruong, 1964:65). In the old intensive days especially, it was necessary to fit one's travel schedule to the possibilities offered by Nature. This is still the case, but to a much lesser degree. The need to have transport oxen close at hand for migration purposes was a major reason for intensivity. The death of one of these prized animals was a considerable blow. Many families have been delayed *en route* because their tame

oxen got loose or were killed by predators. It was best to guard them. Nowadays, the herder is freed from the reindeer for his own transportation needs. The end of the caravan as a major means of transportation signals not only the end of an important, intensive factor, but also the close of an entire chapter in the herder's adjustment to climatic change.

On the other hand, an excellent calving land may present itself further east, closer to the winter land. The journey to the summer land may not be so long or arduous. In this case, the herding family may extend its stay at the spring camp and bring the herd to the summer lands after the calves are born and can manage the move. In this case, the family's transportation to the summer land will be conducted by pack caravan over bare ground. In short, while the reindeer have reasons for moving west in spring, they have a certain flexibility in the satisfaction of their requirements. The herder too has requirements and desires within a range of flexibility, so that the resulting move (or lack of move, as in the forest-Saami example) falls within the product of these ranges. This product itself has a flexibility range. As a certain system becomes habitual, it becomes difficult to unravel causes and effects.

The choice of calving land was most important. The reindeer cows must be able to reach good grazing within a relatively small radius, in order to supply their calves with milk. The open character of the mountain slope, as opposed to the restricted view in the forest, enables the herder during this, for the cows and calves, vulnerable period to keep a better look-out for predators. Rich grazing would also facilitate guarding, for it would permit the cows to stay with their new calves in a loosely gathered herd.

The male reindeer were frequently divided from the cow reindeer at this time, both in order to save the grazing for the cows in the calving land and also to keep the cow herd as peaceful as possible, free from the disruptive spreading and necessary recapturing of the male reindeer. The calving land had to afford protection from wind, provide water and yet not contain any hazards, such as fast-flooding streams or steep ravines. A calving land should be "friendly".

Herders had specific calving areas for their herds, to which they returned year after year. This habitual return to the same calving land and the constant presence of humans during the calving period was one of the main factors determining the high tameness grade of the herds at that time (for example, Ruong, 1975:78). Herders would often have to assist the cows during troublesome births. They might have to turn the fetus in the womb for easy delivery or, in hopeless situations, enter the womb and with a small knife cut the dead fetus free. So important was the choice of calving land, and so certain the herder's wish to attend to his herd during calving, that the spring camp was located predominantly out of regard for closeness to the herd and closeness to the calving land.

Later in spring or early summer come the first new grass shoots, a delicacy to the reindeer. With the coming of warmer weather, the reindeer

are able to make the transition from moss to grass grazing. The reindeer will go to great lengths to obtain the juicy green shoots. These shoots will appear first in the foothills and then gradually spread westward up the mountains. As a result, the reindeer which have been taken further west will often turn eastward again temporarily and, because the concentration of this delicacy may as yet be sparsely spread, the reindeer will want to disperse over a large area. To maintain an intensive hold at this time can be quite difficult. Tomasson (1918) gives a detailed account of herding practices during this period. Intensity had to be somewhat relaxed until the greenery thickened, grew more concentrated and once more allowed for tighter gathering. Upon re-gathering, the male reindeer and cows with calves were grouped once again in a single herd. Tame reindeer oxen, the castrated transport animals to be used in the pack caravan, were pulled from the herd, soon thereafter to begin the move to the summer land.

Those reindeer which have not been taken west on a controlled migration may make the move at a far more relaxed pace. They may wait for the coming of the grass shoots in the lowlands and follow the coming of spring gradually westwards into the mountains. This is especially true of the reindeer oxen, which have no urge to reach a good calving land and may find it quite comfortable to remain in the woodlands, until finally forced to the mountains around midsummer by the coming of the flies and mosquitoes. In the intensive period, it was most common for all the reindeer to be kept together most of the spring and summer. Even if separated from the cows in the calving land, the male herd would be guarded. The westward move was usually undertaken in an organized, intensive or controlled migration. It could happen, however, that the herd would be released westward to move in scattered, uncontrolled flocks, extensively. This choice, of course, then as now, depended upon the type of herding that had been practiced during the winter. If the herd could be kept together and herded intensively, an organized migration would be well within the means of the herders. If, however, the herd had been forced or allowed to scatter extensively throughout the winter land, gathering the reindeer together again in the spring could not only be very difficult, but also inadvisable, as it could put a strain on the pregnant cows. This risk would have to be weighed against the risk of loss through predation.

The sleds which had been used in the migration to the spring camp were stored there until needed again for the eastward migration to the forest lands, once winter opened the land for easy movement. Frequently, spring camp and autumn camp were the same, enabling easy exchange of gear between the bare-ground period and the snow-cover period. But it was not always best to employ this system when grazing factors (or other reasons) dictated otherwise. It could be convenient or necessary to have separate spring and autumn camps. In this case, the spring camp was usually west of the autumn camp. This separation necessitated a shuttle system when exchanging bare-ground and snow-cover gear. The sleds which had

brought the family to the spring camp, for example, would have to be taken to the autumn camp before the eastward move to the winter land was possible. In a similar manner, the summer clothing and supplies would have to be brought to the spring camp from the autumn camp.

Migrations in those days served a triple purpose, three functions which have since become splintered. By migrating, the herders brought their herds to the desired location. The same migration transported the herders themselves with their families, and it also transported the provisions they would need. The reindeer caravan even transported the portable tent *kâta*. The herding family's home was with the herd.

Where this home happened to be during the different seasons depended, of course, much on the location and size of the herding group's available grazing, its taxlands, for example. A sprintar-Lapp with maybe only limited access to taxland would obviously follow a migratory pattern quite different from that of a rich tax-Lapp. Ruong (1964:64 ff.) characterizes the earliest migration patterns as extremely elastic, so much so that herders were totally flexible in their settlement patterns during migration. Later on, the depot method developed, whereby recurring, seasonal stops in particular locations became so usual that some gear could be stored on the spot rather than carried constantly. According to Ruong, the distinction between such a depot and a major camp was very fluid.

It is interesting in this respect to compare descriptions by Linné in 1732 and Swartz in 1780.

In the evening, and indeed till the night was far advanced, we sought for one of the Laplanders' huts, but to no purpose. Tracks made by the reindeer were plentiful enough in the marshy grounds which we followed, sometimes in one direction, sometimes in another, without their leading us to what we were in search of. (Linné, 1811 ed., I:303 f.)

Linné was guided by Saamis native to those parts, and yet they had great difficulty in discovering the location of the camp. The Saamis they were trailing were themselves on migration and so could be encamped almost anywhere. Later, when the depot system became more common, even the short stops along the migration route were often fixed. Tent poles and supplies would be stored at specific points along the way, and anyone acquainted with the migratory pattern would have no trouble in finding the camp.

Olof Swartz, a near contemporary of Linné, states:

(the camp was situated) . . . upon the mountain Keddoive, where after we had gone a bit, we came to a Saami camp, called Soulobyn (Soulo camp), after the Saami's name who had situated himself there, with his family. It was composed of two *kâtas*, or Saami huts, which were occupied by one family. (Swartz, 1780, KB M 205:July 20.)

Still later, Swartz comes upon another camp called Ammasbyn, also named after the family encamped, rather than the place of encampment. Such a method of naming reflects the irregular or fleeting connection with

a specific place. As camps grew more regular and permanent and at the same time larger and more collective, encompassing many family groups, this method usually came to give way to the naming of the camp by the place.

Summer. In the intensive era, herds were kept together all summer and often guarded both day and night. The marking of calves was no momentous summer duty. The reindeer were so tame that corrals were usually unnecessary to contain them. Often they were simply kept together and marked on a snow patch or, when possible, the herd could be driven out on a peninsula and the land end closed off by a few dogs. Herds were quite “clean”, that is, unmixed with reindeer from other groups, and therefore they were generally far smaller than the herds brought into the calf-marking corrals today. The intensive herder was in such close daily contact with his herd that he had ample opportunity to mark his calves. For an intensive herder to lose the ownership of calves through his inability to get them marked was practically unheard of. Lassos were used, but herders often preferred simply to catch the back legs of their calves by hand, a method considered far healthier and less traumatic for the calves.

Another major factor contributing to a high tameness grade was milking, a major activity in the summer and autumn during the intensive era. In the morning, usually before the day had become hot, the herd was driven toward the *kâtas*, and the watch was relieved by a new 24-hour shift. The area around the *kâtas* is called *sjaljo* in Saamish and, because it was here that the herd was generally milked, the term has also the meaning of “milking place”. Nils-Antaris Gruvvisare recounts (Ruong, 1945, ULMA 18368b) that it was not good for the reindeer to try to gather them for milking in warm weather: “One said that the reindeer could stand to be gathered first when they had become full-haired”—obviously because of their increased sensitivity to insects before their fur was fully replaced. In earlier times, milking was practiced all summer. Later it was common to start milking in August. Such changes were to have a direct bearing upon migration-scheduling. Rheen and Graan (1899 ed.) refer to portable tripods, which were part of the standard equipment in the treeless mountains. Cows would be tethered to these while being milked. Most accounts, however, say that the cows were lassoed and held by one family member and milked by another, generally a woman. The woman’s participation in both herding and husbandry tasks during the intensive period was often every bit as great as the man’s. At the more permanent summer camps, it was not uncommon for the *sjaljo* to be enclosed by bushes and thus made into a simple milking corral. During the milking period, the reindeer would sometimes become so tame that they would enter the *sjaljo* of their own accord. Once milked, the herd was allowed to return to the high snow patches in the close vicinity of the camp to seek refuge from insects.

During warm summer days, mosquitoes and flies can be a torment to the reindeer. In order to escape them, the reindeer move up to the high mountain slopes, where the snow patches may remain all year. The insects are not as bothersome on the snow patches. Not only is it cooler there, but those insects that orient themselves by the polarized light from the sun become totally disoriented when the light waves are scattered and reflected back by the snow. Many insects plunge directly into the snow. Warm weather can therefore be an aid to the herder in gathering his herd. Mosquitoes are referred to as "the herders' best helpers", for the reindeer will tend to have clustered of their own accord on the high snow patches to avoid them.

Ruong (*Samefolket*, 1966:123) mentions that mountain herders even had special insect-killing sticks, with which they swatted the reindeer flies. These flies apparently would become weakened by the cool air over the snow patches and seek rest on rocks around its perimeter. Forest herders, with easy access to timber, were more prone to build smoke fires to drive away insects than were mountain herders.

Should the weather be very hot all summer, so that most of the snow patches have melted, the reindeer will have difficulty in finding relief from insects. Warm weather in this instance will be detrimental to the maintenance of intensivity, as the reindeer's only escape from the insects then is to run constantly. They have been known to run themselves to death. In order to maintain intensivity in this case, herders would have to migrate to areas of more concentrated snow cover.

If it is cold and overcast during the day, insects will be scarce, and the reindeer will not need to collect on the high snow patches. They will tend to come down and spread along the valleys in search of the choicest grazing. Here again it may become difficult to maintain intensivity. If the weather is cold and foggy all summer, extensivity may increase, calf-markings may not be so successful, and as a result the herders may have to shift some of their usual summer husbandry duties over to other seasons.

A number of methods were used to prevent the calves from suckling. Certain methods were more common in some areas than in others. One method was to smear the cow's teats with dung, another to place a type of bit in the calf's mouth, and yet a third to fit a type of prickly muzzle to the calf, which pricked the cow when her calf tried to suckle and conditioned her to kick him away. Some families would bring the herd into the *sjaljo* again in the evening for yet another round of milking, although, as we have seen, frequent milking was known to stunt the calves' growth and make them more susceptible to disease. Nor was it good for the reindeer, especially the young calves, to be driven back and forth over great distances too often. Therefore it was common to pitch camp as far up towards the snow patches as practical, so that the herd would be close at hand.

The importance of the milking form of husbandry cannot be over-emphasized. Several sources give detailed descriptions of the various foodstuffs prepared from reindeer milk and the methods of conservation (for example, Pirak, 1933, and von Düben, 1873). Reindeer milk is much richer than that of cattle or goats, and reindeer cheese is one of the most nutritious and concentrated food forms. Cheeses were even a common item of trade and could be smoked and stored for long periods. It was commonly said that the last cheese should "see" the first cheese of the next year. Linné was impressed by the reindeer-milking of the Saamis and states that "... when not occupied in following or attending the reindeer, they remain in idleness for whole days together, feeding on nothing but milk, and the dishes prepared from it" (Linné, 1811 ed., I:298). Later he writes:

I could not help wondering how the Laplanders knew such of the herd as they had already milked, from the rest, as they turned each loose as soon as they had done with it. I was answered that every one of them had an appropriate name, which the owners knew perfectly ... (Linné, 1811 ed., I:314.)

The mixing of herds belonging to different groups in the summer land and the divisions these mixings demanded were preferably and usually avoided quite effectively. Should summer mixing occur, it was due to mismanagement or unusually adverse circumstances and the situation would be quickly rectified. The reindeer were so tame and obedient that no dividing corral was necessary. They were driven onto a snow patch, if necessary, and one group drove their reindeer to one side and the other group to the other side. Great mixtures of herds belonging to more than two groups were not common in the most intensive days. The herders did not need to pull their reindeer by lasso to the proper side. They carried long staves, with which they poked and guided their reindeer. A quick blow on the horns, which at this time of year are soft and sensitive, was usually enough to make a troublesome reindeer obey.

Autumn. As the weather cools in the late summer, the insects begin to disappear. The first snows soon come to freeze the remaining green vegetation. The reindeer are drawn eastward to the lowlands. Their eastward movement is, however, by no means always a necessity. Summer pastures can be rich in grazing all winter, although weather conditions during the winter will make use of grazing in the mountains more risky than in the lowlands. Herds have nonetheless without difficulty "wintered over" in the summer land. The changing migration patterns form a fascinating topic to be dealt with later.

According to Ruong, the reindeer's lactation period can be divided into a number of distinct intervals.

The first period stretches from calving to the coming of the mosquitoes at midsummer (June 21). The other period, the mosquito time or the warm time, stretches from midsummer to the middle or latter half of August. This is also the main

green-grazing time. The third period encompasses early autumn, that is, the last week of August and all of September. The fourth period is composed of the mating season, that is to say, the first three weeks of October and the fifth period is the weaning and drying-out time, encompassing the last third of October and the first week of November. (Ruong, 1975:108.)

The milking of different herders spanned different lengths of this total lactation period. As the green grazing began to wither in the summer land, many herders began the gradual, eastward migration to the autumn camp. By following the ebb of green grazing toward the lowlands, this milking period could be prolonged. While some herders stopped milking with the close of September, others continued on into October and even November. Generally, milking was common all autumn, and the eastward move was conducted with consideration for milking—at a relaxed pace.

Early autumn called for the castration of a good number of the herd's bull reindeer. Castration was necessary not only to ensure a continuing supply of tame transport animals, but also to prepare animals for winter slaughter, though not necessarily for that immediate winter. Castrated reindeer avoid the bodily changes of the mating season and the loss of weight the bulls show shortly thereafter. Bulls were generally castrated at from 3 to 5 years of age, often later, for, if a bull is castrated before he is fully grown, his growth is stunted.

Castration could even be performed in the spring, in which case it would be performed with a knife. The glands are then hard and must be removed. Such an operation may cause infection and therefore castration in the autumn was usually most common. At this time, the glands are large and swollen. Castration was performed with the teeth. The glands were chewed and squeezed with the fingers, and no incision was necessary. One skilled in the art of castration could control by the extent of his chewing the degree of castration and thus the kind of oxen resulting. Castration was not merely an all-or-nothing procedure. It could be performed differently, depending upon the reindeer's age and the use it was selected for.

Intensivity could be relaxed or more difficult to maintain in the autumn, because of what the herders refer to as the "mushroom time". Reindeer are very fond of mushrooms and, as with the arrival of the green shoots in spring, the reindeer may tend to disperse in search of mushrooms. Other, very powerful reasons for the relaxation of intensivity presented themselves toward and during the mating season. Intensivity was relaxed in September and October, and the herds were frequently allowed to mix. If the wind blew persistently from the west, however, herders might look to their herds a bit and guard the western edge to stop the reindeer from moving back towards the summer land (reindeer tend to move against the wind), but otherwise they were usually left "in the wild". Relaxed intensivity at this time did not imply the uncontrolled spreading of reindeer everywhere. The bulls tended to favor certain territories and kept the cows clustered there. Once the mating season was

over, however, intensivity must be restored or else the reindeer would spread widely. After the mating interlude, the herds were gathered and separated according to *sita*. Milking could be continued, and the families were dependent upon access to their tame oxen in order to continue their migration. Once snow cover and ice made travel by sled possible, descent toward the winter lands from the autumn camp could begin step by step.

Winter. Milking had to be discontinued in the winter, and this season called for the harvesting of the herd's resources in a different manner. Winter was the main slaughter period. Not only were the castrated oxen in best form (their hides also healed from the sores caused by the *kârm* fly), but the cold weather made storage of food possible over long periods. The reindeer's body was utilized with the utmost thoroughness and supplied the herding family with far more necessities than just meat. The end of the milking season in no way ended the family's need to be with its herd.

The danger from predators in the winter was very great, and the intensive herder stood to lose not only slaughter animals but milk animals and transport animals. Thievery must also be acknowledged as a main cause of intensivity. Besides just staying close to the herd and guarding it, the herder would frequently be called upon to take an active role in securing food for his herd. During a bad winter, he might go on long, scouting expeditions in search of grazing. He might have to help the reindeer dig through deep snow with a long, scoop-ended stave and thereby induce them to graze in a troublesome spot. Or he might have to work diligently to provide his herd with so-called "beard moss", a useful, emergency food, by breaking the lower branches of pine trees on which it grows or, if need be, by felling the entire tree.

Once the snows come, short-term, climatic changes and the progression of these changes gain increased importance. Should the first snow fall on still unfrozen ground, it will tend to crust on the vegetation. Or, if it snows, thaws and then freezes, a very hard crust can result. The moss itself can become icy, and the reindeer may become sick from eating moss accompanied by so much ice. Sometimes the snow can form such a hard crust that the reindeer have difficulty breaking through the top layer to the moss beneath. Should it rain over frozen ground, the water will not be absorbed so quickly and, should it then freeze, grazing is endangered. A single burst of warm weather can signal doom for the entire winter's grazing. There are thus a number of varieties of "bad" winters.

It is impossible to keep a herd gathered intensively during a bad winter (unless, as will be mentioned later, artificial fodder is used). In order to survive, the reindeer must scatter to find food over a wide area. Intensive herding in the winter requires good grazing. Even from the mobility perspective, a hard crust encourages extensivity, while deep powder snow, which hinders the mobility of the reindeer, helps to maintain intensivity.

As usual, the way a herder reacts to these extensive and intensive

influences depends not only upon their strength, but also upon his situation and needs. Depending upon a herder's herd size or economic dependence upon his herd, he could choose different herding methods in an attempt to meet a bad winter. A "partial herder", that is, one whose economy is only partially dependent upon herding, as opposed to a main or "specialized herder", may release his herd quite early during a troublesome winter. The specialized herder may try to maintain his intensive grip much longer, in order to guard against predators and to prevent reindeer from straying beyond his reach. He may take his herd on an abnormally long, winter migration in hopes of finding some good grazing — maybe as far as the Baltic Sea. Even the most intensive herders of the past, however, would, upon occasion, have to release their herds to extensivity when facing a winter of catastrophic proportions.

Even in winters of excellent grazing, the herders can increase the welfare of his herd by certain herding methods. If the reindeer obtain too much food without having to search and dig for it, they can become so fat that sudden movement (fleeing from predators) causes them to go lame in the hindquarters. To avoid this, the herder might drive his herd out upon a frozen lake for a part of each day.

The pressures for and benefits of winter intensivity were numerous. Herding entities have commonly tended to break down into their smallest units during the winter, both for the sake of the best utilization of winter grazing and also for the increased husbandry control obtained by each individual owner. Obviously, with such a highly intensive, yearly, herding cycle, husbandry knowledge was extremely great. Herders knew which cows were good mothers, which bulls would make good transport animals, which cows gave most milk, which reindeer were best for slaughter, etc. There were many different types of husbandry decisions to be made, and great husbandry knowledge was necessary for the efficient use of the herd.

Chapter 8

Setting the Stage Prior to Northern-Saami Relocation

The purpose of this chapter is to establish the micro-level starting-point for the diachronic analysis of Tuorpon herding from 1910 to 1970. This involves further specification of Tuorpon Village identity, identification of certain grazing zones within Tuorpon, introduction of the individual Tuorpon herders in the early 1900s, and consideration of the social identity of grazing lands. My aim here is not to present a detailed report of grazing conditions in Tuorpon, nor to give an exhaustive discussion of the relationship between grazing-land use and group-identity formation. I wish merely to demonstrate the interrelationships of land utilization and group formation and to present enough of these topics to give the reader the essential background for the material to come. These issues are, of course, constantly resurfacing throughout the historical analysis, so that the reader has ample opportunity to watch the interplay of grazing land and group formation.

A general sketch of the intensive era has already been made, but as yet little analysis or description has been devoted to Tuorpon in particular. It is from around the turn of the century that I propose to follow Tuorpon's herding history specifically. My reasons are many: (1) Hultblad (1968) carries his highly detailed study of the Jokkmokk area through to this period; (2) the first northern Saami to join Tuorpon arrived in 1910; (3) before this time, written material concerning herding form is sparse, and my informants cannot cover an earlier period with first-hand data; (4) most importantly, it is here that I must, despite a certain arbitrariness, draw the starting line for the extensive revolution in Tuorpon. The following section introduces Tuorpon just prior to northern-Saami infiltration, in order to set the stage for developments to come. The extensive revolution in Tuorpon cannot be grasped without knowledge of the land and its people from this point.

Changing migration patterns and Village relations

Besides the important changes in herder — farmer relations, the 1800s were marked by upheaval in inter-Village relations in the Lule Lappmark. Throughout the intensive era, the Lule Lappmark contained four Villages: Tuorpon, Sirkas, Sjöksjö and Jokkmokk (not to be confused with the town and parish of the same name). Tuorpon and Sirkas were the more westerly oriented, mountain herding Villages, and Jokkmokk and Sjöksjö the more easterly oriented, forest herding Villages. Hultblad (1968) has cautioned against the over-simplification of mountain and forest Saami categories during the intensive era, and the herding forms within these Villages were surely various; yet the grazing territories of Jokkmokk and Sjöksjö Villages were originally predominantly east of Tuorpon and Sirkas territory. It is only natural therefore that herding in these eastern Villages should have been more forest-oriented.

In the days when grazing was still plentiful, it was not necessary for Tuorpon herders to move farther east in winter than to the western regions of the evergreen belt, and it was possible to remain in one general location all winter. As winter lands became more and more crowded and the grazing more and more sparse, it became necessary gradually to extend winter migrations further toward the east. Moves of camp in the winter lands became more common. Hultblad's (1968) study of taxlands shows that by the early 1800s even mountain Saamis were petitioning for taxlands in the eastern forest districts.

Just as the mountain Saamis reacted to the pressures of competition for land use and began extending their grazing territories into the easterly regions of the lowlands, so in a similar way it was necessary for the Saamis in the two eastern Villages to begin expanding into the mountain regions. Their need for longer migration routes increased with their growing herd sizes. Some Jokkmokk Village Saamis in the latter part of the 1700s were migrating all the way into Norway.

Of course, quarrels over grazing were inevitable between the western Villages and the eastern Villages. Frequently, however, bargains were struck to the mutual benefit of the contesting parties. A Jokkmokk Village Saami, for instance, might be permitted access to a Tuorpon summer taxland in return for allowing the Tuorpon herder access to a winter Jokkmokk taxland. Marriages between the Villages increased dramatically by the close of the 1700s. In this manner, many Jokkmokk Village Saamis became incorporated into Tuorpon and much of Jokkmokk Village land was incorporated into the *vuoma* form (see p. 71).

As late as 1883, the Nuortvalle area between the Pite River and Lake Karatj is reported as belonging to the Jokkmokk Village.

In Jokkmokk Village . . . there are both mountain and forest Saamis. The former migrate along the divide between Perlelven (Pärlälven) and Piteå River and have

their spring camp at Nuortvalle and other low mountains that border the forest region. They leave these around midsummer (June 21) and move with their reindeer westward toward Rovijaure, Jegnafo, Varvek and Sulitelma, and then turn in the middle of August back to the autumn camp, which they reach at the end of the month. (*Förordning*, 1883:34.)

Although Wiklund (1929:179) speaks of the Jokkmokk Village as late as 1929, all that remained of it then was in the hands of the forest Saami group, for, according to early reindeer counts and records of the 1910s, the herders occupying the Nuortvalle zone and following the above-mentioned migration route are all listed as Tuorpon Saamis and their land as Tuorpon territory (for example, Bergström, 1913*a*). Thus one of Tuorpon's current, major, herding groups seems to have originated as part of the Jokkmokk Village. In fact, the map accompanying the 1883 report shows the Kaska Tjavelk area between the Little Lule waterway and Lakes Peuraure and Karatj also as occupied by Jokkmokk Saamis. The area traversed by Tuorpon Saamis, according to this map, extends in the west from Lake Virihaure to the Kabla mountain zone. Some of these Kabla Saamis apparently joined forces with Jokkmokk Saamis during the autumn in the Kaska Tjavelk zone, but otherwise Tuorpon Saamis are shown as remaining north of the Little Lule water system.

After the turn of the century, the eastern Villages were to be successively splintered, due to the decline of forest herding. Forest herding was hit from two sides. Not only did many forest Saamis gradually adopt a mountain-Saami herding form, but many also went to the other extreme and took to settled farming. Use of mountain grazing land might be advantageous to the big forest-Saami herder, but, to the small herder, agriculture and livestock might be a more attractive alternative.

Hultblad (1968) traces the forest Saamis' transition to settled agricultural life, a transition which had already begun with the early advance of Swedish pioneers but which accelerated greatly in the 1800s. It is interesting to compare this transition of the forest herders to the current and analogous transition of the mountain Saamis.

The development within forest herding during the 19th century is thus concentration, usual in all livelihoods, that is, small enterprises in widespread entities become replaced by big business in a few entities. The background is partially the forest Saamis' move toward settlement and transition to agriculture, partially the specialization of agriculture by many and its intensification, and finally the growth of the timber industry, which provided employment during the winter when the reindeer could not be left unattended . . . the decisive factors must be sought in the economic and social developments of the 19th century. (Hultblad, 1968:144.)

The turn of the century was thus a period of extreme turmoil in Lule Lappmark on many counts. The reader comparing the map of 1883 to a contemporary herding map will find striking differences. The most evident is the fact that, although the Act of 1886 maintained with some

Map C. Saami Village migration routes (taken from *Förslag till Förordning angående de Svenska Lapparne och de bofasta i Sverige*, 1883)
(roads and railroad on this map should be disregarded at this time).

alterations the Village system already in existence, the map of 1883 refers to Saami groups and their movements, not Village boundaries. As noted previously, the term "Village" carries both a social and a territorial meaning. In the map of 1883, it is Tuorpenjaure Lappby as a group of people whose movement is being mapped, indicating (though, according to Cramér, falsely; see p. 79) that before the reconfirmation of the Village as a territorial unit in the Act of 1886, the demise of the taxland system had rendered taxland and Village territorial distinctions not so important or clear-cut. According to this interpretation, the Act of 1886 brought the social categories of Saamis into line with their appropriate territorial categories. I assume that it was from this period of re-organization that the mountain herding group of Jokkmokk Village Saamis who had spread into old Tuorpon territory came to be classed as Tuorpon Saamis (cf. Holmbäck, SOU 1922:10, p. 69).

Despite the 1886 decree of collectivized, Village grazing lands, Tuorpon could hardly be considered a fully unified herding entity in more than name. This total collectivization of land decreed in 1886 was partially overruled as early as 1898. In 1898 it was decreed that traditional group zones should be respected. The short interval of total collectivity and its enormous break with the previous taxland system lends credibility to the interpretation presented by Cramér (1979*b*)—that the real reason behind the 1886 ruling was to break claims of taxland ownership (Widmark – von Düben influence). Total collectivity of grazing utilization at this time was never seriously entertained and never adopted by the herders. Within the Tuorpon territory were groups whose herding activities involved them with groups from other Villages. Sometimes relationships with such "foreign" groups could be more important than relations with other Tuorpon groups. Two groups within the same Village might have very little to do with each other. A problem arises, therefore, in defining Tuorpon as a herding unit, even after Village grazing territory has been determined.

Land determines group

The following rough sketch of the basic grazing divisions in Tuorpon has been made to give the reader some idea of the nature of the land. Other authors engage in more lengthy description, and I refer the reader to Hultblad (1968), Paterson (1956) and the great variety of naturalistic literature on the subject. Nothing short of field experience, however, can compare with or be a substitute for the study of a good topographical map.

Even a cursory glance at a map reveals that the Tuorpon grazing territory is divided naturally into a number of land units by the mountains, large lakes and waterways. The importance of such natural boundaries for herding depends, of course, upon the seasonal grazing quality of

the land, the tameness of the reindeer, the herding form (that is, the conditioned habits of the herd), and the herder's orientation to certain, specific, topographical areas.

Moreover, while the grazing possibilities in certain areas constitute the *sine qua non* of their herding usage, it is the relation of one grazing area to the other available areas which specifies the way that area will be combined into a total, seasonal, grazing cycle for a herding group. The system worked out by one group of herders will naturally have an impact on the pattern of grazing utilization of another group. While it is possible to discuss grazing conditions without reference to the social groups and to discuss the seasonal grazing pattern of one group as if the others did not exist, in fact they are closely interrelated components in the larger herding system of Tuorpon.

In the intensive era, topographical distinctions might be invested with meanings very different from those they have today for both reindeer and herder. The herd was conditioned to a finer grid or stricter pattern of land utilization. A herder might draw benefit from the conditioning he had given his herd for quite a while after he had ceased to condition it. Gradually, however, the reindeer will depart from the old, established pattern, and I have heard herders observe this deterioration with the comment that the "herd is losing its culture."

Such a comment is even more justified with regard to the herders themselves. Of course, the herders, especially through their bonds with their reindeer, share with them to a certain extent the same natural determinants with respect to camp location and migration routes. Whereas the reindeer, if left to roam freely, revert as a group to a grazing pattern subject mainly to the basic natural determinants after a number of years (generation frequency is high, as reindeer reach sexual maturity in only about 3 years), the herder carries within himself a history of social traditions and family bonds which can bind him to certain land areas through many generations, despite radical shifts in the grazing patterns of his reindeer. An entire social history and living pattern from generation to generation links herders to old home territories and causes old group divisions to linger on in the mind, though sometimes not in herding reality. Its recognition can manifest itself in a number of non-herding contexts.

The ways in which group identity and legal recognition of groups affect land utilization will be discussed briefly in the next section. The point I wish to make here is that land utilization and group formation are co-determinant. Of course, there are numerous other factors affecting both land utilization and group formation, such as climate, herd size, predators, etc. The historical material from 1910 to 1970 will amply illustrate such relations.

The Kabla area is a naturally bounded, spring and autumn land, which has given rise to the recognition of certain herders as Kabla Saamis. The

Map D. Basic grazing zones for Tuorpon Village (roads and railroad on this map should be disregarded at this time).

Kabla region possesses both forest coverage and bare-mountain terrain which can provide the reindeer with sufficient early-spring and late-autumn grazing. In years of poor winter grazing, the Kabla area provides a good alternative to the lowlands further east. This area was officially removed from Tuorpon in 1945 (see p. 190) in order to compose part of the newly formed Jåkkåkaska Village.

In a similar way, the large land strip between the Pärlälven waterway and the Piteå River creates a natural herding-land unit. It is most favorably endowed with bare-mountain areas stretching unusually far eastward, notably the Skeltevare zone. Reindeer can survive over a broad time span in this area—a prime reason for the relatively long spring and autumn stops and the relatively short summer stop, characteristic of the Nuortvalle Saamis. An arbitrary, man-made border divides this land strip into two parts. The northern section is included in Jokkmokk District (*kommun*); the southern section is included in Arjeplog District. This east–west District border also forms the southern boundary of Tuorpon. The land south of this boundary belongs to the Luokta-Mavas Village in Arjeplog District. The area between the two water systems which belongs to Tuorpon is called Nuortvalle, while that belonging to Mavas is called Arvas after its large mountain massif.

Northward, across the Peuraure and Karatj lakes from Nuortvalle lies yet another long and narrow land strip, bordered to the north by the Saggat and Skalka lakes, the upper arm of the Little Lule waterway. This area is referred to as Kaska Tjavelk and lies between Nuortvalle and Kabla. Unlike these, however, Kaska Tjavelk is poor in high, treeless zones, offering limited spring and autumn grazing. What little spring and autumn grazing there is in Kaska Tjavelk, the mountain areas of Farforita, Harrivarto and Uppavare, does not stretch continuously to the high mountains in the west but lies isolated to the east, separated from the summer lands by a vast forest area.

This discontinuity of the grazing tends to cause free-roaming reindeer moving eastward in the autumn to balk at penetrating the forest belt until the snows come. Moreover, in the spring, when the reindeer seek bare ground exposed to sun and wind during the westward move, this same forest belt affords little satisfaction and causes the reindeer to pass through, travelling quite far westward very early in spring.

Grazing continuity is a factor of differing importance to the extensive and the intensive herder. Geographical hindrances, such as a rocky ridge with one narrow pass, which might be easily traversed by the intensive herder leading his gathered herd, can block reindeer movements most effectively if the reindeer are left to roam freely. Thus a presentation of land characteristics important for a grasp of land utilization and group division of Tuorpon around 1910 in the early extensive period will be more general and far less detailed than one which seeks to explain intensive-era, herding differences in grazing pattern and group structure.

Yet another excellent spring/autumn area (as well as summer land) is the Virihaure district, all the way westward to the Norwegian border. A grazing system involving such western districts in spring and autumn favors early westward migration by sled caravan and late eastward return also by sled caravan (see p. 133). The factors that contribute to the Virihaure district's usefulness for such extended periods are many. First of all, this area contains concentrated, good grazing. It has not been uncommon for herders to spend the entire winter there when a bad winter "locks" (destroys the quality of or access to) lowland forest grazing. Secondly, proximity to Norwegian coastal settlements and communication routes solves an otherwise prohibitive supply problem. Thirdly, the shores of Lake Virihaure carry considerable birch forest, which is very unusual at that altitude and most useful for firewood. Fourthly, and a factor of far more importance today than in the past, the large Lake Virihaure provides excellent catches of fish (char) for sale as well as for personal consumption. Finally, the land zone between Lake Virihaure and the high Norwegian mountains, closed to the south by Token River and to the north by Kuoutelisjokk and Hurrejokk, forms a natural pocket. This land pocket affords good gathering and containing possibilities and is, moreover, a fine calving area.

So far, mention has been made only of the basic spring/autumn land entities of Tuorpon: Kabla (until around 1945), Nuortvalle, Kaska Tjavelk and Virihaure. One might expect similar natural entities for summer and winter. To some extent, this is true. The following historical survey will demonstrate, however, that in Tuorpon it is the spring/autumn divisions which have been most significant for group identity and group naming, at least in the extensive period.

As for naturally distinct, summer districts, there is the already mentioned, western end of Lake Virihaure, and until around 1945, when it was lost to Tuorpon and Sirkas Villages, the Alajaure – Mellätno – Jäkkäkaska¹ zone, utilized by both Pärte and Kabla Saamis. Besides these, there is the wide area just south of Virihaure, east to Tarradalen and west to the Norwegian mountains. This entire region was the prime summer land of the Nuortvalle group.

Throughout the eighteenth and nineteenth centuries and even in the early years of the present century, it seems that Tuorpon Saami traffic into Norway was quite common during the summer. The availability of supplies along the Norwegian coast gave cause for and possibility of extended stays in the west. Those herders who were not camped directly by the coast or within Norwegian areas of settlement could make regular trading trips

¹The name "Jäkkäkaska" means "between the rivers" in Saamish, in this case the Láddejäkkä and Mellätno rivers. The Jäkkäkaska area proper, therefore, refers to a summer-land area frequented by both Pärte and Kabla herders, but in the 1940s, when these herders formed their own Village, the name Jäkkäkaska was given to the entire Village.

by caravan to the towns and farms. It is quite understandable that, with such a system, many of these Saamis would "become" Norwegian citizens, and that, on account of old age or misfortune, many would end their herding days in the Norwegian coastal settlements. It is interesting to note that the Lule Saamish dialect is spoken in a narrow, east – west belt which stretches unhindered from the Baltic to the Atlantic.

Thus Swedish herders often had family relations on the Norwegian side. The summer grazing in Norway was lush. Reindeer show a distinct craving for the salt water of the Norwegian fjords, and it is thought that the salt water helps to kill the eggs of parasites in the reindeer's nose. The salt may also help the reindeer's growth of fur and hide, so that it becomes more insect-resistant. For intensive herders wishing to keep their reindeer together throughout the heat of summer, Norway afforded the essential snow coverage in patches on its high mountains near good grazing. Both Schnitler (1929 ed., II:171) in the mid eighteenth century and Erik Bergström over 150 years later (Bergström, 1913a) were interested in determining the extent to which Swedish herders were dependent upon migrations into Norway. Both record the need for snow cover as one of the main reasons why Tuorpon herders crossed the border.

The Lule Saami families that regularly crossed the border included the Huosi, Rassa, Pavval, Skåbja, Åstot, Gruvvisare, Pittja, Pirak, Kuoljok, Länta, Kielates and Kallak families (Kalstad *et al.*, 1974, and Wiklund, 1912). The peninsula west of Sulitjelma in Norway has been called Huosenjarga after the Tuorpon Saami family which used to frequent the area (Kalstad *et al.*, 1974). Lars Anders Pavval (1877 – 1935) (#4), a Tuorpon herder, gave the following information to Erik Bergström in an interview held in 1913:

Informant's father until a few years ago regularly used to divide out about 100 young bulls from the main herd (which was kept in Sweden) and keep them in Norway from midsummer (June 21) until autumn. He had them there on his brother's pastures (his brother was a Norwegian citizen) all the way over toward Fauske. This father's brother (Nils Andersson Pavval) had taxland in Norway, Pietselåpta. Lived on the isthmus west of Sulitelma, north of Langvattnet toward Fauske. This brother died seven years ago . . . Informant's own father went often into Norway when this uncle lived with his entire herd and was then with him during the warmest period. Has himself migrated with his father to Norway, the last time about ten years ago, with tent *kåta* and main herd . . . In the past the Juoksa family of Låkteå Village in Arjeplog migrated to Norway with main herd and *kåta* west of Sulitelma. They had *kåta* in Skåppeivare and went over the border around midsummer. In the past the Huosi family in Tuorpon already in the spring had their reindeer and *kåta* in Jaurekaska (between Virihaure and Vastenjaure) and migrated around midsummer to Pietselåpta. They were there until castration time (Mikaeli, early October) and migrated thereafter again to Jaurekaska or Titir. In November they migrated again to the winter land. The Skåbja family in Tuorpon already in May used to go to Norway with *kåta* and herd and was then in Skierreparre, Tjälme-vagge, and around Jeusak-jiekna. They were in Norway as long as to November, sometimes even the whole winter (in older times). Became finally official Norwegian citizens . . . (Bergström, 1913a)

This and other interviews conducted by Bergström in 1913 show a clear tapering off of Tuorpon traffic into Norway toward the turn of the century. They tell of movements across the border only during especially warm weather to reach snow cover or while "fleeing from wolves". Norway was not a haven from wolf attack, of course, but, in general, herders might be forced to change their entire migratory pattern in response to the presence of wolves (cf. Ruong, 1964).

Ruong (1975:84) mentions extensivity in the Padjelanta area around the turn of the century. The decline of Tuorpon traffic into Norway around this time and the extensivity this suggests fits well with Ruong's statement (see p. 119). Extensivity does not require such concentrated, summer snow-cover (the reindeer need not be kept gathered for milking), and therefore I believe one can correlate the tapering border traffic in Tuorpon with the rise of summer herding extensivity. Moreover, extensivity and collectivization of grazing-land usage and work force seem to go hand in hand. Despite the possibility of legal manipulation to neglect taxland claims in the legislation at the close of the nineteenth century (Cramér, 1979b), there is thus some indication that the collectivity of grazing lands decreed in 1886 followed in part at least the herders' own trend toward bigger herding groups and collective land-use in the summer. Shortly after the turn of the century, Norwegian summer lands (though even today partially accessible to Tuorpon herders by law) can be discounted as being of any major importance for Tuorpon herding-group divisions.

In later times, new administrative divisions were made in Tuorpon's summer lands. In the 1930s, when a fully separate Kaska Tjavelk group came into being whose summer land was to be distinct from that of the Virihaure and Nuortvalle Saamis, the old Nuortvalle summer zone south of Lake Virihaure and east to Tarradalen was divided into a Kåtnjunjes part reserved for Nuortvalle Saamis and a Kerkevare part reserved for Kaska Tjavelk Saamis (see map, p. 167). The Kerkevare mountain massif is northwest of the Kåtnjunjes mountain area, but the two zones are not separated by any major geographical hindrances, so that the mixing of Kerkevare and Kåtnjunjes herds can be combated only by considerable intensivity. Kåtnjunjes and Kerkevare, which refer to summer lands, have been used as herding-group names (these summer names correspond to Nuortvalle and Kaska Tjavelk spring/autumn group names respectively) when herding policies were designed to maintain strictly separate, summer herding groups and forced herders to keep their reindeer in specified summer zones. Such group names are based on a fairly high degree of administrative involvement. The reality they describe dissolved as the policing function of the herding administration decreased and extensivity became increasingly dominant.

Many of the hindrances which might otherwise create naturally bounded, winter grazing lands disappear with the coming of winter and the freezing of the waterways. Although deep snow might hinder the

movements of the reindeer, the directions of possible movement are usually quite unrestricted in the winter lowlands. While the distribution of good grazing determines the popularity of certain lowland zones, good grazing is not solely a function of the presence of the desired foodstuffs. In the winter, far more than in any other season, the availability and quality of the existing grazing is subject to the flukes of climate. As a result, while certain zones are frequented, drastic changes in winter land utilization are often called for. Since the taxland days, winter lands have not been apportioned out by any external administration (to date) to specific groups or individuals within the Village. As will be shown, the reason for the partitioning of spring, summer and autumn lands between groups within a Village, when imposed by the herding administration, was essentially to control herder—farmer conflicts and to some degree herder—herder (Jokkmokk—Karesuando) conflicts. Once the crops have been harvested and the snows have come, however, conflicts with farmers are no longer a major threat. Intensity need not be demanded by the authorities on that account.

On the other hand, State inducements for winter intensity were not necessary, even if they had been desired by the farmers. Even until recent times, the winter has been the period of intensive herding, for all herders, both Karesuando and Jokkmokk herders. During the winter, herders split into their smallest social fragments, often each family for itself. Under these circumstances there is less reason for any collective rather than family herding-group name, especially as grazing utilization in winter requires so many herd moves and diminishes the chances that any set of herders will always be linked to any specific grazing area. In later times, herders have shown more of a tendency to form winter groups, larger than before, and extensivity has made some advances into winter herding. Members of the same winter group tend to live in the same winter settlement, and the group name is taken from the location of this settlement—a location which is frequently but certainly not always the grazing zone for the group's winter herd.

Herds are grazed wherever practical and possible with regard to ground conditions and proximity of settlement or herding cabins and communication lines. Winter settlement has now become permanent. The elasticity of winter life in a tent *kåta* is partially compensated by modern communication and transportation facilities. Traditionally the areas around Maitum, Stenträsk, Nausta, Vitberget, Johannesburg, Karats and Pärilan have been used in the winter. Later, as we shall see, the shift of families eastward in their nomadic cycle, their gradual settlement in permanent winter homes and the development of a growing winter collectivity and extensivity have caused winter place-names to gain a new social import.

Group determines land

The names applied to herding groups are a most complex business, though highly logical. The same essential herding group can be referred to by a wide range of names, depending upon the season. The group's structure may very likely change with the season, and so the speaker, when wishing to include or exclude certain herders, will refer to the name which suits his purpose best. The same herding family might, therefore, be encompassed by quite a number of names, and the name applied in any one instance can be used to indicate not only the extent of the category referred to but also which season is specified.

The herders know each other's group affiliations, settlement patterns and family ties quite perfectly, and so the term used to name a group in conversation bears a large amount of information. The reader of this study, however, cannot hope to follow these intricacies and will only be confused when the same group is referred to by a score of different place-names. I shall try to explain the content of the group terms I use here and keep them to a minimum. This can be done at times by referring to the season in question specifically and then using a group name out of season simply to indicate the families in question, a technique actually common amongst herders, depending upon their point of emphasis. The reader cannot always be expected to know the seasonal implications behind a place-name.

In this study, concentration on the spring/autumn group names will prove most beneficial, as the natural boundaries of these basic spring/autumn land entities have led to the most stable or frequently repeated systems of group division throughout the years in Tuorpon. Moreover, in the present century at least, these spring/autumn groups have retained longer a social identity based on family ties. From a strict herding perspective, for example, one might claim that many uprooted Karesuando Saamis were part of the same summer group as the original Jokkmokk Kaila Saamis. Their herds were frequently mixed. But group identity goes much deeper than herding collectivity; it is largely based on family ties and strong bonds to specific lands. The social reality is one thing, the herding reality of land utilization another.

In the intensive era these two were usually merged. Those who used a land area had strong social and traditional bonds to it and to each other. With the extensive revolution and the introduction of new herders, who lacked familial bonds with the native Jokkmokk Saamis and birthrights to specific Jokkmokk lands, the close fit between group identity and land usage was pried apart. Northern-Saami relocation to Jokkmokk lands brought about a necessary herding interaction and land utilization which violated established norms. Healing of this kind of gap (one may indeed call it a wound) occurs slowly, as time gives the new herders recognized rights to grazing areas won by use and brings about inter-group marriages

and new family ties.

As one would expect, the variable size of the total Tuorpon reindeer population has caused government herding authorities to experiment with a wide range of grazing territory divisions. During the "police era", the authorities wished to maintain intensivity. When the total herd size rose very high, new land and group divisions were prescribed in an attempt to combat the trend toward greater collectivity and larger mixed herds. Later on, the police era gave way to the business or rationalization era, when considerations of profit maximization come to dominate concepts of land usage and group size (see p. 323). Policies of steering group affiliation and land usage according to political or economic dictates can violate the herders' still very strong social identity with their land.

In the period around the turn of the century, before the arrival of the Karesuando Saamis and after the end of the taxland system, with its strict specifications, Tuorpon was far from crowded. Herders could modify and alter their already traditional herding program of grazing utilization with a good deal of freedom, according to the natural dictates of land and climate. Most, if not all, of the Tuorpon herders were quite closely related to each other. We can expect, and indeed I intend to demonstrate, quite a well-adjusted correlation between the different, natural, land zones and the many, correspondingly different, major herding groups. The sudden introduction of many new herders from the north, with large herds of reindeer unacquainted with the land, could not but inject a huge imbalance into the system. Even if the newcomers had been more Jokkmokk Saamis with intensively kept herds rather than Karesuando Saamis with summer extensive herds, the confusion, re-apportioning and resulting pressures for extensivity would hardly have been less. But the fact that the new herders were not members of the native population and lacked social bonds with the Jokkmokk Saamis meant that their assertion of land rights caused a bitter battle. The authorities could offer only a guarded, ambivalent support of Karesuando-Saami grazing rights in Tuorpon, (see p. 156). To support them too much would constitute a support of herding extensivity and thereby to incur the wrath of the farmers.

The taxland system had been sensitive to both traditional rights and contemporary need in its land-allocation policies. Since the beginning of the eighteenth century, need has gained legal, though not always actual, prominence over traditional rights. While the Act of 1886 did away with those taxlands that remained after the great Survey (*avvittringen*) in Norrbotten, the grazing collectivity it decreed seems to have resulted in a situation which the authorities found it hard to deal with. With the increase in conflicts with settlers and the need to know whom to blame for reindeer damages, it became a major issue for the authorities of the police era to organize herding into a system they could control and understand. It was deemed necessary for the State to structure land usage within the new *Lappbyar*.

In the new Reindeer Grazing Act of 1898 (interestingly enough, before any Karesuando-Saami relocation), § 9 decreed that tailor-made Herding Regulations (*Byordningar*) should be applied to each Village, and among these regulations, if necessary, there should be one dividing the summer grazing lands into partitions for different groups. The regulations could further specify matters of grazing-use scheduling. According to these regulations under the Grazing Act of 1898, herders should respect the integrity of the grazing areas of the different groups. These same rulings were transferred intact to the next Act in 1928 (§ 11) and were in force until the 1971 Act. In effect, what the Acts from 1886 to 1971 did was first to break up the taxlands and then quickly to put large grazing zones at the disposal of certain groups with legal protection against the encroachments of other groups. Such measures would ensure better herding control by the authorities, promote intensivity and help solve the problem of whom to bill for reindeer damages.

What began with partitioning of the summer grazing lands soon came to encompass partitioning of the spring/autumn lands as well. While violence may have been done at times to what herders might consider natural grazing zones or traditional group divisions, on the whole, the lines were drawn with consideration for the natural grazing conditions and group organization established by the Saamis themselves. Thus, despite an often heavy-handed administration, a herder's group identity, his relations through both blood and marriage, still played a major role in establishing his rights to certain grazing areas and his lack of rights to others.

While the State applied one formal system of land allocation, the Saamis' own traditional system of land allocation could to a great extent continue within it. The group, for example, might well respect the traditional rights of an individual group member to a specific area within the group zone. Even today this is the case, and some herders continue to herd alone seasonally in areas which hundreds of years ago constituted the taxlands of their forefathers. If we are to understand the historical development of Tuorpon herding, it is vital not only to have a map of the Tuorpon territory but also to have a "map" of the herders, their family bonds and group affiliations. The two "maps" must be interlinked.

The early Jokkmokk herders and their group divisions

In 1905 the United Kingdom of Sweden and Norway was dissolved. This separation was to involve drastic changes in the Swedish Saamis' rights to grazing in Norway. Restrictions were not finalized until 1919 and not put into effect until 1923, but as early as 1907 a Swedish – Norwegian Rein-

deer Grazing Land Convention was founded to assess the current situation of grazing use and needs, in order to prepare the way for the consideration of eventual restrictions. It is largely due to this tremendous and lengthy project that we have any concrete data concerning herding in Tuorpon immediately before the massive relocation of Karesuando Saamis.

Much of the coming discussion will deal with the histories of individual family units and their fates as herding entities. Even a casual glance at charts of group membership is sufficient to demonstrate that the *sita* (nomadic-herding social unit) does not necessarily constitute an unchanging herding organism at all. Its components are quite variable. Each season brings new alliances and, depending upon alterations in family situation or herd size, an old pattern of seasonal regularity is easily changed. Yet the way these alliances can change generally originates in family relations (cf. Pehrson, 1957). One must extend analysis of herding formation to the family level. One must not ignore the *sita* and the "big group", of course, but, in all Saamish herding organization, it is most essential to be aware of the family, its internal character, the number of children, the sexes and ages of its members, and, most importantly, the ancestry or familial relations of each person. Strong family bonds often mean strong herding bonds. Social orientation forms an essential factor in almost all herding-group divisions and shifts in membership.

I find it, therefore, a tragedy that, in so much earlier research, family names are ignored. Manker's otherwise excellent surveys (1947 and 1953) of the camps and migration routes of the Swedish Mountain Saami Villages are seriously flawed on this very point. Typically, the man's surname will be given, for example, Blind, but no other names to enable one to distinguish this Blind from the ten other Blind families in the Village. No data are given for the consideration of the familial background. Equally regrettable is the general neglect of the matrilineal side of the family. Without knowledge of the wife's maiden name, a full half of the family's social context remains in the dark. In a society as fully bilateral as that of the Saamis, such an oversight is most inappropriate.

On a practical level, family ties are the natural backbone of herding ties. Family members usually possess reindeer marks which are variations of a common family theme. Herders who have grown up together, with their reindeer mixed in the same herd, naturally know each other's marks exactly. Herding can be quite a vulnerable profession, should one have enemies. Family loyalties inspire trust. Family members (and friends) mark calves for each other in the absence of their rightful owner, and they also represent family interests. They are generally fully aware of each other's herding "philosophy" and financial situation. They are also used to the same territory (as are their reindeer) and share the same minute knowledge of migration routes and grazing areas. It is only natural that they should tend to stick together when other herding factors permit or

favor such unions. The internal structure and shifts of *sita* organization cannot be grasped without an understanding of the family relations existing between the various members—just as modern, big-group composition encompasses but does not necessarily erase *sita* loyalties.

The first reindeer count was conducted in 1907 and was followed by another in 1911. Interviews were conducted in the early 1900s with herders throughout Swedish Lapland to determine the herders' traditional utilization of Norwegian land and what motivations lay behind this usage. In Tuorpon, a most valuable set of interviews was conducted by Erik Bergström in 1913. This material (unpublished), together with material from my own informants, gives a fairly good sketch of Tuorpon herding in the early 1900s.

The reindeer count of 1911 was carried out in Tuorpon during the late winter and is remarkable for its detail. All family members are listed with their reindeer categorized according to a number of criteria: sex, number of calves, number of oxen, bulls, calves grouped by sex, total number of reindeer, and number slaughtered or sold the previous winter. Moreover, all the owners of contract reindeer¹ (*skötesren*) are listed with reindeer totals under their appropriate host herders, and every single reindeer mixed in each group's herd but belonging elsewhere is listed according to owner. The statistics of this reindeer count are far more credible than later counts, when great extensivity made the reindeer difficult to gather and when it was a disadvantage for a herder to expose his full reindeer capital for entry in the tax records.²

The list of herders in the 1911 reindeer count for Tuorpon provides us with a good starting-point for coverage of the extensive revolution. For the best understanding of Tuorpon herding form, it would be necessary to know the familial relations of each of these 30–40 Tuorpon reindeer owners, as well as each family's age and sex composition, as seen against a background of changing herd size. Such detail is impossible here and yet, when especially significant alterations occur, these factors must always be considered. Although an in-depth portrait of each family is beyond both my factual resources and my more general needs, short genealogical sketches will be helpful for future reference.

¹ I use the term "contract reindeer" to indicate those reindeer owned by non-herders, Saamis or Swedes. These owners must arrange for their reindeer to be cared for by a herder. They must establish some kind of contract with a host herder. For further discussion of *skötesren* with respect to Saameby membership categories and voting rights, see p. 387.

² In 1911 the official tax policy was still the same as that instituted in 1695 and organized by the Saami sheriff instructions of 1760. According to this system, the Villages were taxed as a whole, and herders paid a share for the Village in relation to their taxland holdings. But the taxlands were swept away by the Act of 1886. Despite this, however, the tax system was not reformed for herders until 1927. In effect, from 1886 to 1927 the tax system was completely defunct (see p. 77).

I have composed these charts from church records and the oral accounts of the herders. The old church registers are sometimes incomplete and quite confusing. The information gathered from the herders is often imprecise and even contradictory, as memories fade into the distant past. Undoubtedly I too have contributed a share of error. Some omissions, however, have been intentional. While a holistic approach to herding-form transitions demands a strong historical perspective, in order to preserve the real context of interrelating variables, the total context can never be resurrected. Nor in this case is complete documentation the desired end. A balance must be struck between the data and the points I wish to illustrate by it. Therefore some Tuorpon families will be given more prominence than others, and one herder may be given a place on a chart, while his brother, who left the herding occupation, may not be mentioned.

I have introduced the various herding families from the time of their presence in Tuorpon. Some northern-Saami families entered Tuorpon as early as 1910, others as late as 1944. The later growth of each family has been added to its original chart, so that a fuller tabulation of a family's historical genealogy may be provided than is immediately relevant to the period under discussion. These additional data have been included, where appropriate, in the interests of thoroughness and will prove useful in more modern contexts. Attention to dates is therefore important in making use of the charts.

Saamish names are usually compounds formed from relatively few common elements, so that it is easy to become confused. The Saamis avoid much confusion by using a wide variety of nicknames, which often combine the given name with a place-name or the name of a parent. Thus Harrok Inga refers to the Inga who lived in Harrok and Lanni Lasse refers to the Lasse who has a father named Lanna. Where appropriate, I include such nicknames in the charts and use them frequently throughout the study. I have also numbered many of the entries in order to facilitate cross-references between charts and quick identification from the basic text. For example, #3, the daughter to #1 in Chart 1, later came to marry #15 and therefore appears also in Chart 4. Some of the older herders listed here are also numbered by Hultblad and contained in his most thorough family register (1968:203 ff.). There may be readers who wish to dig deeper into genealogies, and I have therefore included references to Hultblad's numbering system, where applicable. (#1) Pava Ammasson Pavval in Chart 1 below is the same as Hultblad's #98, and this will be annotated in the chart as (H98).

Chart 1. Native, Jokkmokk herders' family relations: early, Virihaure herders—Pavval

(#1) Pava Ammasson Pavval's herding labor force was often supplemented by his brother-in-law, Pava Olofsson Segal (1847—1921), who worked as a hired hand.

As mentioned earlier (page 103), (#1) Pava Ammasson Pavval had relatives in Norway whose grazing lands he often frequented. He practiced the custom of staying westward from earliest spring until late autumn, occupying the area around Virihaure, frequently the western end, a system continued by his son, (#4) Lars Anders Pavval, "Pava-Lasse".

Chart 2. More native, Virihaure herders—Pavval

Note that (#6) Nils Pålsson Pavval's marriage to (#2) Anna Kristina made him brother-in law to (#1) Pava Ammasson and thus bound him to the same herding concern. These two families formed a herding entity, the Virihaure Group, with a migration schedule unique to Tuorpon. Nils Pålsson was referred to as "Patron", a name signifying status as a large herd-owner, and his son inherited his herd as well as the epithet, "Patron-Amma".

While such genealogical charts are necessary for grasping the structure of herding groups and their shifting compositions, they are not sufficient to calculate a herding group's work force. A big herd owner might have a number of hired hands, especially if he had little help from his immediate family. These hired hands might stay with one family for a long time or shift quite often, depending upon job opportunities and the changing needs of employers. Some work might only be seasonal. A hired hand might even marry into the herding family with which he lived and worked. Or he might in time amass enough reindeer by his efforts to form an independent herding unit. Women were also hired hands, though they were basically employed for the sizable chore of managing a nomadic household.

Chart 3a. Early, native Nuortvalle herders—Pavval

(#10) Nils Petter Pavval's father was a brother of (#6) Nils Pålsson Pavval, and thus (#10) Pära-Petter and (#8) Patron-Amma were first cousins. With the help of church registers and Hultblad's charts, one can trace the Pavval family (on the Norwegian side sometimes referred to as the Skobli family) in its entirety back to a common ancestor, Panti. Pära-Petter's mother was of Swedish ancestry. The Granströms were among the first pioneers to settle in Jokkmokk. Many of them became totally "Saamified". Hultblad (1968:131) argues that the Granströms' settlement of the Stenträsk taxland, their large herd, and the very intensive herding they practiced all the year round in that lowland zone must in turn have exerted a heavy influence on the herding of (#7) Per Pålsson Pavval and his descendants.

We see here how the marriages of two brothers, one (#6) into a group with a highly mountain-oriented, herding pattern (Virihaure Group) and the other (#7) into a group with a very lowland-oriented pattern (Nuortvalle Group), explain the radical divergence of herding form between them. To understand the splintering of the original Panti family and its consolidation into the Virihaure and Nuortvalle Groups, one must look to the rise of intensive herding, geography and the taxland system. Note also that Pära-Petter's wife came from Arjeplog, reflecting the close ties between Arjeplog Saamis and southern Tuorpon Saamis (Jokkmokk Village Saamis, see p. 95), due to the natural formation of the Arvas—Nuortvalle land mass and the herding cooperation this facilitated or demanded between the two Villages.

Chart 3b. Later generations of native Nuortvalle herders—Pavval

Nils Johan Per Persson Pavval	***	Inga Kajsa Pavasdt Pavval
(1863–1943) “Nilhsok-Addja”		(1874–1948)
(#15)		(#3) see chart 1
	no children	
foster parents to	Nils Johan Juvvasson Pirak	
and	Sigga Maja Kuoljokk (#18); charts 3 and 5	

Chart 4. Native Virihaure and Kaska Tjavelk herders—Pavval

Nilhsok married a daughter of Pava Addja (#1), became a brother-in-law of Pava-Lasse (#4) and thus a member of the Virihaure Group. Nilhsok had begun as a hired hand to Patron (#6) and can therefore already be counted as part of the Virihaure Group before his marriage. Pava Addja's daughters were amongst the few eligible females within the Virihaure Group and it was only natural for them to marry hired hands within the group, a recurring pattern and one highly advantageous for all concerned.

Chart 5. More native Virihaure and Kaska Tjavelk herders—Kuoljokk

Like Nilhsok, Kuoljokk-Anti began as a hired hand in the Virihaure Group, a hired hand of Pava-Addja (#1). Originally he came from Sirkas Village, but on his marriage to Pava-Addja's daughter, he became a permanent Tuorpon herder. The two sisters, (#3) Inga Kajsa (Nilhsok's wife) and (#5) Anna Magga, are said to have gotten along very well together and preferred to be teamed with each other in the same herding group. As Inga Kajsa and Nilhsok were without children, they were given one of Anna Magga's and Kuoljokk-Anti's children, Sigga Maja, to raise as foster-daughter and have as help in the household—a common practice in those days.

Chart 6. More native Nuortvalle herders—Huljo

Järvas-Anders (#20) was a half-brother of Pära-Petter (#10) and, moreover, their wives were close relations. The last name, Huljo, seems to have been dropped in the next generation, and Järvas-Anders himself is sometimes referred to as Huljo and sometimes as Andersson. Järvas-Anders had once been a fairly big herder, and his family relations tied him to the large Nuortvalle Group. Later, between 1920 and 1930, he was to settle in a small cottage in Nuortvalle territory near the Järvas mountain and become a forest Saami. His mother (#9) was rich and helped to pay for the enclosure of a large forest area to facilitate his forest herding, but this herding enterprise was never very successful. His herd decreased, and finally Järvas-Anders gave up herding.

Chart 7. More native Nuortvalle herders—Pavval

Chart 8. Native, Jokkmokk herders (Nuortvalle)—Saulo

Members of the Tuorda, Pirak, Länta and Aira families form a herding group of their own, straddling the border between Tuorpon and Sirkas, later to become Jákkåkaska Village. Their familial relations seem largely bounded by their herding-group affinity, though by no means completely, so the bonds of ancestry reflect the bonds imposed by land formations and resulting herding organization.

Some of these family members are taken up on Tuorpon lists, as they utilized the Kabla area: Inga Tuorda, Nils Ammasson Tuorda, Inga Kristina Ammasson Tuorda, Pava-Lars Ammasson Tuorda; Inga Pirak, Nils Paulus Pirak, Anta Pirak, Per Amma Pirak; Petter Amma Ammasson Länta, Petter Nils Amma Länta, Amma Kajsa Länta, hired hand Johan Amma Finnberg; Petter Nils Apmut Ammasson Aira, Ristin Aira—these were included in Tuorpon's 1911 reindeer-count lists. Others who occasionally used Tuorpon land or joined with these Kabla Saamis temporarily on a seasonal basis appear in Sirkas lists. Village membership for these Saamis was a very uncertain proposition. The familial relations of these Kabla Saamis will not be elucidated here for reasons soon to be discussed. It is sufficient for the matter in hand to indicate that this body of Tuorpon Saamis formed quite a closed northern-Tuorpon group and, with their comrades and family relations on the Sirkas side, they composed a herding entity which, to all intents and purposes, can be considered a separate Village, even if this was not officially proclaimed until 1945.

It is remarkable, in the light of these group relations or lack of relations, that Anta Pirak, a member of this Kabla group, should have been elected headman of Tuorpon, a position he held when Erik Bergström conducted his interviews in 1913. It must be remembered, however, that Anta Pirak was a relatively learned man and had been educated as a Bible teacher for nomad children. He was also later to be author of the remarkable book, *Jåhte Same Viesom* (A Nomad and his Life). It is therefore understandable that he should be entrusted with this position, which in those days existed more to appease and deal with authorities than to steer herding affairs. The interview with Anta Pirak conducted by Erik Bergström is of great interest and will be considered shortly (see p. 124).

Incipient extensivity

The close of the last century signaled a period of unusual change in the herding of the Jokkmokk Saamis. Taxation policy was changed; property rights were unsettled or in dispute (*avvittringen*); a new herding administration was founded, and new herding laws were proclaimed. Swedish settlement had pushed far into the mountains, despite the Agriculture Line, which was drawn through Jokkmokk in 1886 (Lindell, 1900:58). A number of epidemics had taken a heavy toll amongst the herders. Their numbers had declined rapidly during the 1800s. "The rise of the number of mountain Saamis . . . halted in the middle of the 1790s, and instead there began a quick decrease, which continued throughout the 19th century and by 1860 had reduced the number of families to one-quarter or one-fifth what it had once been" (Hultblad, 1968:91). The herder decline was soon to be even more marked when in 1917 the dreaded "Spanish sickness" reached the north and, according to Per Pavval (#11), cut a path of death through Tuorpon in a line from Arjeplog to Tjåmotis.

The easing of competition for grazing lands, combined with a new legal system and an increasingly effective control of predators, seems to have allowed for a relaxation of intensivity during the high summer (July). Those with large herds, especially, could give their reindeer more freedom, and milking decreased. "Incipient extensive herding existed also as early as during the last decade of the 19th century in Padjelanta, the Jokkmokk Saamis' summer land, that is, before the first northern Saamis arrived there around 1910" (Ruong, 1975:84). The benefits of a cash economy were already to a limited extent used for the purchase of food-stuffs, thus freeing the herders more and more from such great dependence on dairy products during the summer. Lucie Kihlstedt, writing of a summer spent with a group of Kabla Saamis (then part of Tuorpon) in 1899, mentions both summer extensivity and quite a range of store-bought goods: "fruit soup, rye porridge, pancakes (flour), cake and much more" (Kihlstedt, 1920). Oddly enough, this is the same group of Saamis of which Jannes writes more than 40 years later:

At that time (before the arrival of the northern Saamis), the Jokkmokk Saamis still held fast to the so-called intensive herding, herded the reindeer constantly, milked them all through the summer and lived practically entirely on the reindeer's products. The Karesuando Saamis, on the other hand, let the reindeer wander about more freely, let the calves have the milk, sold a great deal of the meat and bought themselves a more varied diet. Along these lines the Jokkmokk Saamis have now also fallen in. (Jannes, 1943:66.)

One senses here the guiding hand of Manker, who was partially responsible for Jannes's ethnographic information, and who was himself largely caught up in the Jokkmokk – Karesuando Saami conflict (cf. Manker, 1928).

While it is important to acknowledge the partial relaxation of inten-

sive-herding rigor in the Jokkmokk area in the late 1800s before the arrival of any northern Saamis, this incipient extensivity can hardly compare to that which followed soon after their arrival. In just a few decades, beginning in the early years of the present century, the intensive-herding methods which have been described here were to undergo monumental change. From the highly intensive, almost year-round separation and guarding of herds, herding form was to sweep to the opposite, extensive pole, with large-scale mixing and minor, sporadic guarding. Migration patterns were totally altered or rendered obsolete. Settlement location and housing types grew permanent. Families changed from an economy based more or less on self-sufficient, natural produce to a cash economy. The reindeer's threefold function as milk, transport and slaughter animal was reduced to that of mere slaughter animal. The herding work unit changed drastically from the small *sita* organization to large collectives, often encompassing an entire Village. What lay behind this "extensive revolution"?

A number of different motives have been proposed in explanation: (1) invasion and diffusion—extensive herding was a herding "type" introduced by the relocated Karesuando Saamis (an explanation not without some justification, even if obviously insufficient in itself, as some extensivity had developed before the arrival of any northern Saamis), (2) modernization—new technical innovations and increased communication facilities have given herders new possibilities, (3) degeneration—the herders now in contact with modern civilization have grown "soft" and unwilling to invest the work demanded for intensive herding, (4) grazing conditions—industrial encroachments, climatic crises and overgrazing have rendered grazing lands scattered and poor in quality. Extensivity is a natural and unavoidable result.

To evaluate these explanations, a deeper look into the history of herding-form transition in the present century is necessary. The continued, diachronic analysis of Tuorpon is an attempt to uncover the causes of this rapid period of change, to investigate these and other motivations, and to understand their interactions. Armed with a description of Tuorpon herding development, it will be possible to approach Tuorpon's current herding problems with respect to the transition to "rational herding". In a final summary, I shall try to present an analysis which places intensive, extensive and rational herding within a larger theoretical framework.

Chapter 9

The Coming of the Karesuando Saamis (1910—20)

Still other names appear in the active herder (*husbönder*) list in the reindeer count of 1911. They were not Jokkmokk Saamis but Karesuando Saamis.

Henrik Persson Blind (1864—1932) ***** Katarina Persdt. Parffa
"Heika Gubben" (#30) (1883—1962)

Henrik Guttormsom Omma (1892—) (#33) *** Elsa Persdt. Blind
(1898—)

Per Henrik (1923—)

Henrik G. Omma (#33) began in Tuorpon as a hired hand to Henrik P. Blind (#30) but later married and became his own master. He was to become Village headman and a leading figure among the Karesuando Saamis but in 1935 he moved with his family to Norway. Guttorm G. Omma (#37), who arrived in Tuorpon much later (see chart 11), was his brother.

Guttorm Blind (1906—51) (#31) ***** Inger Anna Blind (1902—73)
see chart 12

Olof Henrik (1932—) *** Inger Ellen Omma
(1929—)
see chart 13

Anders Assar Blind (1908—) ***** Anna Kuhmunen (1912—)
 (#32)

Sigrid Blind (1912—) ***** Gustav Helmer Omma (1904—68)

Chart 9. Family relations of dislocated Karesuando herders — H. Blind

Henrik P. Blind (#30) and his family were the first northern Saamis to come to Tuorpon. He came to Tuorpon as early as 1910, long before the era of forced relocation of northern Saamis, which began after the completion of the work of the Norwegian—Swedish Grazing Commission in 1919. Nonetheless, even with access to Norway, grazing lands to the north were overcrowded, and Heika Gubben moved of his own accord from Saarivuoma Village to seek more room.

It was already known that, with the dissolution of the Norwegian—Swedish Union, which occurred in 1905, the Swedish Saamis' rights to Norwegian grazing must be reduced sooner or later. The first of a series of commissions to investigate Norwegian—Swedish border conditions with an eye to revision of the 1751 Codicil was started as early as 1843 (Åhrén, 1979a:112).¹

The reason one wanted to form more modern rules was that one considered the codicil's regulations as generally outdated. The development of a strong settlement and farming penetration into a large area where the Saamis used to take their reindeer in Norway (Troms) especially had caused difficulties which could not be solved according to the regulations of the codicil. (Åhrén, 1979a:113.)

Heika Gubben's southward progress to Tuorpon was not direct; he "experimented" with herding in different areas along the way, thus spending some time in Sörkaitum Village and later in Sirkas (the Vaisa area), where, according to Mattias Kuoljokk, "Heika Blind became rich", that is, became a big herder² (Ruong, 1945 ULMA 18368b). Other northern Saamis were in experimental movement at this time, but Henrik Blind was the first to reach Tuorpon.

The story told by his son, Anders (#32), is that, while Heika Gubben was

¹ Further adjustments and changes in the rights of Swedish Saamis to Norwegian grazing and the rights of Norwegian Saamis to Swedish grazing were enacted in 1972.

² According to Heika Gubben's descendants, this statement is not at all true. He was a big herder long before he began to move south. Kuoljokk, a Jokkmokk Saami, may be implying here that Heika Gubben, a Karesuando Saami, acquired his wealth dishonestly, by appropriating Jokkmokk reindeer into his herd.

on a scouting expedition in search of good grazing territory to occupy, he came to the Virihaure area, where he found an enormous reindeer horn, a fell horn from a bull reindeer. The size of this horn convinced him that the grazing in this area must be outstanding, and so he moved his herd to Virihaure and joined the Staloluokta camp of the native Jokkmokk Saamis' Virihaure Group in 1910. Henrik P. Blind's arrival did not meet with the resistance from native Tuorpon herders which later met many of the subsequent northern-Saami arrivals. The native Viri Group was small, and there was plenty of grazing.

Margareta Parffa (1843—1917) ***** Per Guttormson Parffa (?)
 widow upon arrival in Tuorpon

Gustaf (1866—1933) (#34)
 Per Persson (1872—1946) (#35)
 "Parffa Gubben"

Per Persson Parffa (1872—1946) *** Brita Johanna Sikku (1886—1965)
 (#35) already married upon arrival in Tuorpon

Maria Kristina (1900—)
 Lars Petter (1909—36)
 Isak Solomon (1917—) (#36)
 Karin Ingrid (1921—)
 Nils Tomas (1926—)
 Ella Margareta (1928—)
 Johan (1933—)

Gustaf Parffa (1866—1933) ***** Kajsa Pettersdt. Kuoljokk
 (#34) (1881—1943) sister to (#16)
 Anders Kuoljokk. See chart 5

Karin Margareta (1920—) (#45)
 see chart 12

Isak Solomon Parffa (1917—) ***** Anna Hurri (1918—)
 (#36)

Johan Parffa (1933—) ***** Karin Nutti (1940—)

Chart 10. Karesuando herders — Parffa

Heika Gubben was soon joined by the Parffa brothers. The marriage of Gustaf Parffa with Kajsa Kuoljokk was the first of the very few marriages

between Karesuando and Jokkmokk herding families in Tuorpon. In this way, certain bonds were cemented between the newcomers and the native herders of the Viri Group. Parffa Gubben was considered the family head and herding leader of the other members of the extended Parffa family. The Parffas arrived in Tuorpon in 1911. They also had been seeking less crowded grazing lands. We find strong family bonds linking these two northern-Saami families, one of the major factors behind their unification in Virihaure. Heika Gubben was married to a Parffa, a sister to the Parffa brothers.

These charts illustrate the great importance of family relations in determining herding-group formation and place of eventual relocation during the tremendous turmoil in the first half of the present century. As will be seen, this story is repeated time after time. It remains to be seen how these families divided up during different seasons, the land areas they used, and the herding arrangements of the groups composing the Tuorpon herding system during this period.

The Nuortvalle Group

In his report of Tuorpon group affinities, Anta Pirak (1913) divides the Tuorpon Saamis into four main categories: (1) Kaila Saamis or Pära Saamis (a term derived from Per P. Pavval (#7), as was the nickname of his son, Pära-Petter), (2) Virihaure Saamis (*padjelaha* or highlanders), (3) Karesuando Saamis (*sirtolattjah* or displaced Saamis), and (4) Kabla Saamis. A knowledge of family bonds gives these tables much more meaning.

We have seen how the large Pavval (by some spelled Paval) family was grouped in two parts. The larger part was gathered around the big herder Pära-Petter (#10) in the southern part of Tuorpon. They migrated often in the Kailavagge area (hence the name Kaila Saamis) with a migration schedule centered largely on the spring/autumn encampment of Puolle-måive in Nuortvalle. Nuortvalle is an excellent spring/autumn land, both in amount and in distribution of grazing. As noted, the influence of the in-married Granström family with their old possession of the Stenträsk taxland and a tradition of forest Saami herding, not to mention that Nuortvalle herders were once part of the old Jokkmokk forest Village as well, might help to explain why these Kaila Saamis were not predisposed to spend such long periods in the summer land or to migrate as far westward as other Saamis. Moreover, the ability of the Nuortvalle area to maintain herds for long spring/autumn periods lent itself to this arrangement. Yet, as mentioned earlier, there is evidence that, in the past, Nuortvalle herders migrated all the way to Norway. One might speculate that, as trading relations with Norway grew less important and as crowding in

the taxlands declined, the reasons for such lengthy migrations were weakened. In early times, these herding families migrated westward in small groups from Nuortvalle as early as the end of April. By the 1900s, however, they would not usually depart from Nuortvalle until early June, after the calves had been born in the Nuortvalle area under intensive guarding.

Before embarking upon a description of the Nuortvalle Group's migration pattern for this decade (1910–20), it would be wise to make some general remarks about migrations in general. Due to the wealth of synchronic analyses and the misconceptions they impose, many sources frequently refer to *the* migration route of a certain herding group. In fact, the same group may take a wide spectrum of alternative routes through the years, just as a motorist driving in the middle of the city will not always take the same route between two points. Of course, if there is only one road to a desired destination, the motorist will always take it, and in the mountains one certain pass may be by far the most practical and therefore frequently trafficked. However, the herder usually faces numerous different routes to the same goal and many variations on any single migration theme. The route he takes can never be fully planned in advance, just as the motorist must be flexible and adapt himself to traffic jams or detours. The herder may start out with a tried and true route in mind, but, step by step, day by day, he will “play it by ear” and accommodate himself to climate, grazing conditions, the presence of other herds, shelter, availability of firewood, etc. If one traces out the migration routes of a certain herding group year after year for a long time, one soon finds that, although some routes are most favored, there is hardly a single available route which has not been made use of at one time or another. Generality and vagueness in migration-route description is therefore not a matter of insufficient sources or poor data, but rather a more accurate reflection of the actual situation. One must try to think like a herder to grasp the essence of all these migration shifts. A migration consists of an ever-renewed pattern of intertwining determinants and is not a rigid itinerary of place-names.

Before the erection of the Parka crosswise fence in the 1930s, the Nuortvalle Group's westward migration from Puollemäive¹ was begun by boat along Lakes Karatj and Peuraure to Skaite. In the early 1900s, the herd was guarded in the Nourtvalle area until *after* calving (calving in Skeltavare was a later development), whereupon the herd was released to move west of its own accord as the calves grew strong. The herd was used to following the northwestern slant of the long land strip and needed little attention. The herders would meet the herd at Skaite. At this time, Puol-

¹ In earlier times, this camp had a somewhat different location nearby. According to Pära-Petter (related by his son Per (#11)), the change was probably motivated by the depletion of firewood.

lemåive was the only permanent camp these herders had. The Parka camp did not yet exist, and the herders did not have large stores of supplies planted along the way at such spots. Erik Pavval (#13) points out that in the intensive herding days there was not much time to embark upon any supply runs to furnish the route with provisions, as became common with extensive methods.

Ox reindeer were not available in Puollemåive (once the herd had been released in May) to freight the families' goods westward in late June. Transport oxen would be caught only upon arrival at Skaite, and for this reason the first leg of the trip had to be by boat. From Skaite, at the western end of Lake Peuraure, they would *klövje* (that is, travel with pack reindeer) to Sjöallapuolta and further all the way to Viejevagge (or Vehevagge), north of Rovijaure (or Råvvejaure) in the Kierkevare zone. As Erik Pavval (#13) has commented, "That pack-reindeer traveling lasted all summer". Such statements reflect the great amount of time spent on the move in relation to the time spent stationary at any single camp. Most of the summer was spent migrating with only short stops.

From Skaite, the route would commonly go over Parkajokk. A stop was often made by Sjongakuorso by Tsielekjokk. The regular settlement by Parkajaure was a later occurrence and reflects the extensification process. The Parka encampment became regular only in 1936 and owes its existence to the good fishing prospects, the birch forest for lengthy stays and the construction of a complex system of fencing. As a strategic herding location, it was usually somewhat out of the way to be of use as a short-term, intensive-era camp, but it is ideally located with respect to the herd separations necessitated by the extensive revolution—separations first between the Nuortvalle and Kaska Tjavelk groups and later, after 1968, between all Jokkmokk and all Arjeplog Saamis. The move continued along the great mountain chain of Skellapuotta, following Tsielekjokk past Vuoka, keeping above and to the south of Tarradalen and then breaking westward into the Kåtnjunjes — Kartevare area or turning earlier up Kuravagge.

Per Pavval (#11), brother to Erik, also remembers many of his early summers spent in Viejevagge. They would stay in Viejevagge for only about three weeks in tent *kåtas* before beginning the return trip east. During the high summer period (July), their herds could spread almost to the southern shore of Lake Virihaure, though generally held east of Staddajokk.

The herd was so tame that calf-marking could be done a little at a time in front of the tent *kåtas* in the evening without recourse to any corral. In the evening, the herd was freed from the insect pests and could leave the windy peaks to concentrate on good grazing. During the westward move, the Nuortvalle herd would frequently contain a number of neighboring Arvas-group reindeer belonging to the Sjaggo family from the Luokta Mavas Village. The Sjaggos would often separate their reindeer from the

Nuortvalle herd at Shlabbanjarga by Tsielekjokk, and the Pavvals in turn would separate any of their strays from the Sjaggo herd at Harroknjarga. Summer guarding of the herd was intensive to avoid mixing, even though they did not milk until later in August in the Skeltavare area upon the eastward return. The herders alternated with 24-hour guarding shifts, which changed each morning.

Per Pavval recalls that neither he nor his father, Pära-Petter, ever engaged in regular summer milking, as this was known to be bad for the calves. Pära-Petter was a very wealthy herder and, according to Per, summer milking was generally practiced by the less well-to-do, as one would expect.

Later, towards summer's end, this Nuortvalle Group might make a brief stay by Lake Rovijaure, even before this became a standard practice in the 1930s. The eastward move in August was broken by a number of stops: frequently at Skaitash, Korso, Kurapuolta, Akanbäcken and other places. The eastward move back to Puollemåive would be slowed in order to engage in milking *en route*. The cows would need plenty of relaxed grazing to produce the desired milk. Skeltavare was an especially convenient, autumn-milking area, because of its excellent, concentrated grazing, and it was common to let the herd stay there during the milking for a week or more.

Already in these early years of the present century, even autumn milking began to decline. It followed that eastward migration need not be slowed for the sake of milking, and therefore the amount of time spent west of Puollemåive was shortened. The ability to house goats over the winter with nearby settlers (such as those in Lillselet and Luovaluokta) increased and made dependence on reindeer milk less vital. Moreover, powdered milk was soon to become common. Most important, however, in explaining the earlier return to the lowland spring/autumn camp is, I believe, the ever-growing entanglement with the cash economy and the ever-improving transportation and communication facilities which expanded from the eastern coastal regions toward the western mountains and made supplies accessible.¹ As access to other supplies grew, the reindeer's own importance as a food producer declined. It became more and more an item for sale in order to obtain other goods, and these goods could be obtained in the east. The time spent at the spring/autumn camp could be lengthened.

It seems that, as soon as one segment of the herding cycle leans toward extensivity, it spreads like an infection to those parts of the cycle imme-

¹ This development of communications with eastern settlement took a dramatic jump in the years around the turn of the century, specifically in the area around Lake Karatj, due to the effects of a mighty storm, which in 1897 felled most of the surrounding forest. The result was a bonanza for the timber industry and the greater Jokkmokk community. Hundreds of jobs were created and new transportation facilities established to "harvest" the fallen forest (Vesterlund, 1925, pp. 129 ff., and Andersson, 1978:29).

diately before and immediately after. Without the need for summer milking, the reasons for maintaining small intensive herds in the summer land are greatly reduced. When the herds merge in the summer land to form one extensive mass, there is no pressing need to maintain strict division in the spring. And with the end of summer intensive milking and the formation of larger herding entities with herds of gradually decreasing tameness, it becomes increasingly difficult to impose autumn milking.

With the coming of a growing number of Karesuando herders and the crowding of their reindeer into the Virihaure zone, Viri herds spilled into the Kerkevare zone. As will be described in more detail later, the Kaila Saamis were forced to retreat further east and formed a Kåtnjunjes summer group. The long move to Viejevagge ceased, and the summer camp went no further northwest than to Rovijaure. Milking was soon to be a sporadic practice during corral occasions, that is, one might milk while the herd was corraled for separations, but one did not gather the herd for milking alone.

In early times, the Nuortvalle district was not reached again till September, but with increasing extensivity and speeded eastward migration, arrivals took place earlier in August. The authorities finally put a limit on the return to the lowlands in order to give the farmers time to harvest and store their grain out of reach of reindeer (*Byaordning för Tuorpons Lappby*, 1927:4). Later, it was stipulated that herds should not be brought into the lowlands before August 10 through the Parka crosswise fence.

Anta Pirak's (1913) report shows the Kaila Saamis divided into five autumn *sitas*. It must be noted, however, that all of these five Kaila-Saami, autumn *sitas* (the same grouping appears again in the spring) were located on the Nuortvalle land strip neighboring each other, except for the so-called Lastak *sita*, composed of Nilhsok (#15), Elsa Pavval (#23) and Brita Pavval (#24), a variation which deserves special consideration. Once again, it is interesting to note how the strengths and weaknesses of family bonds, are both reflected in the splintering of the large summer group into smaller autumn groups (and frequently into even smaller winter groups). At this time, there was as yet no need for the large, late-autumn separations at Rautare (sometimes spelled Rautojaure, although this causes confusion with another lake in the Kaska Tjavelk zone), which became necessary with increased herd-mixing and lasted on into the 1950s. At most, there was only a small bush corral at Rautare for the Sjaggos to check for strays. The large corral complex which was to be built at Rautare later came to hold reindeer from widely separated groups, all mixed in the same herd. With increasing extensivity and herd mixtures, herd separations became much larger and more time-consuming affairs.

In the autumn camps, summer gear was changed for winter gear. The sleds which had been stored there at the end of the previous winter would be brought forth to be used in the further, eastward migration to the winter lands around November. The frozen waterways were best for travel and

easiest for the control and driving of gathered herds. Intensivity was greater during the winter than during the bare-ground period. Kaila Saamis moved eastward to Nausta, Juokkil and Johannesburg, to give some examples, but even as far as Njallaberget (by Vitberget) near the Piteå border. Grazing was fairly good in the east at this time, barring bad winters. Later, encroachments were to impair eastern grazing prospects and force the reindeer to stay further west in the winter. According to many Nuortvalle herders, this is one reason why the Udtja fence (see Chap. 14) has been so detrimental to Tuorpon herding.

A number of different, privately owned, butchery companies competed with each other for the purchase of the herders' oxen (not the specially trained transport oxen, of course, as these were too valuable to sell). In the summer land, bulls, usually 3—5 years of age, were castrated during the calf-markings or later in the autumn. Oxen avoid the hormonal shifts of the rutting season, are not exhausted by it and therefore retain their weight far better than the bulls in the winter. Oxen could therefore be sold in the late autumn or winter for good profit or used by the herder's own household.¹ At this time, however, the market for reindeer meat was not highly developed, and herders were given a poor price for their reindeer by current norms. The slaughter of bulls on a large scale in the autumn just before the rutting season, which is so profitable today, was not a possibility open to Tuorpon herders until the early 1960s, when improved communications made possible the transportation of slaughtered bulls in the autumn from more westerly locations. In the early 1900s, the butchers could either meet the herders in their autumn camps once the lakes had frozen or wait a bit longer till the reindeer were brought further east into the winter land, so that they might buy up a large number of oxen and drive them on the hoof to a favorable slaughter location by a road or railroad station.

The stability of the autumn camps, and the availability of good building materials there, both pine and fir, enabled the Nuortvalle Saamis to erect a number of permanent structures, wooden *kåtas* and storage huts. In the winter land, however, greater intensivity and the possible scarcity of winter grazing could require more frequent moves and thus the use of tent *kåtas*. If favorably located, herders could rent space in one of the outer buildings of a farm complex for part of the winter.

After a number of shifts of winter pasture, the Kaila Saamis would return to their Nuortvalle homes sometime in March or early April. The sleds would be stored, and the families would once again await the move to the summer lands.

Changes in the Nuortvalle herding form during this period were slight and far more gradual than those occurring in the Viri Group. The point

¹ Today, neither castration with teeth nor with knife is allowed. The law requires the use of special tongs, which crush the sperm ducts.

I wish to make is that even the Nuortvalle Group, long considered the bastion of intensive herding, had embarked upon a mild, extensive trend, which radiated from the cessation of summer milking and had nothing to do with northern-Saami relocation. The most immediately compelling force toward extensivity in the early part of the extensive revolution in Tuorpon originated from Tuorpon's Virihaure Group, and it is the history of this group which in early times dominates the analysis of the extensive trend. It took a good number of years before the new forces for extensivity in the Viri Group made themselves felt in Nuortvalle.

Before turning to the Virihaure Group, it is necessary to tie up some loose ends with regard to the Kaila Saamis. The introduction of Olov Amma Gruvvisare into the herding lists by 1913 caused some re-adjustment, though with by no means such a major effect as one might imagine from Pirak's chart. It must be remembered that Pirak, in his rigorous portrayal of conditions in 1913, sometimes makes it difficult to distinguish the abnormal from the normal. Thus the Låke summer *sita*, consisting of Olov Amma Gruvvisare and Lars Petter Pavval (#22), and the Puoitesoive spring and autumn *sita*, composed of the same herders, should be recognized as a temporary constellation. Olov Amma Gruvvisare (1891—1978), originally from Sirkas Village, married Maria Lanisd. Pavval (#21), a sister of Lars Petter. Maria was much older than Olov Amma. The marriage was basically one of convenience for both parties. She died soon after and Olov Amma merged with the regular Pära-Petter group until he quit herding.

Another sudden fluctuation recorded in Pirak's report of 1913 is the occurrence of Nilhsok, Elsa and Brita Pavval among the Pära Saamis in the summer and at Lastak in the spring and autumn. By his marriage to Inga Pavval (#3), Nilhsok had very strong ties with the Viri Group and was for many years a regular member of this group. Later, however, as he grew older, he lapsed back into the Nuortvalle Group, from which he had originated. His ties with Nuortvalle were further strengthened by the marriage of his foster daughter Sigga Pavval (#18) to Johan Pavval (#12), a son to Pära-Petter. Nilhsok gradually cut back on the length of his migrations until he became stationary at last in a cabin on Lake Peuraure and later at Luovaluokta on Lake Karatj. During this transition, Nilhsok showed a rather sporadic herding pattern with frequent shifts. The summer camp of the Viri Group at Staloluokta and the summer camp of the Kaila Saamis were not so very far apart. Sometimes Nilhsok was in Virihaure; sometimes, and in later years regularly, he was with the Kaila Saamis all summer. He would then separate from the other Kaila Saamis during their eastward move at Tsielekjokk and hold his herd at Lastak before proceeding to Kaska Tjavelk in late autumn. Finally, he did not bother with this separation and remained with the Kaila Saamis in Nuortvalle all autumn, but by this time he was so old that he was soon to quit herding altogether. Anders Kuoljokk (#16), however, who followed lar-

gely the same pattern, continued much longer as a Nuortvalle herder before settling at the eastern end of Lake Karatj. Nilhsok was also Tuorpon's headman for a number of years, and this task, which he took very seriously, demanded his presence at calf-markings and auctions in both the Virihaure district and the Kátnjunjes district (summer lands of the Nuortvalle Group). Basically, however, one can see the transition of his herd from the Viri Group to the Nuortvalle Group as proceeding via an intermediary step, the building of a Kaska Tjavelk group, a pattern of transition which we find repeated again and again throughout Tuorpon's history.

The Virihaure Group

In the early 1900s, the Virihaure Group consisted of Pava-Addja (#1) and his wife, their son Pava-Lasse (#4), their daughter Anna Magge (#5) and her husband Anders P. Kuoljokk (#16) and children, occasionally Nilhsok (#15) and his wife, Pava-Addja's other daughter, Inga (#3), Patron (#6), Patron-Amma (#8) and his wife Elsa Gruvvisare or "Stuor-Elsa" from Sirkas. A varying number of hired hands, both male and female, were attached to these families.

The bonds uniting this group were forged largely by women (marriage relations) rather than by the wealth of strong bonds by blood characteristic of the Nuortvalle Group. The Viri Saamis therefore give the impression of being a far less permanent and stable social unit than the Nuortvalle Group. Of course, the Virihaure grazing lands have always been attractive for their rare combination of excellent spring, summer and autumn grazing and have therefore been utilized off and on for centuries. But proper utilization of Virihaure grazing demands quite a difficult migration system, presenting considerable problems for families with small children. Even in recent times, members of the Viri Group have lapsed into the Nuortvalle Group with age, decreasing herd size or inability to continue the demanding investment of work. Thus the constitution of the Viri Group does not show the same familial continuity as the Nuortvalle Group.

The western end of Lake Virihaure contains a rare combination of seasonal grazing possibilities. There is plenty of green-grass grazing for summer use, and to the west there is a rim of high mountains affording snow cover, where the reindeer can escape insects. The mountains along the lake are low and friendly, free from snow at an early date and form excellent calving land. The high, treeless, mossy plateaus make it also a choice autumn land. Although the Virihaure area enjoys these good qualities, its grazing for all three seasons is concentrated extremely far westward. As was noted earlier, the Jokkmokk herders composing this early

Viri Group had, up to the first few years of the present century, moved even further west and utilized Norwegian summer grazing regularly. Sometimes only choice bulls were taken to the Norwegian coast, where they would grow extremely fat on the excellent grazing. Inga Larsson, "Harrok-Inga", recalls that Pava-Addja's and Pava-Lasse's reindeer were inordinately large after a summer in Norway: "The calves were like bulls and the bulls were like small moose" (personal comm.). Utilization of grazing distributed in this manner demands a migration scheduling totally different from that of the Nuortvalle Group. It also necessitates a large degree of dependence upon Norwegian provisions, in contrast to the Nuortvalle Group's greater dependence upon Swedish lowland provisions during the spring and autumn periods. Moreover, the total grazing capacity of the Virihaure district is not so large as that of the lands utilized by the Nuortvalle Group, especially if Viri-Group herds are kept there constantly for three seasons. These factors, taken together, imply a normally smaller group size and total herd size for the Viri Group than for the Nuortvalle Group.

Pirak in 1913 categorizes the new Karesuando-Saami families Blind and Parffa by themselves. Actually, however, on the basis of the criteria of grazing utilization and migration pattern, these newcomers should be grouped with the other native, Jokkmokk, Viri Saamis. We see here a clear example of the difference between the grouping by herding reality and the grouping by family bonds so prominent in the Saamis' way of thinking. At this time, Staloluokta was not always the site of Viri Group residence. Nor did all Viri-Group families always camp together. Before the arrival of the northern Saamis, the Jokkmokk herders used tent *kåtas* all summer, and these could be pitched in a great many, different, convenient places. Some old pictures in the archives of the Nordic Museum in Stockholm indicate that Viri-Group herders could camp on the southern side of Kieddejåkkå. There are remains of tent *kåta* sites dotting the western end of Lake Virihaure. The hiker's guide book published by the Swedish Tourist Organization (STF) (1921:193) mentions a Saami encampment at Serkaluokta on the lake's southwestern edge. Even today, this is an important spot for herding operations and has for many years been the site of a permanent turf *kåta* owned by the Saameby collective. Pirak's categorization might well reflect differences in summer encampment between the native Jokkmokk Saamis and the newly arrived, Karesuando families. One could hardly expect them to live together immediately, even if their herds were mixed. Yet so similar was the herding method of the newcomers to that of the original Viri Group that merging and cooperation presented no problems, and combined residence at Staloluokta¹ was soon to become increasingly common.

¹ "Staloluokta" means "troll inlet" in Saamish. It is both the name of an inlet of Lake Virihaure and of the Saami village by its shore. The actual site of the village, however, has shifted a number of times within the vicinity of Staloluokta inlet.

These Karesuando Saamis, used to the excellent grazing in Norway's Troms area, were also in the habit of migrating far westward early in spring on snow cover and staying in the west till late in autumn to return to the east with the first new snows. The use of sled caravans enabled them to haul more supplies than an equal number of pack oxen could carry. Their reindeer were also used to this migration system and therefore crowded naturally westward. It was to take subsequent Karesuando-Saami arrivals many years before they were to have even the possibility of changing their reindeer's habits enough to allow for union with the more easterly oriented Nuortvalle Group. We shall find that it is a pattern, repeated again and again, that, upon first arrival, northern Saamis always join Tuorpon from its westernmost group (or form a new western group), until with time they are able to merge into groups with different migration schedules and areas of grazing.

In other areas that experienced Karesuando-Saami infiltration, circumstances were not so fortunate. One can well imagine the confusion resulting from a thrusting of the Karesuando pattern immediately onto the Nuortvalle pattern. Indeed, mixtures of this type did occur elsewhere, for example, in Sirkas Saameby, resulting in considerable animosity between northern and central Saami groups. In another unpublished report in 1913 which concerns the feasibility of populating central Lappland with northern Saamis, Erik Bergström writes:

As it is northern Saamis which are to be relocated, a whole new factor arises, and that is the question of how the *relations* here will be between the new and the old Saamis. Luckily we have already clear data to refer to in a judgment on this point, in that already since a few years back 7—8 herders have moved into this district. My own experience has shown me that relations between these newly arrived and the old in the district are *the very worst*. The old Saamis hate intensely the new and the reason for this is that they have found that these Karesuando Saamis are of the lowest moral nature. Honesty is, of course, something characteristic for the southern Saami districts. Be there a reindeer thief, he is generally disdained. Since, however, these Karesuando Saamis were in the area some time, the old Saamis began to notice that the new Saamis did not at all share the same ideals. Gradually they put together their experiences and they have now gathered a most convincing material that the newly arrived Saamis are the worst reindeer thieves . . . There exists therefore now a united dislike of these northern Saamis, and the old wish nothing more than that they should return to their own land again. That they under these circumstances should be scared and panicked at the thought that there shall come *even more* of the same kind should be quite understandable. (Bergström, 1913b:15.)

As regards the general theme, that relations between northern and central Saamis were far from ideal, Bergström is perfectly correct. In Tuorpon the matter was to come to a head somewhat later and was less serious than in other Villages. Elsewhere, the conflict led to large meetings of native Saamis and in Arjeplog they drafted various points (M 1930, I K, no. 211) concerning problems with the Karesuando newcomers to bring as a petition to the parliament through the representative Carl Lindhagen.

Although the reasons Bergström gives (given him by the native herders) for this animosity may be true, they are probably far from the whole truth. The native Saamis stood to lose control over and utilization of much traditional family land—a complaint the authorities would tend to ignore; relocation was decided on the basis of available space, not tradition. Moreover, perusal of old documents shows time and again that reindeer thievery was not so uncommon in central Lappmark (see, for example, Engström (1834)). If it was less common, and this may be true, it seems to have depended more on the intensivity of the herding form, which inhibited thievery, rather than the moral character of the population. With the extensive method, the opportunity for thievery is increased greatly, and the risk of apprehension greatly reduced. Moreover, loss of reindeer through theft is more damaging to small, intensive herders than to bigger, more extensive herders. I have been told but, of course, cannot attest to its truth, that in the northern Finnmark area the attitude, "I'll take from my neighbor because he is surely taking from me," is indeed more widespread than further south. Much of this I believe is due to the historical developments of herding forms. That is, the Jokkmokk Saamis, used to more intensive herding, could certainly be shocked at the northern Saamis' "long-handedness" or propensity to acquire foreign reindeer. Moreover, and this is a decisive point, the newly arrived Karesuando Saamis at first lacked familial ties with their new neighbors, ties which greatly influence "moral fiber" and, as we have seen, form the backbone of herding cooperation.

Even if the authorities demonstrated that there was room for more herders and many more reindeer, as calculated from the current conditions in the Jokkmokk area, it could not help but diminish the native herders' chances of herd expansion and also inhibit their freedom of movement if more herders were to arrive. The social identity with specific land areas which I have mentioned before must almost be considered a matter of course for people so bound to and dependent upon the same tracts generation after generation. The taxland system, which supported such feelings, was not at all so long past. This, taken together with the possible disruption of the herding method and the need for more separations because of the mixing with northern-Saami reindeer, resulted in very understandable resentment. The reindeer of the northern Saamis could not help but be bewildered by their relocation to new land. Those native herders suffering from the confused condition of these reindeer preferred to call them mismanaged. Both views contain truth to varying degrees.

According to Ruong (1967:33—35), (1) the northern Saamis, with their alternate dwellings on the snow-swept, Finnmark plateaus (winter) and on the coastal peninsulas and islands (spring—autumn), early developed a dual camp pattern, (2) the Saamis further south tended to have more intensive herding patterns, so that the farther south one goes the more multi-camp patterns one encounters (perhaps due to more varied environ-

ment plus longer, snow-free periods), (3) modern communication systems accentuated northern-Saami patterns, and (4) hence northern Saamis tended to bring with them one-or-two-camp, herding patterns.

The importance of such factors is aptly demonstrated by the incorporation of this first wave of northern Saamis into the Viri Group of Tuorpon. Here, instead of animosity and resentment, we find harmony and cooperation. Bergström himself happens to supply a partial explanation in discussing stray reindeer traffic into Norway, that is, reindeer which stray across the border and are not intentionally brought into Norway by the herders.

In Tuorpons Lappby, the stray traffic is again somewhat livelier, but also here it is confined to only one part, the southernmost toward the Arjeplog border. Remarkably enough, even this is a spot where newly arrived Karesuando Saamis have come to rest (two families Parffa, one family Blind and one hired hand Omma). They came there in 1911. Here, on the other hand, stray reindeer traffic has by no means been confined to the period after the new Saamis' arrival—instead it is very old. The native Tuorpon Saamis (of the Pavval family) have themselves since olden days had *completely the same migration method* as the newcome Karesuando Saamis, in that they already in spring at the end of April migrated up near the Norwegian border and stayed all autumn till the beginning of November. (Bergström, 1913b:8; my italics.)

Thus at this stage there was no great disruption caused in Virihaure by the clash of different herding methods. And, equally important, there was plenty of space for the newcomers. The total reindeer population for Tuorpon, according to the 1911 count, was just over 7000, a figure which includes the herds of the newcomers plus the herds of the Kabla Saamis. If we consider that Tuorpon today with a greatly reduced land area (since the formation of Jåkkåkaska Village) has a maximally permitted, reindeer population of 9000, we see that crowding was as yet no problem, and the small Viri Group was well able to contain its reindeer without much mixing with the Kaila Saamis to the east. According to Per Pavval (#11), mixing of Viri and Nuortvalle reindeer in the summer land first began in the 1920s.

By this time, Pava-Addja and Patron were both very old (Patron died in 1911). None of their children had as yet any children in turn. There were then only three active herders—Pava-Lasse, Patron-Amma and Kuoljokk-Anti—along with some hired hands. Due to summer extensivity, the work requirement was seasonally uneven. During periods of heavy work load, such as migrations, the Viri Group would sometimes have to make use of extra temporary help. Grundström (1931) mentions that Pava-Sekel (1847—1921), once a hired hand to Pava-Addja but in later life a settler at Luovaluokta, would often join the Viri Group to help with eastward migration. At this time it was a relatively easy matter to find temporary, skilled, herding labor. A number of hands could be called upon. Today, however, while the need for such a temporary labor force is equally great, recruitment is a great difficulty. As there was no excess

labor force in the Viri Group, the arrival of new forces was not at all merely a negative prospect.

Anta Pirak's 1913 report lists all Blinds and Parffas, together with these native Viri Saamis on the same summer *sita*, Staloluokta *sita*. Both spring and autumn, however, they are listed in separate *sitas*, the Karesuando families still in Staloluokta, while the three main, native, Viri herders have grouped in a Tarreluoppal *sita*. The zone between Lake Virihaure and Tarreluoppal, that is, the eastern end of Lake Virihaure around Tuoddar, like the western end, is also a good spring/autumn land, though more open and not able to contain herds as well in a natural pocket. It seems that the original Viri Group was in the habit of utilizing a number of different grazing patterns within the general Virihaure tract. Herds could be kept from spring through autumn west of Virihaure or they could be held there only during the high summer. Most commonly, both western and eastern ends were used in combination. As the Tuoddar area is more open and offers less hindrances to reindeer movements both east and west, it was often convenient to release the herds there to calve in the spring and let them graze their own way westward. In a similar manner, it was convenient to shift them from the western end in the autumn to the Tuoddar—Tarreluoppal area and let them stray a bit eastward before undertaking the big gathering and migration. In this way, grazing at the western end could be conserved. An old photograph from 1892 in the Nordic Museum's archives in Stockholm shows a *njalla* or one-legged, storage construction, placed in Tarreluoppal and thus corroborating this site as a pre-Karesuando camp. The later creations of spring/autumn camps at Kartevare, Kura and Tarra reflect some of the same motivations as gave rise to this early Tarreluoppal *sita*.

Actually, this pattern of separation in spring and autumn from the newly arrived Karesuando Saamis did not last for long. At first, the newcomers along with their reindeer were still more bound to habits of extreme westernmost focus in migration pattern. Even if reindeer of both native and Karesuando Saamis were mixed at the western end of Lake Virihaure all summer, the social division of these herders into different spring and autumn camps was for a time natural. Different reindeer herds will merge readily, while their herders may remain divided. From a herding perspective, the Jokkmokk herders may have felt that, with the Karesuando herds staying so long at the western end, it would be wise to move east to ease the grazing pressure, a shift these Jokkmokk herders were very likely to make with or without the Karesuando-Saami presence. Such a shift and division would also prepare the Jokkmokk herders for separate eastward migration.

The Karesuando Saamis soon gained the necessary feel of the land and became bolder in their use of it. They experimented with different variations from year to year, in order to establish a major migration route and to find the most suitable winter grazing lands from a social as well as from

a herding perspective. The amazingly fast, social incorporation of the Karesuando Saamis into the native Viri Group was caused not only by herding similarities but also simply because the native Viri Group was in a state of dissolution. Incorporation was also aided by the marriage of Gustaf Parffa, a Karesuando Saami, to Kajsa Kuoljokk, a Jokkmokk Saami. The situation would have been quite different, had the native Viri Group been a strong, vital, herding entity with the human resources and will to retain a separate identity. As it was, Pava-Lasse was soon the only active main herder left of the old group, and even more Karesuando herders were about to arrive.

Nilhsok's departure from the Viri Group soon resulted in Anders Kuoljokk's following suit. Their wives, who were sisters, preferred to be together and, furthermore, the birth of children to the Kuoljokk family was a further incentive to give up the difficult, Viri-Group, migration pattern. Neither Nilhsok nor Anders Kuoljokk ever became big herders, and one may conjecture that with increasing age these herders felt membership in the Viri Group demanded too much work of them in relation to their rewards. For a number of years, these two joined forces in the Kaska Tjavelk area during the autumn and large parts of the winter. In the summer they began to merge with the Nuortvalle Group. While in Kaska Tjavelk, they were sometimes joined by a couple of Kabla families, Länta, Aira and maybe Tuorda, who would cross over from Kabla at Njavve. For some years these Kabla families, together with Nilhsok and Anders Kuoljokk, created an ephemeral Kaska Tjavelk Group. There is a lake called Rautajaure in Kaska Tjavelk, where this group frequently made camp. In time Nilhsok and Anders Kuoljokk were to merge with Nuortvalle. They used the same summer zones as the Nuortvalle Group, Nuortvalle had far better grazing than Kaska Tjavelk and fewer predators, the need to separate their herds each autumn was problematical, and merging seemed the logical choice. Their bonds with Nuortvalle were further strengthened through marriage. Nilhsok's foster daughter, Sigga (#18), and her sister, Anders Kuoljokk's daughter, Maria (#17), both came to marry children of Pära-Petter, Johan (#12) and Erik Axel (#13) respectively. The Kabla families, which had occupied Kaska Tjavelk, also abandoned this area as autumn camp, and for about 10 years this huge land strip was regarded as "reserve grazing" and was largely unused by active nomadic herders.¹ The original Viri Group was thus quite depleted and, soon after the arrival of the Blinds and Parffas, only Pava-Lasse and Patron-Amma can be counted among the original herders.

Even Patron-Amma was soon to fall away in importance, though not immediately in presence, for he suffered terrible misfortune with his herd.

¹ This is not to say that the Kaska Tjavelk area was devoid of reindeer. It was still used by more settled Saamis, such as Sekel, Pirak, Ribja, Pirtsi, etc., who practiced various forms of limited forest herding.

Almost his entire herd was lost one winter over Predikstolen ("The Pulpit"), a great cliff, when the overhanging snow gave way. On another occasion, he lost many reindeer in the Lillselet area in an attack by seven wolves. It is said that he had been too lazy to guard them all night, but, with the benefit of hindsight, this seems quite a demand to make. Patron-Amma was not considered a particularly good or lucky herder, a condition often spoken of by herders as an almost uncontrollable fate. His original wealth came from his father and, when this was lost, he was never able to pull himself up to prosperity again. After the loss of his herd, he spent a number of entire winters at Staloluokta hunting ptarmigan. In later life he became sickly. There is disagreement amongst herders as to whether he moved with his wife Elsa to her brothers' camp at Pårte in Sirkas Village or whether she returned there herself only after his death.

Not long after their arrival, therefore, the northern Saamis, in company with Pava-Lasse, still a herder of stature, and his helpers, usually different members of the Pirtsi family, composed the main, Viri-Group, herding force.

Pava-Lasse was greatly liked by the northern Saamis, and his hardiness and love of reindeer have become legendary. Although one of the richest of herders, Pava-Lasse never liked to sell any reindeer, preferring to run up a large debt. Unless absolutely unavoidable, he would never kill a reindeer himself but always gave this job to his hired hands. He had no use for money and entrusted all his financial affairs to his helpers. He would be out all day or days at a time, without bothering with food, to watch his herd. He seems to fit exactly Paine's description of the pastoralist as rudimentary capitalist—"Capitalist, obviously, and rudimentary ones on account of the few conversions they make with their capital..." (1971:170). In this respect Pava-Lasse was one of the last of his kind. Paine is correct in pointing out the few capital conversions made by the early pastoralists, but the drive for optimal security, wealth and prestige had herd maximization as its only basic choice. In short, there was often little profitable reason for making more than the necessary conversions of capital. For the old nomadic reindeer-herder, the ways of storing surplus wealth were limited, as were his reasons for desiring "converted" wealth. Later, pastoralists *could* no longer remain so rudimentary in their capital conversions. Even Pava-Lasse was able to maintain his traditional, pastoral lifestyle with minimal capital conversions only at the expense of running up a large debt.¹ When Pava-Lasse died, his creditors took possession of a large part of his herd.

Pava-Lasse has been mentioned in connection with the greatest variety of migration routes. Grundström (1931), quoting Erik Holmbom, writes of the native Viri Group migrating eastward over Rittak and Festajaure

¹ Thus even the change-over to meat production alone, with most emphasis on a cash economy, can in itself be seen as a rationalization of the herding industry, once the opportunity and the needs were created (note the discussion on p. 337).

before turning down Tarradalen. From Kvikkjokk it was an easy matter to veer over Lastak and so to Lake Peuraure. Paulus Pirtsi, one of Pava-Lasse's hired hands, has informed me that Pava-Lasse would sometimes spend considerable time in Valli on the eastern move. His brother Nils-Anti Pirtsi says that Pava-Lasse often took the route just south of Tarradalen, over Vuoka, following Tsielekjokk to Skaite by Peuraure. He might start out over Rittak, Festajaure and Tarreluoppal before swinging up to Vuoka or he might start with a more southerly route over Pieskejaure (the one by Rovijaure sometimes called Hadet or Hadditjaure) and then come to Vuoka after a move through Kuravagge. The Kaila Saamis, having moved earlier, would have turned into Nuortvalle, but Pava-Lasse, moving first around November, could travel over the frozen lakes Peuraure and Karatj directly to the winter land.

It must be remembered that the Viri Group's migrations to the west occurred before the move of the Kaila Saamis and to the east after their retreat from the mountains. There was thus no need to bother about avoiding mixing. In fact, besides grazing and climatic conditions, one of the main determinants of the choice of the eastern route was where stray reindeer were thought to be. It was a great advantage to pull all these strays along while migrating east and bring them into the winter-separation corral, usually at Karats at the eastern end of Lake Karatj.

In the early years just after their arrival, Heika Gubben and Parffa Gubben stayed together on the eastern move and after following Tarradalen continued along Lakes Saggat and Skalka, wintering sometimes in Njavve or Tjåmotis. But mention is also made of these two families wintering over in Stalo (not only during the bad winter of 1912-13). Parffa Gubben is heard of in Tjuoltadalen, north of the Tarrekaise mountain complex and, according to Olov-Björn Blind (#44), he was even briefly in Kabla. Later he was to be joined in a migration pattern along the Little Lule River's upper arm by Lars Hotti, Pillto and Tomas Labba until 1936, when the Parffas and so many other Karesuando herders who were used to staying in the Viri area until late in autumn were finally forced to move eastward earlier with their herds into the Kaska Tjavelk zone. In this early period, however, Heika Gubben and Pava-Lasse would sometimes separate from Parffa Gubben at Virihaure in the autumn before migrating east along different routes. Heika Gubben and Parffa Gubben might rejoin later in a common winter *sita* further east.

Heika Gubben, it seems, soon made a lasting partnership with Pava-Lasse and in his company utilized the same spectrum of migration routes as Pava-Lasse. Such cooperation was invaluable to the Karesuando Saamis, who were still quite inexperienced in the area. Once they were with the herd in the winter lowlands, Heika Gubben and Pava-Lasse would separate and continue to different winter zones, the Blinds often around Lillselet, Norvijaur and later Stenträsk, and Pava-Lasse often around Pärilan. Through his partnership with Pava-Lasse, Heika Gubben grew

used to migrating along the lower or southern arm of the Little Lule waterway, that is, Lakes Peuraure and Karatj, whereas Parffa Gubben at first remained on the upper arm, the northern side of Lakes Saggat and Skalka. At first these northern herders seem to have halted their autumn migration to the lowlands much further west than would the native Jokkmokk herders. Jokkmokk herders established winter quarters further east. According to Olov-Björn Blind (#44), Heika Gubben had to be guided by Järvas Anders (#20), upon moving as far east as to Maitum as late as 1928.

The benefits of cooperation, however, were not all one-way. When Pava-Lasse merged with Heika Gubben and the rest of the native Jokkmokk herders of the Viri Group dissolved, Pava-Lasse's use of the Tarre-luoppal camp site decreased, and it became more common for him to spend all spring, summer and autumn in Stalo. Pava-Lasse no longer had access to as much labor for any bare-ground independence from the Karesuando herders. With growing extensivity, grazing utilization being confined for such a long time to one general area (Virihaure), and the presence of birch forest and good fishing, it became all the more practical to erect a permanent dwelling at Stalo, a turf *kāta*, better able to give shelter in the harsh climate. Although turf *kātas* were not unheard of by the Jokkmokk Saamis, few mountain Saamis had any experience with them. It was indeed the northern Saamis who, with their expertise in this construction form, helped the Jokkmokk Saamis to adapt to changing conditions. Heika Gubben helped Pava-Lasse build a turf *kāta* by Lake Virihaure.

Heika Gubben himself and Parffa Gubben built turf *kātas* a little way from the large lake shore on the northern side of the nearby small Lake Luoppal at the spot, sheltered from the wind, where Kieddejåkkå runs into Virihaure. Pava-Lasse was later to rebuild and join his neighbors on the Luoppal side. In fact, for over twenty years the whole of Staloluokta camp, which began to grow with new Karesuando arrivals, was on the Luoppal side. Nowadays the *kātas* have almost all been rebuilt on the Virihaure Lake shore. The camp has taken on an entirely new character as a result of further herding extensification, the growing importance of commercial fishing, and the advent of the seaplane.

The introduction of the turf *kāta*, however, did not mean the immediate or the total disappearance of the tent *kāta*. With their herds often on the other side of Lake Virihaure from Stalo, it would be very advantageous to have a tent *kāta* located there for handy use when gathering or marking calves. And before the herds could be gathered again in autumn for eastward migration, herders would have to spend days sweeping the western end of Lake Virihaure up towards Vastenjaure and well over into Norwegian territory to collect the scattered fringes. In the Nuortvalle Group, the use of the transportable tent *kāta* was to continue for a much longer period, although its seasonal period of utilization was to be narrowed.

Strange as it may seem, one might in some years have reason to view Stalo as a spring/autumn camp only, when the herders were required to spend much of their time across the lake at the western end during the bare-ground period; and yet it would probably be more fair to see it as a central hub for all spring, summer and autumn herding operations. Should one describe a camp according to its use by active herders or according to its use by their families? With the rise of extensivity and the building of more and more permanent camps with turf *kåtas* and later in some places even four-walled cabins, a considerable gap could arise between family location and herder location.

One of the greatest problems in discussing herding migration patterns, camps and grazing utilization is that one is soon forced to speak in terms of a grid in which it is hard to accommodate the flexibility of fact. Just as seasonal use of the same grazing area might shift, so the function of a certain camp might shift from year to year and even within one year, from family to family. Herders will habitually refer to the migration from the Stalo area to the winter land as the Viri Group's "autumn migration", even though it was delayed until December by poor weather conditions. To call it a "winter migration" would imply a move between different, lowland, winter-grazing zones. In order to facilitate communication, the grid of a normal year or an idealized pattern is employed, despite radical shifts of fact. Herders arriving first in January with their herds from the mountains would rather say that autumn migration was late this year than call it a winter migration. The same discrepancies arise in speaking of some camps as summer camps or autumn camps. My point is that the very terms one uses, and must use, necessarily impose a misleading aspect of order on the material, especially when pressures for change are very strong. The order that does exist must be found in the deeper structure within this great flexibility—that order which causes herders to understand each other when one refers to "autumn migration", though it occurs in winter. For this kind of understanding, a focus on determinants is essential.

To summarize, in the early 1900s we find three main herding groups in Tuorpon, composed of the Kabla Saamis, the Kaila Saamis and the Viri Saamis, each of them held together by family bonds and corresponding to three of the four natural spring/autumn herding zones based on grazing and land formation. The fourth major land area, Kaska Tjavelk, is less well endowed with good grazing for spring and autumn. Although mountain herders and some settled forest herders (frequently "retired" mountain herders) have used it sporadically, it has usually served them only as a transitory stopping-place before combination with the Nuortvalle Group. We have also seen how these land formations with differently dispersed, grazing possibilities and natural hindrances lead to the organization of two dramatically distinct, yet highly flexible, herding patterns. The Nuortvalle Group could center its herding cycle far more to the east of the Viri Group. Puollemåvie, the main spring/autumn camp of the

Nuortvalle Group, was the central hub of their migration system. The moves west from Puollemåive and east returning to Puollemåive were made by pack animals on bare ground, framing a high-summer period in the mountains of relatively short duration. In contrast, the Viri Group centered its herding cycle extremely far to the west, utilizing the Virihaure area in spring, summer and autumn.¹ The westward migration was undertaken early in spring, travelling over frozen lakes and snow cover with sled caravans and staying in the west until these conditions repeated themselves in the autumn to facilitate the eastward move direct to the winter lands.

It is interesting to note that already at this early date we can clearly see the formation of what is later to be referred to as "big groups", the collectivization of *sitas* into bigger herding units. Rather than seeing big-group formation as something totally new, a result of extensification only, I believe that it is more reasonable to see big-group structure as something immanent in the bonds of family relations, combined with natural herding-land units, such as Kabla, Nuortvalle and Virihaure. The extensification process did not lead to the *creation* of big groups as much as to a greater emphasis on this collective structure and diminished emphasis on smaller *sita* organization. This is far from maintaining, however, that big-group structure is a recent development. In certain instances, *sita* and big-group definitions even overlap. As used, the difference is often only an arbitrary matter of size.

The reason why this fact, the existence of big groups or latent big groups based on a system of closely intertwined families sharing major grazing areas (even if herds might be kept separate, as in the very intensive days), has been overlooked in describing the changes of extensification is that misleading comparisons with the northern Saamis have obscured many of the real issues. The northern-Saami families which moved to foreign ground were largely uprooted from adherence to specific land areas. To a great extent, they were packed quite artificially into various big groups by the extensification process and the dictates of the Saami sheriff (*lappfogde*). Such newly formed collectives of uprooted families naturally cannot reflect the historical continuity of social development from the independent family or *sita*, intensive-herding unit to larger group membership, a continuity which, despite the early taxland divisions, was basic to the Jokkmokk Saamis.

Indeed, such membership might always have been fully recognized from the earliest times. Although certain intensive determinants required small herding units in earlier times, this does not mean that these rather isolated units did not recognize themselves as part of a larger social unit

¹ Although use of Norwegian grazing was to be restricted, the herders could, of course, still make supply runs over to Norway, often to the town of Sulitelma, from Stalo—by sled caravan in the spring and by pack caravan in the summer.

which shared rights of potential, if not actual, grazing utilization over certain, large, land zones. Even in the intensive era, fluctuations in determinants could necessitate occasional switches to the extensive method (a bad winter, for example), when once-separated herds would be released within larger, bounded, land zones. It seems that terms such as Arvas Saamis, Kabla Saamis and Nuortvalle Saamis were in use at the height of the intensive era. More study has been devoted to the composition and organization of the independent herding units, *sitas*, than to their interrelations. The rise of intensive whole nomadism may not have splintered social structure as much as was previously imagined. The flexibility of herding organization and social structure may be obscured by the requirements of a certain static period. What is real structural change? And what is rather an old alternative or latent structure brought forth by changing determinants?¹ Diachronic studies tend to make visible the larger, underlying patterns whose permutations are but slightly tapped at any one time. Much work remains to be done on the connections between Saamish social organization, herding organization and land identity in both past and present.

¹ Note that this distinction is the same as that between two types of need (see p. 22). The one involves utilization of an already structured potential (like eating potatoes instead of just rice). The other involves *renormalization*, a restructuring which shifts or extends the realm of flexibility (like the evolution of the ability to digest foods indigestible before).

Chapter 10

New Waves of Karesuando Saamis (1920–30)

The bulk of the Karesuando Saamis who were relocated in the south came during the 1920s as a direct result of the Norwegian–Swedish Reindeer Grazing Commission's finalization in 1919 and the continued crowding in the northern grazing lands. Altogether, the number of northern Saamis who moved south between the years 1894 and 1947 was about 411, divided into 130 households (Åhrén, 1979a:124). The years around the turn of the century saw a flurry of international grazing restrictions between the countries dividing Lapland, and they all seem to have been connected by a sort of domino effect (cf. Elbo, 1952). The Saamis in northern Norway, Finland and Sweden suffered a rapid succession of border restrictions, which in turn provoked massive redistributions of herders. In fact, the finalizations of the national borders in the north were relatively fresh. The Norwegian–Swedish border in the north was fixed in 1751, the Swedish–Finnish border in 1809, the Norwegian–Russian border in 1826, and the Norwegian-Finnish border in 1852.

In 1852, Russia (then in control of Finland) barred Norwegian Saamis from crossing into Finnish territory. The northwestern arm of Finland, wedged between northern Sweden and the Norwegian Finnmark, effectively cut off the traditional seasonal moves of Kautokeino Saamis through Finland to Karesuando. Cajanus (1870) views this move on Russia's part as a reaction to a refusal by Norway to bargain with Russia, which desired an ice-free port in the Varanger district (ibid. 44). Von Düben (1873:5 and 417), however, claims that this common belief that Russia's action was caused by desire for an ice-free port is false. Nonetheless, it is quite certain that large-scale international politics lay behind this restriction of nomads. During this period Russia and Europe were battling in the Crimea and, although the Swedish–Norwegian Union was not actively engaged, it was certainly involved in forming allies and seeking safeguards.

... a complex political power play was in progress during the mid 1800s. A result of this is the November treaty of 1855 between Sweden–Norway and England and France. Here the two latter states guaranteed the integrity of the former

against Russia in exchange for the promise that no land would be granted to Russia. (Åhrén, 1979a:142.)

Whatever the cause, many Kautokeino families, in danger of being cut off from both Finnish and Swedish grazing, moved to Karesuando and Jukkasjärvi and became in effect Swedish Saamis, for whom no restrictions had as yet been made. Soon thereafter, however, Swedish Saamis were also barred from crossing the Finnish arm. Many Kautokeino Saamis then in Karesuando returned home to Kautokeino, no longer having an advantage in Sweden, but many also remained in Sweden.

This shift and the loss of Finnish grazing, plus the abnormally fast growth of reindeer population in the Karesuando district (Åhrén, 1979a:113), caused a considerable burden on Norwegian grazing areas utilized by Swedish Saamis—especially the Troms area. In 1919, after lengthy study and discussion, a complex system of restrictions was presented and scheduled to come into full effect by 1923. The Norwegian grazing lands were not completely closed to Swedish Saamis, but were open to a variously regulated use during certain specific times. Nonetheless, many Karesuando Saamis found themselves unable to adapt to these regulations. Grazing on the Swedish side became dangerously over-used. The steps taken by the authorities to ease this situation became increasingly more drastic as the commons dilemma grew more severe.

Herders were at first merely urged to slaughter more animals and were more tightly controlled in their movements. As previously noted, a number of northern herders had already moved south of their own accord, in order to avoid the crowded conditions. But even the later, massive relocations were only to provide temporary relief to northern grazing lands. One must surmise that under the prevailing conditions of the commons dilemma, a good deal of damage had already been done to the regenerative capacity of these grazing lands before any measures were taken. Eventually, enforced slaughters were imposed. Those herders refusing to slaughter were forced to move south. §8 of the then current Grazing Act of 1898 stipulated the conditions under which herding authorities would have the right to relocate herders forcibly. According to this section, insufficient grazing capacity had to be proved. In 1925, however, a new Act (SFS 1925:181) made implementation of the right to relocate herders an easier matter. Under this new Act, opinionated debates about grazing capacity were avoided and herd size (objective count) could be sufficient for orders to move (Åhrén, 1979a:120). In the early stages of enforced relocation, herders were directed to the southern district of Norrbotten, partly composed by the Jokkmokk district. According to §8 of the 1898 Act, herders were to be relocated to the nearest Village in which there was grazing room for them, a regulation which ignored totally familial bonds. Here, therefore, we have a further strong reason why related herding families chose to move south together. Otherwise they might well have

been assigned to different Villages. Later, as the more northerly Villages filled up, Karesuando herders were directed further and further south. The longer one resisted pressures to move, therefore, the more difficult and the farther from home relocation was eventually to be.

As a result of this situation, the 1920s were years of great instability. It was to be a long time before the different, uprooted, Karesuando families finally came to rest and were incorporated permanently into a specific Village. The demands of the seasons during their southward relocation could cause the families to form temporary camps along the way, with accompanying temporary associations with different herding groups. Moreover, the final Village group or even final Village to which a family bound itself was by no means always that which the authorities had indicated before the move. All manner of factors (once again notably family relations) interposed to dictate associations quite different from any plan. For some families, Tuorpon was just a stopping place or waiting station, while for others it became home.

By 1921 four new Karesuando families had arrived in Tuorpon to stay:

Guttorm Guttormsson Omma ***** Anna Maria Palopää (1892—)
(1887—1961) (#37)

Henrik Salomon (1914—65)
Anna Kristina (1917—)
Elin Maria (1921—)
Per Nils (1925—74)
Lars Jonsson (1928—)
Anders Guttormsson (1931—)

Henrik Salomon Omma (1914—65) *** Signe Gerda Pavval
(1915—) (#14)
see chart 3a

Lars Henrik (1945—)

Per Jonsson Piltto ***** Kristina Henriksdt. Palopää (1888—)
(1868—1947) (#38)

Margareta (1905—) *** Jonas Nilsson Heika (1904—76)
Edvin Henrik (1908—) originally from Karesuando,
later of Jákkákaska Village
Inga Maria (1910—) *** Petter Länta (1909—71)
from Jákkákaska Village

Tomas Ammasson Labba (1877—1962) ***** Sara Guttormsdt. Omma
(#39), second marriage (1890—1963)

Henrik (1922—47)
Guttorm (1913—)

son to (#39) by previous marriage: Per Nils (1906—79) (#40)

Per Nils Labba (1906—79) *** Ella Blind (1908—);
(#40) see chart 12

Per Henrik (1939—)

Lars Nilsson Hotti (1887—1977) ***** Anna Brita Labba (1890—1924)
(#41)

Nils Johannes (1913—38)
Inga Maria (1915—) (#42)
Anna Maria (1917—72)
Ella (1921—67)
Kristina (1924—)

Inga Maria Hotti *** Johannes Orpus (1913—)
(#42) (1915—) from Lainiovuoma Village
came to Tuorpon in 1946

Anni Maria Hotti *** Kalle Olsson (1916—)
(1917—72)

Lars N. Hotti (#41) later was widowed and remarried to
Inga Kristina Pirtsi (1896—77): no children

At this time Gustaf Helmer Omma (1904—68), a nephew to Guttorm Omma, also joined Tuorpon as a hired hand to Heika Gubben (#30). He was later to marry a daughter to Heika Gubben, Sigrid A. Blind. See chart 9.

Chart 11. Karesuando families—G. Omma, Piltto, Labba and Hotti

Without a knowledge of the matrilineal side in each of these families, Omma, Piltto, Labba and Hotti, it is impossible to see any bonds uniting them. I do not mean to imply that family bonds were the sole explanation of their simultaneous arrival in Tuorpon and unification into the same Viri Group. Herding authorities played a large role in determining which families were to be relocated and where. But certainly family relations were an important contributing factor. To a certain extent the families could decide whether or not to follow the orders of the authorities to the letter. Even the decision to move from Karesuando was not always only the Saami sheriff's doing. One can well imagine that, for families moving south to an utterly unknown fate, there were quite real reasons for sticking

together as far as possible and maybe joining other relatives who had moved earlier and therefore were already acquainted with the new area.

Per Piltto's and Guttorm Omma's wives were sisters. Tomas Labba was married to a sister of Guttorm Omma, and Lars Hotti and Tomas Labba were half-brothers. Moreover, Guttorm Omma was a brother of Henrik Guttormsson Omma (#33), who had accompanied Heika Gubben to Stalo many years earlier as a hired hand. For the very same reasons that Heika Gubben and Parffa Gubben had joined the Viri Group, these new, northern Saamis did the same. They and their reindeer were used to a migration system with long periods in the west, where the herds could be left under fairly extensive care.

Interestingly enough, by this time we find evidence that the Viri Group had become considerably more extensive. Heika Gubben and the Parffas were more used to complete, spring-through-autumn extensivity than Pava-Lasse had been, although one can by no means call Pava-Lasse's herding form before their arrival classic intensive. Pava-Lasse had to adjust to his new companions. The presence of new herds alone meant the inevitability of greater herd mixtures, and the higher reindeer/grazing ratio imposed by the introduction of the large Karesuando herds must also be recognized as an extensifying pressure. Rather than regard these changes as detrimental, Pava-Lasse viewed them as natural and necessary under the circumstances. In a 1913 interview with Erik Bergström, Pava-Lasse acknowledged in a positive way the increased extensivity due to Karesuando influence:

In the Kaska Tjavelk autumn land (between Lakes Karatj and Saggat) there can be 4000 to 5000 reindeer. Even more could be there if they were not herded, because then they do not ruin (trample) the land so much. This can be seen from the Karesuando Saamis. (Pavval, in Bergström, 1913a.)

One might say, therefore, that the previous arrival of Karesuando Saamis in the Virihaure area and the gradual changes their presence had effected there created a situation more conditioned for the arrival of yet more northern Saamis. Thus Inga Orpus (#42), a daughter of Lars Hotti (#41), has informed me that, although Hotti had received orders from the herding authorities to join the Nuortvalle Group, he found it necessary to join with Virihaure not only for his reindeers' sake, but also because his children were too young to be of much help in herding, and he therefore doubted whether he could maintain *the stricter herding form demanded of the Nuortvalle Group*.

This statement seems to contradict what was said earlier about the greater difficulties for the families on the Viri-Group migration pattern. Inga Orpus explained that the greater intensivity of the Nuortvalle Group during the bare-ground period demanded a sizable work force—many hired hands, if active family members were not available. While in the past the Viri Group also maintained higher intensivity with a larger, bare-ground, labor force, as noted by the time of Hotti's arrival at least, herding

in the Viri area had become even more extensive and therefore somewhat easier for families with only small children. The other difficulties of the Viri Group's migration pattern from longer isolation would have to be weighed against this benefit of reduced work investment. In addition to these reasons why Hotti at first chose to stay with the Viri Group, there is, of course, the standard reason that it was in the Viri Group that he had his friends and relatives. He was not at all welcome to Nuortvalle.

To speak of any specific herding organization and migration patterns in the Viri Group during the decade 1920—30 is nearly impossible. Each arrival of new herders with more reindeer necessitated adjustment to some extent by all and the formation of new alliances. Besides these new families which stayed in Tuorpon, other northern Saami families, such as Nutti and Palopää, were in Tuorpon only briefly before moving on. Furthermore, before the situation could stabilize after this second wave of Karesuando families, a third wave was to crowd into the Viri Group in 1926.

Chart 12. Karesuando families—A. Blind and A. Valkeapää

Anders O. Blind and Heika Gubben were first cousins. From 1923 to 1926, this family, along with a number of other Karesuando families, had formed a temporary camp at Láddejokk, just north of Virihaure. When this group split up, Anders O. Blind and his family joined their relatives in Virihaure rather than proceed southward to Luokta-Mavas Village, to which they had been assigned.

Within a relatively short time, 6—7, large, extended, Karesuando-family herding entities had joined Tuorpon, all of them concentrated in the Virihaure area. Certainly one can point out that these northern herders brought with them a summer extensive form of herding and that this form was on the whole quite similar to that of the already existing Viri Group. These traditions, combined with the topographical conditions of the Viri district and its flexible grazing possibilities, were conducive to a long season of extensive herding, which radiated from high summer and was later to encompass the entire interval from the end of calving to the eastward autumn migration. The influences of northern-Saami herding traditions are not to be overlooked, but let us not, on the other hand, ignore the tremendous alteration in reindeer population with consequent repercussions caused by this massive reindeer infiltration. Such determinants have been dealt with from a general perspective earlier, but it is helpful to give a brief sketch of certain basic determinants, as they were here in this particular historical situation, Tuorpon at the end of the 1920s, just after the greatest absorption of Karesuando Saamis.

The reindeer which found themselves merged together in the Virihaure area came from many different quarters of northern Sweden. Many attempted to return to their old homelands, and herders had sometimes to travel far afield to gather such strays. They were also used to the good grazing and salt water by the Norwegian coast. The coast was now declared off limits for Tuorpon reindeer. They were allowed only a seasonal use of Norwegian grazing in the immediate vicinity of the border. The terrain was quite different from what they were used to in both summer and winter land. Many northern herders expressed delight and wonder upon seeing a fir tree for the first time. Disorientation and confusion on the part of the reindeer took a number of years to overcome. Even a small proportion of unstable reindeer in a herd of otherwise tame animals can cause serious disruption of the entire herd. Reindeer tend to follow each other and, should a wilder, more extensively oriented reindeer break away from the herd, the chances are that he will draw other, tamer animals with him. The proportion of disoriented reindeer in Virihaure during the twenties was extremely high.

Needless to say, with the arrival of the Karesuando herds, not only did herd size in the Viri area increase, but the rate of increase, following an exponential tendency, also shot up enormously. Regardless of the addition of Karesuando reindeer, Tuorpon's reindeer population was rising steadily during the good years of the twenties and early thirties. On the

average, however, Karesuando Saamis had considerably larger herds than did the Jokkmokk Saamis at first. Herd increase in the northernmost districts seems to follow a steeper, exponential curve, possibly due to greater lack of homeostatic factors, such as predation. One might say that the problem of too many reindeer on too little grazing, struck earlier in Karesuando, became unbearable because of the restrictions on Norwegian grazing, but it was a problem evolving in the Jokkmokk area as well but at a slower rate. Had the northern herds never been introduced to the Jokkmokk area, the total herd-size increase might have been blocked by unfavorable conditions before much damage had been done to the regenerative capacity of the grazing lands. As it was, however, with the addition of the Karesuando herds at such a rapid pace, the problem which had been slowly forming suddenly burst into actuality.

The different natural conditions of the islands along the Norwegian coast and their use as summer grazing areas by the Karesuando Saamis are often cited (cf. Manker, 1947), justifiably, as reasons for their summer, extensive-herding form. Islands and peninsulas afford excellent opportunities to contain herds with minimal or no effort. As herders comment, "the land guards the herd." Inga Orpus (#42), born Hotti, adds the following motivation: "Of course Karesuando Saamis were more extensive. One has to be when grazing gets crowded, and the Karesuando Saamis were used to crowded conditions long before coming to Jokkmokk. That was the very reason why we moved."

One might well charge the authorities responsible for much of the relocation with simply shuttling their problem southward and causing an overly high reindeer/grazing ratio in other districts, while seeking to solve the problem in Karesuando. Moreover, according to Ruong (personal comm.), the Karesuando Saamis brought with them "highly explosive" herds southward, that is, herds with a high concentration of cows, causing rapid herd growth. Increased extensivity with a rising reindeer/grazing ratio is inevitable, and the more the extensive-herding entities that are packed into one general area, the greater will be the pressures for collectivity in herding.

According to information gathered from herders by Erik Bergström (1913a) in the preliminary studies for relocation, the western end of Lake Virihaure had a grazing capacity of about 3000 reindeer. A higher figure would necessitate transgression into Norway. After the 1919 Commission, however, herders were understandably loath to avail themselves of their limited border rights in Norway, for, if they had not managed to sweep all their reindeer from that area at the close of their prescribed grazing season, they would be fined a certain amount per reindeer per day. Moreover, this Norwegian land was so narrow as to cause no appreciable change in the rational figure of reindeer estimated for the western end of Lake Virihaure. Limited rights to Norwegian grazing were granted Tuorpon mainly because of the valuable snow cover which the high mountains

there could afford in a hot summer. The need for snow cover in summer had been one of the often-repeated reasons given by the Jokkmokk Saamis (cf. Schnitler, Bergström) for crossing the border. Even when intensive migrations into Norway had ceased, Swedish reindeer would commonly seek Norwegian snow cover. The high Norwegian mountains formed a natural land border for Tuorpon reindeer, and it was reasonable to permit their presence there, as long as they were removed by summer's end. But with the arrival of the Karesuando families, continued favorable conditions for herd growth and the resulting enormous rate of herd growth, the reindeer population in the Viri area rose quickly to the estimated rational limit and, of course, did not stop there.

The authorities had been less precise in their calculations of winter capacity. As already mentioned, winter grazing is the bottleneck of the yearly cycle, and a full load on the summer land will necessitate greater possibilities in the winter land. Bergström was aware of this problem and qualifies his speculations on northern-Saami relocation with a phasing out of the Jokkmokk Forest Saami Villages and a turning over of their lands to the mountain Saamis' winter use.

It must be noted here that, until the current Herding Act of 1971, the Forest Villages were given a lower status than the Mountain Villages. It was generally supposed that the Forest Villages could not prove economic and would soon be abandoned, their members turning to farming or timber work. Therefore, according to law, should Forest-Saami grazing territory be needed by mountain herders for winter pasturage, Forest Saamis were ordered to give way. Events have shown that this never occurred and, rather than declining, the Forest Villages today are among the most financially profitable, herding enterprises. Tuorpon was thus in the position of containing a high and growing reindeer population with no room for winter expansion. Increased extensivity for the Viri Group, soon more marked than the traditions of the Karesuando Saamis, was called for, a circumstance desired by no one—neither by Jokkmokk Saamis, nor Karesuando Saamis, nor the herding authorities.

Predation, although still a real threat, was held in check by experienced hunters, so that intensivity was not constantly demanded. Should wolves strike or be spotted in the vicinity, guarding was, of course, increased. According to Per Pavval, the Nuortvalle Group was troubled by a pack of wolves which for a number of years forced herders to practice intensive guarding from September through December. Finally, the hunter Landström shot them all, and the guarding was relaxed. Hunters received a generous bounty for shooting predators.

Due to the favorable climatic conditions of the 1920s and the addition of Karesuando herds, by 1931 the Tuorpon reindeer count yielded a figure of 12,598, and the Saami sheriff Malmström estimated the real figure to be closer to 14,000 (Malmström, 1932). When we consider the rational reindeer figures given for Tuorpon today, 9000, and take into account the

Kabla area lost to Jákkákaska Village in 1945 (the *whole* of Jákkákaska Village has a rational herd size of only 4,500), we find Tuorpon dangerously over the reasonable limit. Things were headed for catastrophe. In 1928, the authorities recommended that herders begin cutting down their herds voluntarily or else government-enforced slaughters would be imposed. The herders were, however, unwilling to slaughter so many more reindeer. The price of a reindeer in those days was almost nothing, and the herders wanted to wait until prices improved. Enforced slaughters were instigated.

As the numerous determinants favoring or requiring a natural extensification in the Viri Group of Tuorpon seem to have come together almost all at once to form a most powerful constellation, the law, on the other hand, sought desperately to counteract this development. The complaints of farmers grew to a high pitch in proportion to the rise in reindeer population. Herders were not uncommonly fined by farmers for the trespass and damage caused by their reindeer even above the so-called Agriculture Line—a situation which herders were less and less in a position to control. One must remember in this context that land west of the Agriculture Line was supposed to be maintained for herding, not farming. Moreover, past a particular date in autumn, all crops were either to be taken into the barn or well fenced against reindeer. Such precautions were commonly ignored by many farmers. There are even cases in which crops were purposely left exposed to attract reindeer, so as to give the farmer an excuse to shoot reindeer or exact compensation (Stenberg, 1920:37). The dogs of the settlers frequently killed or scattered reindeer, and unfenced crops as well made orderly herding a more difficult task (Pirak, 1933:78). Not only farmers, but even other herders—those who were still able to cling to more intensive methods—complained at the massive mixing, disruption and troublesome separations caused by stray, “foreign” reindeer. The Nuortvalle and Kabla Groups, as we have seen, were still free from Karesuando-Saami invasion, and they would have preferred to remain so.

Highly influential figures, such as Nils-Anti Gruvvisare, from Sirkas, and Pära-Petter, from Tuorpon’s Nuortvalle Group, championed the ideals of intensive herding and set a remarkably strict standard. Besides day-to-day business, Sirkas and Tuorpon herders were dealt with together by the herding authorities in those days in one large meeting each year, held according to old tradition in February during the Winter Fair.¹ These meetings could last several days, until all problems had been voiced and decisions made. At this early stage, the native Jokkmokk Saamis still held a somewhat favored position with respect to their district authorities. They

¹ The time of this meeting was changed in the 1960s, for it had become a major tourist attraction during the Fair. The annual Fair, which was begun in 1606, was no longer the only opportunity to gather all the herders for conference.

were the hereditary, rightful herders of the land and, furthermore, they carried the banner of an intensive herding form. They thus voiced exactly what the authorities wanted to hear—a desire to return to greater order and intensivity in herding. Medals were distributed to those herders (Jokkmokk Saamis, of course) who upheld the traditions and standards of “good herding” and thereby set an example to others.

The enormous presence of Nils-Anti Gruvvisare cannot be emphasized enough. His intelligence and honesty were admired by all who knew him. He served as headman in Sirkas for 48 years, and throughout his life kept to the tenets of strict herding order. He was the last herder to milk regularly in the Jokkmokk region. His influence over the herding authorities was great, and many Tuorpon herders consider that it was largely due to Nils-Anti Gruvvisare that herding policy and law during the 1920s and 1930s were driven to such intensive extremes—for many, beyond the possibility of compliance under the circumstances.

Characteristic of this time was the attitude that the degeneration of herding could be conquered simply by will-power and work. Little attention was devoted to the underlying changes in determinants and the irrevocable march of time. Wiklund (1929) gives the impression that a return to milking is a choice as easily implemented as the preference of one dish to another on a restaurant menu.

One sees from his (Linné's) description that the Saamis are more refined and advanced in our day than in his time, but one also sees that in certain respects they have gone backwards since his time. Clearest and easiest can one maybe see this in the question of the reindeers' milking. 200 years ago the Saamis obtained a large part of their food from the reindeer's milk, and it has been so even long since then. Nowadays one does not bother to milk the reindeer in many places, and one loses in this way great sums for each year. The calves get the milk, one says, and this is better for us than if we ourselves ate it up. But the calves lived and thrived even in the old days when people took some of the milk, and they would surely thrive just as well still today, even if the Saamis milked their reindeer cows. (Wiklund, 1929:194.)

The set of Village regulations for Tuorpon (*Byaordning*) issued in 1927 is classic in its intensive stipulations, which include restrictions of migration scheduling (to protect farmers and to ensure that grazing is not over-used), rules specifying the maximum size of collective herds (a low figure of 1500), rules indicating the manner of migration (gathered herds and orderly movement), rules to determine the minimal number of active herders on the job, a rule stipulating that a herder may not camp more than 5 km from his herd, and most importantly, even a rule prescribing that, to maintain intensivity, the summer grazing lands should be divided by the Saami sheriff, in conjunction with the herders, into distinct grazing districts, where all efforts must be taken to keep these separate summer herds “clean”, i.e. unmixed. Such a rule meant maintenance of a group's traditionally used grazing areas without crowding by newcomers (a rule to be enacted “if necessary” according to §9 of the Act of 1898 and thereby

allowing partial reversal of the complete collectivization of lands proclaimed in 1886). In Tuorpon the concrete application of the rule meant that the Nuortvalle Group's lands (or a portion thereof) were to be protected from Karesuando-Saami infiltration. Events proved, however, that natural determinants could not be controlled by borders drawn on paper.

Herd separations in the summer land were compulsory upon the slightest mixing, in order to maintain the distinct, summer-intensive herds in their assigned areas. The Grazing Act of 1928 followed these same lines. Rarely has herding law been so out of tune with reality. The forces for extensivity were in full tide and gaining. Virihaure herding was already quite extensive and was soon to spill over into Nuortvalle. To move from intensivity to extensivity is a relatively easy matter, so long as one has an adequate herd size; to move from extensivity to intensivity is very difficult, especially if the herd is too big.

The decade 1930—40 was to witness a constant battle between the farming concerns, the law and the policies of the herding administration, on the one hand, and the natural herding determinants, on the other. One may indeed criticize the authorities for their conservatism and seeming disregard for herding realities and yet, given the chaotic situation and the growing feud between farmers and herders, more intensive groups and extensive groups, what were they to do?

To summarize, the combination of a series of international border regulations and good herding years brought about a difficult case of reindeer over-crowding in the Karesuando area. A number of Karesuando families left home of their own accord to search for better conditions elsewhere. The situation in Karesuando remained critical, however, so that in time the herding authorities imposed enforced, reindeer slaughters. Naturally, this policy met with resistance from the herders and, rather than face possible herd reduction, some families moved south. It was not long before the authorities took the measure of enforcing the relocation of herders who refused to reduce their herds or move of their own accord. These herders were assigned to other Villages and ordered to have completed the move within a specific time to ease the situation in the northernmost districts.

Throughout the 1920s, homeless Karesuando families wandered toward new Villages further south. It could take a number of years before these families came to settle, and where they finally stayed was not always where they had been assigned. Family relations played a major role in the distribution of the Karesuando herders. Kindred tried to stay together and to join with other relatives and friends who had moved earlier.

In 1921, four Karesuando families, the G. Omma, Piltto, Labba and Hotti families came as a group to Tuorpon. In 1926, the Anders O. Blind family, along with members of the closely related Valkeapää family, also came to Tuorpon. In each instance of Karesuando-Saami arrival in Tuor-

pon, the new herders joined the other Viri Group herders in their utilization of Lake Virihaure's western end all spring, summer and autumn. The reindeer of the Karesuando herders were accustomed to a predominantly western migration pattern, such as that practiced by the Viri Group and, furthermore, the Viri Group was composed of other Karesuando herders, among them relatives. Tuorpon was divided into a basically northern Saami group and a native, Jokkmokk Saami group.

Settlement into herding groups according to social bonds, however, was not a system which pleased the herding administration. The authorities would rather have been able to distribute herders with regard to grazing capacity and herd-size variables alone. Indeed, the enforced relocation of Karesuando herders was conducted mainly according to such calculations. The native herders could hardly be expected to welcome the newcomers with open arms. Besides creating much conflict between northern Saamis and native Saamis—a problem discussed in the following chapter—the authorities were not able to master the original problem, that of an overly high reindeer/grazing ratio. The problem was simply shifted from the north to Tuorpon and other Villages further south. Herds continued to increase with good years and, with the addition of the Karesuando herds, Tuorpon was soon to be overrun with reindeer.

Greater extensivity is a necessary result of such a situation. Because it was the Viri Group which hosted each wave of Karesuando Saamis to reach Tuorpon, it was the Viri Group which encountered first the increased pressure to extensify. Of course, one must not forget that the Viri herders from Karesuando were of tradition more extensive in their herding methods than were the native Jokkmokk herders. Nor should one forget, however, that it was to a considerable extent the overcrowding the northern herders had already experienced in Karesuando which fostered these traditions.

The extensive pressures which now faced these Karesuando herders drove them soon beyond the degree of extensivity which they desired or were used to. The continued problem of overcrowding came to antagonize (even more) relations between the Jokkmokk herders and the Karesuando herders. Besides herder—herder conflict, the relocation of northern Saamis with their herds to Tuorpon caused great herder—farmer conflict. Although the authorities had helped bring about the problem, they had to enforce herding intensivity in order to protect the rights of the native herders and the farmers. The Reindeer Grazing Act of 1928 and the Village Regulations of 1927 are most stringent in their orders for the maintenance of intensivity. The result was a severe clash between many different interest groups.

Chapter 11

Jokkmokk – Karesuando Conflict and Compromise (1930 – 40)

As could have been predicted, the Virihaure area was unable to sustain such a large reindeer population from early spring to late autumn. Already by early August many reindeer were driven to seek better grazing and spread eastward, mixing with Nuortvalle herds. It became increasingly less possible for the Viri Saamis to continue the old migration system. It became necessary to embark upon a system with separate summer and spring/autumn grazing areas, similar in principle to that employed by Nuortvalle. Here we see the beginnings of a series of successive shifts which was to bring the majority of Viri Saamis bit by bit away from the Virihaure Group, through a Kaska Tjavelk phase, and finally into assimilation with Nuortvalle. The camp at Stalo gradually became only a high-summer camp. Active herders spent most of the spring and autumn there as well, but their families stayed further east, some of them taking up residence first at Kartevare and others soon thereafter at Kura and Tarra, neighboring camps in Tarradalen. It is difficult to give exact dates for the institution of these spring/autumn camps, as each family followed an individual course in this transition, but it is safe to say that by 1932 the families were all firmly established in one or another of these three camps. The families would come to Stalo only briefly during the high-summer weeks and gradually even this move, although short, was considered unnecessary. They might stay the whole time in Kartevare, Kura and Tarra. The nomad school was switched from Stalo to Tarra. Stalo became "like a bachelors' barracks".

The shift eastward to new quarters was an attempt to maintain better control of the herds, now that they were moving eastward earlier in autumn. By being stationed further east, families would not be left behind so early by their herds and would not need to migrate so soon. Moreover, this would shorten the migration distance for the heavily laden caravans, as the families would be left in camp with all their supplies unpacked earlier on the spring move and taken up later on the eastward move. To a great extent, however, we must attribute this new system to the author-

ities' division of herders into separate summer groups with separate autumn lands and a tightening of the stipulation that they should camp near their herds.

In 1930 a Committee was appointed by Parliament to survey the dismal herding situation in the north and to make suggestions for its betterment. The nomad-school inspector, Dr. Erik Bergström, was called in as expert to lead this committee, and he was assisted by the various Saami sheriffs. In part of the unpublished work for this report, the Saami sheriff Malmström gives the following, most interesting description of Tuorpon herding, which I feel must be quoted at length:

South of the Kabla Saamis migrates the so-called *Virihaure group*, which, with the exception of one herder, is composed of relocated Karesuando Saamis. The group's reindeer population, according to the reindeer count of 1931, came to 8,121 animals (14 herders). Spring and autumn camps are three in number, one on the northern side of Lake Tarraure, about 12 miles west of Kvikkjokk, one by the mouth of the Kurajokk stream where it runs into the River Tarreätno, one on the eastern slope of Kartevare, not far from where the Kartejokk stream meets Tarreätno. These camps are left as a rule around June 21st, when they migrate via Lake Tarreluoppal up to the summer camp at Staloluokta on the northern shore of Lake Virihaure's southernmost inlet.

There is no orderly migration with gathered herds and accompanying families; instead the animals wander freely up to the summer pasturage around Lake Virihaure, where they are then left to graze in a mixed mass without any strict guarding till the end of Aug., when they wander of their own accord eastward. At the same time or—sad to say—often later, when the reindeer have already managed to do damage to the farmers' fields around Kvikkjokk and Peuraure, the herders and families migrate down to the autumn camps. After arrival there, they try to hold the herds in two parts: (1) those that live by Lake Tarraure and at Kurajokk in the so-called Lastak area, that is, the land between the waterways Tarreätno and Tsielekjokk, (2) those that live at Kartevare in the so-called Tjuolta area, that is to say, the land between Njåtsosjokks valley and the Tarrakaise mountain complex. Because of irregular and loose guarding, mixing is constant, so that in reality one can hardly speak of two separate herds.

The winter migration begins with snow cover and follows the Pärälälven waterway—and after separations by Lake Karatj—continues on to the tracts around Lake Kerkejaure and the settlements Maitum and Stenträsk by the Jokkmokk—Älvsbyn road. During the period in the winter land they are divided into smaller groups and practice daily watches over the reindeer, but after the arrival at the spring camp (spring migration begins at the end of April along the same route as the eastward move) the herds are thrown together again and graze mixed over the highlands between the Alatjåkko and Kerkevare mountains and in the low mountains south of Lake Rovijaure.

The women participate to a very minor degree in the herding work; often they do not move at all up to the summer camp but remain in the spring camp. The house form during spring, summer and autumn consists of turf *kåtas*; in winter-time, on the other hand, they live generally in tents but also in farm-houses.

Farthest to the south within the Lappby migrate the so-called *Pavval Saamis*. This group consists of four herders, all native Jokkmokk Saamis. According to the 1931 count, the group's reindeer population was 3,107.

The Pavval group still tries to herd its reindeer by a more intensive method than the other Tuorpon Saamis. This attempt becomes, however, harder for them to

fulfill each successive year, because the neighboring groups herd their reindeer according to a more extensive method, which has as a consequence that the group is inundated by foreign reindeer, in such large numbers that its own work force cannot manage to keep their reindeer gathered.

The group has its spring and autumn grazing land as well as spring/autumn camp on the Nuortvalle zone between Lake Karatj and the district boundary with Arjeplog. The move up to the summer land occurs around June 21st. They do not move continually to reach a certain specific camp; instead the migration adapts to grazing conditions and is carried out at a slow pace with a stop here for some days and a stop there for some days until they reach the zone around the Kartevare mountain, the Lakes Skalojaure and Rovijaure as well as Viejevagge valley. From Nuortvalle to the westernmost reach of the summer move takes generally 3 weeks and the stay in the western mountains is about equally long to the beginning of Aug., when the move down occurs. Nor is this move made all at once, but stops are made here and there. The autumn camp is therefore not reached before the latter half of Aug.

During the move to the summer land, the stay there and the move down to the autumn land, a regular watch is kept over the herd, which is held gathered as far as possible. During spring and autumn, however, the herd is given greater freedom. The women participate in the herding work practically to the same degree as the men.

The winter move begins at the close of Nov. or beginning of Dec. and goes to the area around the settlements of Nausta and Kitajaur. The group stays there until the beginning of May, when they return to Nuortvalle. During the winter the reindeer are herded in the usual way, that is, the herd is watched daily.

The housing form for both summer and winter consists of tent *kåtas*, autumn and spring of turf *kåtas*. (Malmström, 1932:7—10.)

The above description of Tuorpon herding in the early 1930s contains much valuable information. We see, for example, that the Viri Saamis, even before the orders of the herding authorities, had begun to separate into two different autumn groups. This division, as Malmström says, was not very successful. The autumn lands they sought to utilize were not so widely separated and as a result the herders were actually totally mixed. We must also consider such fission from the social aspect. Virihaure herders were not easily divided into two separate groups without taking into consideration a great number of family ties and herding partnerships. Despite the policies of the authorities, it is only a good deal later that we can even begin to speak of truly distinct, Karesuando-Saami groups in Tuorpon. The herders themselves speak of a great number of shifts in living quarters between the three spring/autumn camps, Kartevare, Kura, and Tarra. Membership of the so-called autumn groups was far from stable. It takes time for a routine to develop, and the Karesuando Saamis were never given much time to work out their own most comfortable social groupings or most practical herding organization. We can note here the statement that the Viri reindeer were streaming eastward long before the herders followed. This would cause the Viri reindeer to mix with the Nuortvalle reindeer in their summer land, and the Pavval Saamis (Kaila Saamis) as a result were soon to abandon their westernmost zones around Viejevagge. Nuortvalle's stunted westward movement, however, must

also be regarded with respect to the end of autumn milking and the general dwindling of the western, bare-ground phase of migration mentioned earlier (pages 127 ff.).

Malmström's description is not only interesting for its factual material but is also valuable for its opinions or its slant. Elsewhere he is more outspoken:

... we see how the large, so-called Virihaure-group herders herd their reindeer mixed in the same herd practically all spring, summer and autumn. What such a collective herding form leads to was discussed in the summary of the Committee's report concerning the poor situation in the herding area. It is perfectly clear that something must be done in order to accomplish an organization into smaller groups. (Malmström, 1932:24.)

In looking back at the enormous reindeer population at that time, and the long array of other powerful, extensive determinants, it is difficult to see how the authorities could think the problems could be solved by such administration. One is amazed that the problem could be viewed as stemming basically from mismanagement by herders; and yet, had the authorities not taken this stance, they would have had to admit that the situation was hopeless. As it was, real relief came by way of the herding catastrophe of 1936 and the demise of farming rather than the restrictions of the authorities.

Malmström goes on to suggest division into four summer and, correspondingly, four autumn groups, a system which does not fit so smoothly with the three natural districts within Tuorpon—Virihaure, Nuortvalle and Kaska Tjavelk (in his report Malmström does not treat the Kabla Saamis as part of Tuorpon but deals with them separately). This suggested division (see *Map E*) occasioned a storm of protest from the extensive Karesuando herders¹ but met with a favorable reception from the Kaila Saamis, who hoped that a tightening of controls on the Viri Group would ease their own problems. The ensuing debate between the Jokkmokk Saami Pära-Petter, patriarch of the more intensive Nuortvalle group, and Henrik Omma (#33), a Karesuando Saami and headman of Tuorpon, summarizes the entire intensive—extensive confrontation and is worth quoting at length. It provides us with a rare chance to check the views of the herders themselves at this time:

Nils Petter Pavval (#10)

I can very well remember the time when separate herds were held, for example, within the suggested 3rd and 4th districts. Naturally this required better herding than that which is now practiced, but the reindeer at least then didn't take any

¹ As one might expect, Karesuando protest was mainly directed toward the proposed distinction between summer districts 1 and 2 in Tuorpon's westernmost end. According to the Karesuando herders, the topography of these districts was not conducive to maintaining separate herds all summer. Note that in the threefold summer-land division which was finally adopted, proposed districts 1 and 2 were merged to create the so-called Virihaure zone.

harm from it. The herding method which is generally practiced now is all too weak. The reindeer wander from one herd to the other. He who wants to herd his reindeer in a better way cannot do it. Foreign reindeer come in great masses and quickly the herd grows because of this foreign invasion to such a size that the herder is no longer able to hold together the animals, and even his own reindeer wander away and mix in other herds. Separations, of course, occur, but these are too small or of no effect. Should one separate today, perhaps tomorrow one will have just as many foreign reindeer in the herd. These mixtures have started since the mass of Karesuando Saamis came to Virihaure. Still, as long as only the Parffa brothers and Henrik Blind were there, all was well. The Karesuando Saamis are so shy; why, they're half wild, they run away from people. Then one can understand that it's impossible to keep the reindeer gathered. The cause of the reindeer's half-wild condition is to be found in the weak guarding. Generally the reindeer are released to roam aimlessly during the late summer, before the *káta* people begin the move down to the autumn camp. The same happens during the spring migration. Some animals are allowed to go ahead, some stay behind. When the Virihaure Group, for example, in the spring of 1931 moved up to the spring camps in Tarradalen, of the over 8000-head herd, they had only a few tame transport oxen with them. Doesn't this show where to seek the root of the evil? The cure is to be found in a re-organization of the summer herding, so that one gets more, smaller herds, which are guarded separately from each other. During migrations, the *káta* people must absolutely accompany the reindeer. The herd must be kept gathered and cannot be released ahead or left behind. In the winter, big mixings do not occur. These occur during the summer, spring and autumn. Doesn't this prove that herding is better in smaller groups? In the winter-time, herding is regularly in small groups. (Malmström, 1932:41—42.)

Henrik G. Omma (#33)

The first years that the Karesuando Saamis were in Jokkmokk, herding was better, because the number of Saamis and reindeer within the Village was less then than now. Since there came more people and the reindeer population grew, one had to let the reindeer wander ahead. The mixtures are caused by the grazing land's conditions and topography; there aren't any naturally closed grazing areas within which the reindeer can be kept in separate herds. The Saamis, now as before, try to do their best; the evil does not stem from laziness or carelessness on their part. The youths work just as much now as in the old days and obey and follow the directions and orders of their elders. The number of reindeer guards is generally in a good proportion to the number of reindeer. Herding would not gain from a re-organization of summer herding in the direction expressed by Nils Petter Pavval. The guarding would be too strict. The animals would become tired out and calves would die. Pasturage is on the whole the same now as before. In some spots the lichen grazing has been somewhat reduced. It is difficult to find a cure for the mixtures. The planned stretches of fencing must, of course, do something. The number of reindeer within the Village is not too large. (Malmström, 1932:41.)

Malmström sides with Nils Petter Pavval (Pära-Petter) and points out the contradiction in the statement by Henrik G. Omma, where he first says that the increased extensivity came with increasing herd size and then later says that the herd size in Tuorpon is not too large. Actually, Omma's statement need not be viewed as a contradiction at all. To Malmström, it is a contradiction because he sees the great rise of extensivity as an evil, and certainly the herd size was too large for the smooth, intensive order

he longed for. Although Henrik G. Omma agrees that the herd size is so large that it requires extensivity, he does not see this as an evil to the same extent as Nils P. Pavval. By saying then that the herd size is not too large, I believe Omma means simply that from a pasturage viewpoint Tuorpon could handle these numbers if all the herders would learn to live with extensivity.

The above statements demonstrate the clear duality of the argument. The one side emphasizes *management*, the other *determinants*. Omma's motivation, I think, is clear. He does not see extensivity as an evil, instead as a necessity imposed by big herds. Naturally, as a herder he wants big herds and defends the Karesuando methods, while at the same time acknowledging the pressures from outside parties and their justified desires for more order. This puts him in a double-bind, and he honestly expresses his inability to find a quick and easy cure for the mixing of different herds.

Pavval's stand, however, has, I believe, far more depth than is expressed. What motivates Pavval's desires for strict order? He says that "he who wants to herd his reindeer in a better way cannot do it," but he does not fully come to grips with *why*, from his viewpoint (not the authorities' viewpoint), he thinks intensivity is better. Of course, he does not have to give any explanation. He can simply and truthfully base his attitude on old tradition and the desire to help the noble aims of the authorities and set a good example to all herders. All herders would, of course, acknowledge the ills of over-extensivity, where reindeer were lost and calves not marked, but there is obviously a great difference of opinion when it comes to determining what is over-extensivity. To Pavval and the authorities, it seems that at this point all extensivity is over-extensivity. Malmström's responsibilities towards the farming contingent explains his attitude, but why cannot Pära-Petter see any positive side to greater extensivity, as did Pava-Lasse (see p. 148), who was also a native Jokkmokk herder?

I believe that we must realize that there are other, very obvious and powerful reasons behind Pära-Petter's stance. The maintenance of strict order, with separate herds and separate grazing zones, was the only way for the native Jokkmokk herders to retain their integrity as a separate, herding, social group with specific land areas preserved for their own use. The Nuortvalle Group was in effect fighting to save the social identity of its land, an identity established by generations of use. An increasing extensivity *within* the group, a trend we have already noted, is no threat, but a lapse into extensivity which begins to erode the borders of group identity and land use through mixtures with other groups is indeed a threat. Pära-Petter is careful to make the point that the mixtures of his own reindeer in other herds is a sorry effect of foreign reindeer mixing in his herd. I do not mean to say that Pära-Petter is saying one thing and meaning another. All he says is undoubtedly justified and fully believed by him. He was indeed one of the greatest champions and hardest workers

for the intensive cause. My purpose here has been to clarify what was at stake in this battle.

The Karesuando Saamis had everything to gain from extensivity—big herds and expanded grazing territory. For an uprooted group with no traditional rights to Tuorpon land, extensivity was not only made necessary by determinants, but was also quite advantageous, for, with extensivity, the Karesuando herders stood to increase their claims to grazing land. The Nuortvalle Group, on the other hand, being the defenders of the land against the swarming newcomers, had almost everything to lose from an accepted policy of Village extensivity.

Intensivity became the official policy of the herding administration. The overly large Viri Group was to be partitioned and strict separation maintained. The remaining issue was where to make such a division amongst the herders and how to divide the grazing lands. It is interesting to note that the discussion of big-group formation and suitable, collective-herd size in the 1960s (*Renutredningen*, 1960:65), which treats as novel the re-organization of herding entities into rational units based on Norwegian and Russian models, was already commonplace in the 1930s. The figure suggested by the Russian and Norwegian sources, 3000 head per group, is the same as that finally arrived at in Tuorpon 30 years earlier as the maximum herd size if proper order was to be maintained. Indeed, considering the oversized collectives they were already dealing with in the 1930s, the establishment of most efficient herd-size entities (or rather the largest herd for good control) meant in those days a decrease in herd size, while 30 years later under rational ideals it meant generally an increase. As we have seen, the Viri Group alone in 1931 had about 8000 head. Again I wish to emphasize that big-group formation is nothing revolutionarily new; the difference, and that which is indeed radically new, is that, before, considerations centered around cutting back the group and herd size for the maintenance of order, whereas, today, considerations center generally on building up group collectivity and herd size, with the emphasis placed heavily on economic factors—matters of the labor expended per herd, which size of herd and group of herders is most profitable, etc. Contrast this with Malmström's negative attitude toward collectivity, described on page 176. In both cases, an administratively imposed structure meets and clashes often with a backbone of old traditional structure, based on family ties and the social identity of grazing lands.

In the 1930s, intensive herding was considered the ideal by the authorities, and yet the unwelcome, extensive realities forced attempts to reach a compromise.

It is undeniably best that a partitioning of Tuorpon Lappby—as well as a partitioning of other Lappbys in Norrbotten— with the cited drawbacks of the all too common, group-oriented herding before us, should take a *middle way*, so that the problems from inconveniences can largely be eliminated without, however, sacrificing the demands for order, which must be seen as necessary for the prevention of damage to others' property (Malmström, 1932:40; italics mine).

It must be recognized that, in all the ensuing debates over finding the proper "middle way", the different, existent, herding entities naturally argued for divisions of grazing territory which would favor their own cause and give them more land or land which because of its topography made herding easier. Much squabbling occurred therefore over the "unnatural" borders of Malmström's suggested quartering of Tuorpon. The northern Saamis demanded more territory, and the Nuortvalle Group was loath to give up "herding rights." The whole issue became moot, however, when the years immediately after 1931 showed a decrease in reindeer population. Malmström was then willing to cancel his proposed four-group plan and satisfy himself and the herders with a plan for division into three groups. Naturally, these group grazing zones followed the land's own dictates as far as possible, and so the Virihaure, Nuortvalle and Kaska Tjavelk spring/autumn lands were coupled with the three respective summer zones, Virihaure, Kåtnjunjes and Kerkevare. Even here, there was conflict, for, although Nuortvalle and Kaska Tjavelk were naturally divided spring/autumn lands, there had never before been a division of summer land between more than two groups, Virihaure and Nuortvalle. The Nuortvalle Group had had use of much of the land which in 1935 was assigned to the Kerkevare summer group. Viejevagga, for example, was to be off limits for Pavval reindeer. The group districts assigned in 1935 were as follows:

1. Summer district, *Virihaure*
autumn/spring land Tjuolta 3000 reindeer
 2. Summer district, *Kerkevare*
autumn/spring land Kaska Tjavelk 3000 reindeer
 3. Summer district, *Kåtnjunjes*
autumn/spring land Nuortvalle 3000 reindeer
- (Malmström, 1935:11)

The era of spring/autumn camps at Kartevare, Kura and Tarra was short-lived for the Virihaure herders (now split into Viri and Kerkevare herders). It had lasted only 4—5 years. Although, as Isak Parffa (#36) has explained to me, the idea of these camps had been to get a "head start" on the reindeer, now that they were crowding eastward so early in autumn, the herders were still left far behind. One autumn he remembers that herders in these camps had to walk many miles toward the lowlands in order to find pack oxen for a caravan. They then had to bring the pack oxen back into the high mountains, in order to move the families with their supplies to the lowlands. In larger and larger numbers, the reindeer pushed eastward earlier and earlier. Whereas, before, the Virihaure reindeer had moved east only after the Nuortvalle reindeer had evacuated the mountains, now they were mixing much earlier and this meant that they would have to be separated at different times during the summer, but most

importantly in late summer or early autumn before occupation of the separated spring/autumn lands Nuortvalle and Kaska Tjavelk.

Despite the group divisions with distinct summer-grazing territory, mixing became an ever-increasing reality. In the 1920s, separations between Nuortvalle and Viri herds were often held on Stalonjarga, a peninsula jutting from Lake Virihaure's southern shore, before the Nuortvalle herders moved eastward. Now, in the 1930s, Malmström instigated numerous summer separations and, to accommodate all three of his newly established groups, these separations were held at the newly constructed corral at Jälli, further east. The herders have told me, however, that, once Malmström had left the corral and the separated Virihaure, Kerkevare and Kåtnjunjes herds had been driven off in different directions from the Jälli corral, the reindeer were frequently allowed to mix again behind Jeknafo mountain. Herders complained about having to work so hard to keep the herds separated when their mixing was unavoidable.

The first summer separations in the 1930s tried to maintain Malmström's threefold division, but soon they lapsed into the old twofold form. The Viri Group, occupying Virihaure's western end, managed to remain somewhat separate because of the land's natural boundaries, but the Kerkevare Group and the Kåtnjunjes Group, despite repeated attempts, could not stop their reindeer from mixing. Finally, they stopped trying to separate the reindeer in the summer, let their herds move east together in autumn and separated them at Lastak and Parka before entering the autumn lands. This development, however, was contingent upon the construction of the Parka crosswise fence, which will be discussed shortly.

Even the Nuortvalle Group, which had shown itself initially favorable to strict group divisions, was to be troubled by Malmström's inflexibility. Per Pavval has told me that upon numerous occasions, despite protests, they were made to separate from their traditional neighbors, the Arvas Saamis, early in spring—herders with whom they had come to be together almost all of the bare-ground period in a partially mixed state because of their common Nuortvalle—Arvas land mass and the crowded reindeer population.

During this time, a great activity in the building of corrals and fences occurred, in order to execute separations and to hinder scattering. Wire fencing was now available and, with large, wooden, fence poles, was transported to the bare-mountain regions by horses. Money for such large-scale projects was in part taken from the Village treasury but was also provided by the State. Corrals were built at Jälli and Keddaure and later on Virihaure's western shore. The scattered reindeer were gathered and driven into these permanent corrals for combined calf-markings, castration and separation.

By far the most important construction of this type from a herding perspective was the fence which, after a few years of work, was eventually

Map E. Suggested grazing-land distribution amongst Tuorpon groups in the early 1930s. S = summer-land district, s/a = spring/autumn-land district. Reindeer occupying 1s in the summer were to occupy 1s/a in spring and autumn etc. (the roads depicted here did not extend so far westward at this time).

Map F. Grazing-land distribution authorized for Tuorpon groups in the late 1930s. Summer zones: (1) Vi = Virihaure, (2) Ke = Kerkevere, (3) Kå = Kåtnjunjes. Spring/autumn zones: (1) Tj = Tjoolta, (2) Kas-T = Kaska Tjavelka, (3) Nuo = Nourtvälle (the roads depicted here did not extend so far westward at this time).

extended all the way from Falehaure on the Pite River through Parka and the Jokkmokk – Arjeplog border straight across Tuorpon grazing land to Kvikkjokk. Unlike fences which stretch in a northwest – southeast direction and hinder reindeer from scattering into other Villages to the north or south, this fence cut Tuorpon land in two and blocked the reindeer's northwest – southeast migration routes within the Village. This fence was constructed on the initiative of Erik Bergström, in order to protect the farmers to the east from the all too common, early descent of reindeer into winter and autumn areas (declared illegal because of the early season) before the farmers had been able to dry and store their hay. This fence, the Parka "crosswise" fence, was finished by 1936 and in the beginning wreaked havoc on the Tuorpon herders.

The reindeer, unused to any such complete block in their migration path, crowded up against the fence. The area on the western side became "a mud soup", and a number of calves died from trampling. On one occasion, tormented by the plight of his reindeer, Pava-Lasse broke the law and cut open a segment of fence to let his herd pass. Despite summer separations, reindeer from all three of Tuorpon's summer districts would be mixed in the press against the Parka crosswise fence, and these would have to be separated into different herds before they could be allowed to proceed eastward into different autumn lands. Stray reindeer from the Viri Group, which were supposed to occupy the Tjuolta autumn land, would be "pulled with" (separated into the same group with) the Kaska Tjavelk herds at the fence, if they came so far east. This fence was, therefore, a major factor in the eastward shift of Karesuando Saamis from the Kartevare, Kura and Tarra camps, in order to be on hand for the great August herd separations at Parka and Lastak between Nuortvalle (plus Arvas) and Kaska Tjavelk (plus Viri) herders. An eastward shift to the Parka – Lastak zone at the tree-line so early in August meant that a good deal of the northern Saamis' eastward move would have to be performed by pack caravan over bare ground rather than by sled caravan. Whereas, earlier, only their short moves between Stalo and the Kartevare, Kura and Tarra camps might be made by pack caravan, now this distance was extended, and an earlier eastward move was required.

This new fence, in conjunction with the continuing eastern movement of overcrowded Tuorpon reindeer (the herds of the Jokkmokk Saamis at this time had also swelled) and the stipulated divisions into Tjuolta, Nuortvalle and Kaska Tjavelk spring/autumn grazing zones, ended the old system of predominantly westward migration for many northern Saamis. Pava-Lasse died in 1936. By the late 1930s, no Karesuando families remained west in Stalo waiting for the snows. All had moved east by pack caravan in August. The institutionalization of camps at Kartevare, Kura and Tarra had been the start of this general trend to an eastern movement. Its cause was predominantly overcrowded herds, which demanded earlier eastward moves to fresh grazing, but we must also ac-

knowledge the growing dependence on eastern (Swedish) supplies and the cash economy in a manner similar to that which had caused the eastern movement of the Nuortvalle herders many years earlier. With the widening of the distance and time intervals between Stalo and the new late spring/early autumn camp at Lastak, the migration schedule and the pack-caravan method of most northern-Saami families began to parallel more and more the Nuortvalle system. Before the construction of the Parka crosswise fence, the Viri-Group members, whether native Jokkmokk or relocated Karesuando herders, had employed a wide variety of migration routes during the eastward move toward the lowlands. The herds had been separated already in Stalo, and each herder had moved off more or less separately to avoid the mixing of the big herds. Now, however, with the new fence, the herds were not really divided until they came to Parka and Lastak near the tree-line, and as a result all herders had to be on hand there and would follow the same basic migration route, Peuraure – Karatj, which presented itself from that position. Parffa Gubben, for example, was to cease his migration along Lakes Saggat and Skalka.

By 1936, all the Viri and Kerkevare herders had moved to new late-summer and early-autumn quarters at Lastak, situated at the mouth of the Kaska Tjavelk land strip. The essential spring/autumn camp, analogous to Puollemåive, was founded at Rakka on the northern shore of Lake Karatj, conveniently near the best spring/autumn mountain areas of Farforita, Harrevarto and Uppavare on the Kaska Tjavelk side. While the Anders Blind (#32) and Per Labba (#40) families joined the others at Lastak to be on hand for the great separations, their reindeer, the bulk of them at least, remained at Virihaure's western end and did not move with the majority of northern-Saami reindeer into Kaska Tjavelk autumn land. Blind and Labba would leave their families to the east and walk back to Stalo carrying their skis in October, to begin gathering their reindeer in preparation for the usual November or December eastward move.

A number of Kaska Tjavelk herders would also leave their families and return west to round up strays left in their summer land and sweep them eastward for lowland separation and reunion with the proper winter herds. Whereas Anders Blind and Per Labba were engaged in moving their main herd from the west, Kaska Tjavelk herders were basically involved in a "clean-up" operation with their eastward sweep. The character of the Kaska Tjavelk Group's sweep operation, however, was to undergo a number of variations. As we shall see, the difference between the Viri Group's eastern migration and the Kaska Tjavelk Group's sweep operation is really only a matter of degree. The two can be identical, occur at the same time and even be coordinated and merged with each other. In this situation there seems little reason to speak of two separate groups. The Kaska Tjavelk – Viri split was never clean or permanent, despite the authorities. Sometimes more head were swept down in November and

December than came east with the families through the Parka crosswise fence in August. Especially after the deaths of Guttorm Blind (#31) and Henrik S. Omma, two of the Kaska Tjavelk Group's main leaders and organizers, this sweep operation seems to have atrophied, and Kaska Tjavelk reindeer left in the summer zone would be picked up and brought to the winter separation corrals at Karats or Maitum by the Anders Blind—Per Labba group (enlarged by this time with others, such as Nils M. Omma (#56) and Anders Omma (#58)) during their eastward move. Such developments, however, bring us well beyond the 1930s.

In a similar way, as a result of the new crosswise fence, the Nuortvalle Saamis shifted somewhat eastward with the establishment of a new permanent camp, Parka, eventually with turf *kātas* and wooden supply huts by Lake Parkajaure. This camp was situated just at the intersection of the crosswise fence and the Tuorpon—Luokta Mavas Village border (which is the same as the Jokkmokk—Arjeplog community border). It is thus an important focal point with respect to early-autumn separations and, moreover, has access to fishing waters and firewood. Nuortvalle Saamis came to rely increasingly on this new camp, so that, before very long, Nuortvalle families no longer followed the reindeer further west. Only the active herders went west as far as Rovijaure and Kåtnjunjes to attend summer calf-markings and separations.

The crosswise fence was not only to alter Nuortvalle's eastward move, but was also to re-arrange totally this group's westward move from Puollemåive. With a permanent camp at Parka, the herders could store (and needed to store) a large amount of supplies there for long periods. A sled-caravan supply run was institutionalized from Puollemåive to Parka, which made unnecessary the boat-transport system along Karatj and Peuraure with the families in spring. Now with the main supplies already stored at Parka from the earlier, sled supply run, pack oxen could be used to transport the remaining needs of the families from Puollemåive. The herd could even be released *before* calving, in the knowledge that they could not scatter further west than the crosswise fence. The nearby mountain area of Skeltevare afforded excellent, easterly, calving land, which meant that the pregnant cows would not need to press far westward at so fast a pace. Nor could the pack oxen escape too far west before being caught and brought back to Puollemåive to build pack caravans for the westward move. The oxen were often in poor condition after a hard winter, so that the families moved in short stages. The herd itself was used to following the northwestern slant of the long land strip and needed little attention.

Calves could be marked along the way on a convenient peninsula, such as that at Lule Alep, and it was not uncommon to have a spring separation by one of the many Skelta lakes, so that the Udtja forest Village herders could take their reindeer before they followed into the highlands against the wishes of the Udtja herders. It should also be remembered that the

Nuortvalle herd would contain a large number of Arjeplog reindeer as a natural consequence of the Nuortvalle – Arvas land formation. Nuortvalle reindeer and Arvas reindeer were often mixed with each other in the western summer lands as well. Spring separation between Arvas and Nuortvalle was therefore not so vital (although Malmström insisted on the contrary) as it was for the Udtja Saamis. The Arvas and Nuortvalle Groups could divide later further west, if need be, or even wait till autumn. In fact, the greater mixing of Arvas and Nuortvalle herds was to a large extent a result of the crosswise fence built by the authorities. The fence allowed earlier release of herds in the spring.

Nuortvalle Saamis had always been easterly oriented, compared to the Viri Saamis, at least in more modern times, and so they did not have to make adjustments of major degree to accommodate the early-autumn separations at Lastak and Parka. Lastak and Parka grew to be corresponding points on the migration schedules of two major autumn groups. They were often referred to as the “middle camps”, that is, camps used by the herders between the summer camps and the spring/autumn camps. Both served as late-summer and early-autumn quarters for the active herders during the big herd separations which were to occur in conjunction with the release of the herds through the crosswise fence. This release of the herds east of the fence to move into their separate spring/autumn lands occurred as soon as the authorities permitted and the gathering and separating work was done usually on August 10 or soon thereafter.

To those Saamis assigned to the Virihaure summer group, use of the assigned spring/autumn land, Tjuolta, had never been more than an unsuccessful experiment. By autumn, those of their reindeer which were not still at Virihaure's western end were inextricably merged with the Kerkevare herds, despite some success in maintaining separation during the summer. Both Viri and Kerkevare summer-group herders continued to share Staloluokta as high-summer camp and had mingled even later, in autumn, in the Kartevare, Kura and Tarra camps. It was difficult to implement a system in which certain members of the same essential group, participants in the same camps closely related by family bonds, had to neatly divide and stop their reindeer's natural eastern move with the Kerkevare reindeer to funnel them over into the Tjuolta zone. Although reindeer-count records list each herder as distinctly belonging to the Viri – Tjuolta, Kerkevare – Kaska Tjavelk or Kåtnjunjes – Nuortvalle group, the actual herding situation was quite otherwise. Herders say of this period that all the fussing over group membership on paper had very little to do with the facts, at least among the Karesuando Saamis.

The facts were that the two basic, Tuorpon, summer-herding zones, Virihaure's western end and the old Kaila Saami area of *both* Kerkevare and Kåtnjunjes, had never been successfully broken up or replaced by the threefold division. The Viri – Tjuolta Group could retain some distinction in the summer, while Kerkevare and Kåtnjunjes reindeer were hopelessly

mixed. Many Viri reindeer followed Kerkevare reindeer to the crosswise fence and were separated with them into the Kaska Tjavelk area. Many Kerkevare reindeer remained west until the sweep operation later in November or December. The Pavval Saamis were to regain dominion over their "clean" herds only after the Parka – Lastak divisions.

The groupings of herders in camps, however, showed quite a different pattern, due to the complications of the Jokkmokk – Karesuando split. This split was maintained throughout the spring, summer and autumn. With regard to herding reality, we are forced to speak of three main herding elements or zones of activity, but at any one time the Kerkevare – Kaska Tjavelk element was mixed with one of the others. In speaking of the herders themselves, one uses the terms Viri, Nuortvalle or Kaska Tjavelk Saamis with regard to criteria of social identity, camp location and work organization rather than their reindeer's grazing utilization.

The Parka – Lastak separations generally occurred in many different shifts, and it was not until the herders had gathered reindeer into the corrals a number of times from the western side of the crosswise fence and after separation released them to the east of the fence that the herders and their families continued by pack caravans to their homes at Puollemäive or Rakka. Manker (1957) in his book *Bortom Fjällen* gives a sketch of the Parka – Lastak divisions, but his description is more concerned with establishing an atmosphere and recounting a personal experience than in portraying the greater herding context. The Jokkmokk Saamis (with Arjeplog help) would round up reindeer to the Parka corral, and the Karesuando Saamis would bring in reindeer to the Lastak corral with their move eastward from Stalo. Nuortvalle herders usually did not have to bring their reindeer eastward to the fence. They came of their own accord in a big wave, which sometimes reached the fence too early (they could not be released past it until August 10th). If this occurred, the herd could trample the zone near the fence and then turn back westward. In this case, herders would have to gather them into the corral. Each group would, of course, have to be on hand at the separation "hosted" by the other group. Reindeer belonging to the Karesuando herders separated at the Parka corral would be driven to Lastak and placed in a corral again there. It often happened that during the short drive from Parka to Lastak, many more head became attached to the original "clean" herd, so that Jokkmokk herders would have to come to Lastak to pull out their reindeer before the Karesuando reindeer could be released east of the fence. Similarly, Jokkmokk herders' reindeer and Arjeplog reindeer found at Lastak would be driven to Parka before release through the fence. Once released from these separate points, the herds were kept separate by a section of fence stretching from the crosswise fence to the western end of Lake Peuraure, thus dividing Nuortvalle land from Kaska Tjavelk land. It is helpful to conceive of the fencing system as resembling a "T", with unfenced summer land above the crossbar and divided autumn land

below it. Herders have told me that herd-separation time at Parka and Lastak could be most exhausting, for no sooner had one group “hosted” a separation, with the resulting shuffling back and forth between camps, than the other group would bring in a herd and start the process all over again.

Once all the reindeer which could be gathered into the Parka and Lastak corrals had been “processed” and released eastward into the respective autumn zones, the herders and families would continue eastward by pack caravan to the Puollemäive and Rakka camps. Anders Blind and Per Labba, however, did not join the other Karesuando Saamis at Rakka, but instead chose to live separately in Lillselet. We see here shadows of the defunct, Tjuolta, autumn separation. Their families would remain in Lillselet when the men returned in October to round up their main Viri herd at Virihaure’s western end. Thus even the most traditional Viri-Group members were in some respects to acquiesce in the prevalent eastern shift in migration scheduling. The families moved east from Stalo in a pattern similar to that of the Nuortvalle Saamis, even though the bulk of their reindeer remained at Virihaure’s western end all spring, summer and autumn, as they always had.

With increased extensivity, the families’ moves and their reindeer’s moves were no longer combined in the same event. Anders Blind and Per Labba had to move east with the others to cover the Parka–Lastak separations and to fetch their strays with the Kaska Tjavelk herders (among whom they had close relatives), but then they returned to Stalo without their families to resume their older migration pattern. Now, with the families already in the lowlands, this eastward move of the Viri herd could be undertaken with fewer stops and fewer sleds. Similarly, the later, autumn “sweep operation” of the Kaska Tjavelk herders can be viewed as a remnant of the old Viri pattern, in their herding schedule, a transitional element in the shift from western to eastern dominance, from Viri pattern to Nuortvalle pattern. As we shall see, some herders, such as Anders Blind and Per Labba, made a new, steady state of this hybrid, transitional pattern, while most of the other Karesuando herders, at least by around 1959, were to give up their sweep operation and even to slaughter those reindeer with a tendency to remain in the west, in an effort to approach more completely the Nuortvalle pattern.

Although the charts of the herding authorities for this time make much of the distinction between Virihaure and Kerkevare Saamis, diligently noting the shifts in membership between them, this distinction was in both herding reality and camp location largely blurred. However, the shifts in membership between this more or less combined Karesuando Group and the Nuortvalle Group of native Jokkmokk Saamis carry a very different significance and reflect the crossing of a much wider social barrier.

The first Karesuando-Saami family to join the Nuortvalle Group was that of Guttorm Omma (#37) in 1935, and he was soon after joined by Lars

Hotti (#41) and family. These herders considered Nuortvalle grazing lands far superior to the Kaska Tjavelk area to which they were assigned. The two families were given distinctly different welcomes. The Omma family was accepted without a murmur, while loud protests were raised against Lars Hotti. As one would expect, this difference in attitude was largely based on the existence, or rather lack, of family ties. Guttorm Omma's son, Henrik Salomon, married Gerda Pavval, a daughter of Pära-Petter. Hotti had no such ties with Nuortvalle. No group likes the thought of hosting newcomers outside of the family network, especially if they bring with them the possibility of herding conflicts. Note that resistance to Hotti was based on his lack of Nuortvalle ties, not on his lack of ties with native Jokkmokk Saamis in general. Hotti's wife at this time, his second wife Inga Pirtsi, was a native Jokkmokk Saami but not of the Nuortvalle Group. Efforts were made to hinder Hotti's move on the grounds that Nuortvalle grazing was full. Hotti pointed out that in the early twenties he had been assigned to the Nuortvalle area by the authorities and then there had been far more reindeer in Nuortvalle than there were in the late thirties. The authorities assigned him nonetheless to Kaska Tjavelk, but Hotti was stubborn and did as he pleased anyway, with the result that he was fined for not obeying the rules about respecting the prescribed group divisions. Finally, however, Hotti got his own way, although group relations with his neighbors in Nuortvalle were not always of the best, as is reflected in his somewhat off-to-the-side *káta* positioning in both Puollemåive and Parka. The problem of extensivity's spread had begun to make clear inroads into the herding in the Nuortvalle area. To imply that this spread was merely due to the infiltration of northern Saamis into the Nuortvalle Group is to miss the point.

Of all the measures taken to control extensivity, probably none were as effective as Nature's own method—the reindeer catastrophe of the winter of 1936. From a total of 8,167 reindeer for Tuorpon (without Kabla) in 1935, the figure had dropped to 4,735 by 1938. The early thirties had had bad winters as a rule (Johansson, C. 1976), but the winter of 1936 is remembered to this day as one of the worst in herding history. According to Isak Parffa, "The grazing lands looked like a graveyard, and Tuorpon did not fully recover from this blow until the 1950s." Some Tuorpon herders have never recovered their losses from the 1930s. Yet, though this eased the pressure on grazing lands and reduced an extensive pressure, it did not create an intensive pressure—at best an intensive possibility, which, because of numerous other determinants, could never be realized. The old, circular, cause-and-effect constellation of small herds and milking was no longer viable. Other factors, external to herding, had entered the scene and easily replaced the need for a milking economy for even a small herder.

Not only was the cash economy in full bloom amongst herders by this time, but the use of goats was also already commonplace. They followed

along on migrations and were accommodated at some neighboring farmhouse during the winter. Soon even the use of goats was to fall away with the use of powdered milk. The milking of goats, along with increased fishing, solved a possible conflict between powerful extensive determinants and other intensive determinants. Another factor which both favored greater extensivity and eased intensive determinants was the growing ability to find part-time labor at a good wage outside of the herding concern. Many herders began to combine their seasonal duties with lumbering or the floating of timber to the sawmill, job opportunities made more available by the herders' eastern shift. Such factors will be dealt with in general terms later, but it is worth pointing out here that the greatest conflicts and problems occurring in herding are when strong extensive determinants clash with strong intensive determinants. Instead of just reaching an unstable and costly compromise, the more successful development is to find alternatives which satisfy needs without conflict. The milking of goats can be seen as an example of meeting dietary needs without conflicting with the dominant extensive trend, just as the use of artificial reindeer fodder today can be seen as a method of maintaining greater intensivity to protect against predators when poor grazing demands extensivity.

To summarize, the 1930s were a period of great re-organization, especially for the Virihaure Saamis, as the tremendous upheavals of the relocation began to make themselves felt, first in the westernmost edge of the Village and from there spreading eastward. What had begun as "summer extensivity," to use Ruong's (1975) term, had soon expanded into spring, summer and autumn extensivity. With the overuse of Virihaure grazing areas, the herds of the Karesuando Saamis (and Pava-Lasse) were forced to move eastward earlier at the end of summer and seek special, separate, autumn-grazing territory rather than spend all spring, summer and autumn in one general area, as had been the rule before. Only a few herders consistently maintained the old form, although they could not prevent some of their reindeer from following the others to the east. The reindeer's eastward shift pulled the Viri Saamis eastward with them and caused the establishment of specific spring/autumn camps, first at Kartevare, Kura and Tarra, but soon thereafter even further eastward, with an early-autumn camp at Lastak during the period of herd separations, followed by regular spring/autumn quarters at Rakka (and Lillselet). Along with the changes in camp and seasonal grazing location went a total re-organization of migration scheduling. A large section of the old sled-caravan route was now traversed by pack caravan later in the spring and earlier in the autumn during the bare-ground period.

In like manner, the need for early-autumn separations caused the Nuortvalle herders to establish a permanent camp at Parka. The presence of a permanent camp at Parka enabled the Nuortvalle herders to store supplies there, and supplies were needed for the families who were to

remain in Parka all summer. A sled-caravan supply run from Puollemåive to Parka could be instituted, which obviated the old system of boat transport along Lake Peuraure. Now, with lighter burdens, the families could move from Puollemåive to Parka by pack caravan.

Worried by the extensive trend and the resulting complaints of farmers and other herders, the authorities devised a policy of threefold, summer group division with respective spring/autumn lands, hoping to find a suitable "middle way" between the extensive forces and the need to maintain order. A crosswise fence from Falehaure in Arjeplog through Parka to Kvikkjokk was built, dividing Nuortvalle and Kaska Tjavelk lowland zones from the essential summer zones in an effort to protect farmers from inconvenience. This fence was a major factor in the eastward shift of Karesuando-Saami camps, in order to be on hand for the great August herd separations between Nuortvalle (with Arjeplog) and Kaska Tjavelk (with Viri) herders.

Despite measures for threefold group division, herding reality showed strong adherence to the twofold pattern. Reindeer from the Kerkevere summer group were mixed with the Kåtnjunjes Group's herds during the summer, and many head of Viri reindeer were separated with the Kaska Tjavelk group in the autumn. While it is true that, after the Parka – Lastak divisions, the Tuorpon reindeer occupied all three essential land zones, Virihaure, Nuortvalle and Kaska Tjavelk, because of the mixing and cooperation of Viri and Kaska Tjavelk herders, one can still speak of the essential split as being between native Jokkmokk and Karesuando families. The Kåtnjunjes – Nuortvalle Group, however, could not maintain its strictly Jokkmokk-Saami identity but was infiltrated by the northern Saamis Guttorm Omma and Lars Hotti, the former by marriage ties and the latter, finally, by outside official authorization. By the close of the 1930s the herding forms of Jokkmokk herders and Karesuando herders had approximated to each other to a considerable extent.

Ruong (1937) in his Jukkasjärvi report also speaks of an eastern shift. The shift he describes, however, seems to have mainly been caused by increased communications developments in the Swedish inland, a factor which, although not without influence on Tuorpon, cannot be considered the major motivation at this time. Eastward shifts for the Viri Saamis often meant a reduction of supply contacts with Norway, as much as increased contacts with Swedish sources. The dominating reasons for the eastward shift in Tuorpon were the reindeer's reaction to overcrowded grazing lands, the growth of herds and the imposition by the authorities of certain herding rules and the crosswise fence.

The Saami sheriff Malmström himself, in a speech made at the yearly Sirkas – Tuorpon Winter Fair meeting in 1938 presents his own summary of the past decade. Here are a few brief excerpts:

When the Commission of 1930 began its work, chaos existed in the district's reindeer herding ... it was plain to see ... that the cure for the then current

disorganization was to be found in the Saamis' abandonment of the pronounced collectivized herding form.

The Commission's field leader at that time, the now deceased Dr. Erik Bergström, who through many years' experience in all of Sweden's Saami districts had acquired in-depth knowledge of the different herding forms within the country, after serious consideration came to the conclusion that the best solution lay in a herding form in between the southern Saamis' old hard intensive herding and the method from the North with the most extended freedom in reindeer guarding.

What Dr. Bergström prescribed and what became for the Commission a foundation stone in the formation of herding policy was not a new, in practice untried system. What he recommended had been in use right here in the Jokkmokk area.

Still, it seemed in the early 30s that even Jokkmokk herding was going to degenerate . . .

Fortunately it seems that those times are now past, but I want to tell you that, in Jokkmokk as in other places, a change for the better was very difficult. (Malmström, 1938:5–6.)

Malmström sees the times of turmoil as gone, and the "middle way" finally attained through determined effort.¹ To a great extent, he can thank the 1936 catastrophe. His outlook on the future is positive and, with the reduction of herds, the "foreign reindeer's" habituation to their new home, and a more logical distribution of Karesuando Saamis over a greater grazing area, one might share his optimism. But a world war lay just around the corner, which, despite Sweden's neutrality, was to have effects in the furthest reaches of Lapland. A new wave of relocation was to follow. Still, however, from the standpoint of maintaining peace between herders and farmers, Malmström was right in seeing better times ahead—mainly due to the near total demise of farming in the area after the war. But from the perspective of herding development as a source of livelihood for the herders, hard times lay ahead.

¹ In a motion (M 1930, I K, no. 211) submitted to Parliament by Mr. Lindhagen but composed largely by the native Arjeplog Saamis (notably Karin Stenberg and Lars Spellok), the Arjeplog Saamis ask for greater legal protection against the "more primitive" extensive herding of the relocated Karesuando herders. In this motion, it is also stated that "the herding of the Jokkmokk Saamis holds a middle position between that of the Karesuando and the Southern Saamis."

Chapter 12

The Official Group Lists and the Complex Reality (1940—50)

The overcrowded summer lands had necessitated a marked, temporal shift in the eastward-migration schedule for both man and reindeer. The eastward move of the Viri families became a bare-ground move in August and was no longer a sled-caravan move to the lowlands in November or December. In many respects, eastward and westward moves are often mirror images of each other. If the Saamis move west by pack caravan, it is usual for them to return east to the autumn land by pack caravan. In a similar manner, the Viri Saamis, who had combined spring, summer and autumn lands in the west, migrated up by sled caravan and back down to the winter land also by sled caravan. Without such symmetry, sleds and gear must be shuffled. The increasing separation of autumn land from summer land for most Karesuando Saamis demanded the introduction of a pack-caravan phase in the eastern move. But one cannot simply alter the timing of the eastward move and expect the westward move in spring to remain unchanged. If spring land and autumn land did not form a unit, that is, if the spring land remained combined with the summer land in the far west, then the easy circularity of the migration pattern would be broken. If the families moved west by sled in early spring and then left early in autumn to reach a separate autumn land in the west by pack caravan over bare ground, then the sleds would be left in the west and be unavailable for winter use or next spring's move. Obviously there would have to be some shuffling.

The Nuortvalle Saamis could move both westward and eastward between the mountains and their combined spring/autumn zone during the bare-ground period, due to the favorable, easterly location of their calving-land possibilities in Skeltavare and, in general, the excellent, spring/autumn, grazing capacity of Nuortvalle. The Kaska Tjavelk Group, however, could not follow this system. The Kaska Tjavelk grazing area is depleted early in spring and autumn. What is more, it is poor as calving land, and the pregnant cows move quickly through the long forest stretch and find their first calving lands and good spring grazing well to

the west around Vuoka or even further up around Tuoddar. This in turn meant that the Kaska Tjavelk group could not simply put aside the old practice of an early westward move to suit their need of and growing habituation to an early eastward move. How could an early-spring sled move be combined with an autumn, pack-caravan, bare-ground move?

In order to understand the system which developed, one must consider the flexibility of the old migration system and realize that this older migration form was composed of numerous elements in combination, which could, without much difficulty, be broken apart. The old, spring, sled migration served to bring herd, families and supplies to the western grazing lands. Now, however, the sleds would not only go west in spring, but must also be brought back down in spring, in order to be on hand in the autumn camp later for the continued move from the autumn land to the winter land and to serve afresh next spring. Then, again, not all sleds would be returned to the lowlands in spring. A few would be left in the west to be of use to herders in the late-autumn, sweep operation eastward in November and December. The families could stay behind most of the spring in the autumn camp (thus making it for the families a regular spring/autumn camp, although in spring the herd with some active herders would be much further west) and wait till the ground was bare before moving west by pack caravan. Only a few herders, if any, were needed to guard the calving process in the west and to watch for predators. As a result, the old, early-spring, migration method lived on, mainly as a quick supply run. Note that the sled supply run to Parka by the Nuortvalle Saamis came at this time as an innovation, while for the Karesuando Saamis, the sled run to Stalo was all that remained of a much larger event, a degenerate version of the old spring migration. Yet both developments were caused by much the same pressures, the "middle-way", herding system, which caused both groups to approach each other in method. The Karesuando herders still needed to bring supplies to Stalo, but those who had brought up the supplies would then turn around with their tame oxen and empty sleds to the lowlands again. These same oxen could be used as pack animals for the move west with the families later.

Sometimes, but with crowded winter lands increasingly less frequently, the herd would be held gathered until spring for each group or sub-group. Should the winter and very early spring grazing prove excellent, intensity could be maintained, despite the usual formation of a hard snow crust with the return of the sun, which can cause reindeer to scatter. In this case, the reindeer could be brought westward, as of old, in a gathered, orderly migration, along with the supply caravan (but without the family element). At Lastak, it was common to pull oxen from the herd in an attempt to keep them from following the pregnant cows west. The oxen, unlike the cows, were not hurrying west and, by leaving them around Lastak, the herders ensured that they would have pack animals for the migrations of the families later. Often, however, winter or early spring grazing condi-

tions had demanded extensivity, and the herds had been released to work their own way west. Under heavy snow cover, the crosswise fence offered no obstacle to the reindeer's westward move early in spring. The sled supply run would then proceed alone as an isolated segment of the old spring migration.

After leaving the supplies and returning to Rakka (and Lillselet), the Karesuando herders would not move west again with their families until June by pack caravan. Not infrequently, they had made a quick supply run even to Lastak, where the families would stop briefly to round up their oxen and put together the caravan. The move from Rakka to Lastak could be made by pack caravan if any oxen were available so far east so late in spring, but usually it was simply easier to travel this stretch by boat along Lakes Karatj and Peuraure (a practice reminiscent of the Nuortvalle method before the building of the crosswise fence).

Of the changes in the old, spring, sled-caravan migration imposed by the eastern shift and the separation of summer land and autumn land, one might say that for most herders extensivity replaced the herd's orderly move—there was no real need for intensivity any more during the bare-ground period—which in turn meant that the herders and families could follow a migration pattern different in scheduling and more free from that of their reindeer. This separation allowed the families to round out their early, eastward move by a later, westward move, both by pack caravan, on the Nuortvalle model of an increasingly dominant, easterly, spring/autumn camp period. The supply element of the old spring migration remained as a separate supply run by sled caravan, to which the herd's westward move was sometimes attached, sometimes not. The entire system is a remarkable hybrid of the Nuortvalle form and the old Virihaure form.

The war years had a decided effect on Tuorpon herding. Refugees flooded across the Norwegian border (see Erikson, M., 1974). Many died in the mountains, and many, half starved, plundered the supplies of the herders, which had been stored in Stalo. Little was left for the summer. In desperation, some refugees had even eaten old reindeer hides. Moreover, because of worldwide shortages, a rationing system with books of food coupons had been instituted, which prevented herders from buying many supplies all at once. With the rationing system, frequent visits to stores were necessary.

To accommodate these conditions, the Viri—Tjuolta Group did not attempt to divide its reindeer in the summer and drive them to Virihaure's western end. Herders did not like the prospect of having to gather strays in occupied Norway. Upon one such occasion, Nilas Blind (#43) and Per Labba (#40) were shot at by German soldiers. During the war years, rather than take up their summer quarters at Stalo, the families and even many of the herders situated themselves further east, closer to the Swedish supply lines (Kvikkjokk), even during the high summer. Stalo was occu-

ped by active herders, and the old spring/autumn camps at Kartevare, Kura and Tarra now served again temporarily as summer quarters for the families. By 1943 or 1944, there were absolutely no summer divisions. Virihaure, Kerkevare and Kåtnjunjes reindeer were mixed in one huge, summer, extensive herd, which was not separated until the autumn at the regular Lastak and Parka divisions into Nuortvalle and Kaska Tjavelk autumn groups.

Despite the war, and even despite the very reduced, total reindeer population of Tuorpon, Malmström insisted upon a threefold group division all summer as well as autumn. Apparently Malmström's divisions, which had never been strictly followed, were accredited with such success in maintaining order that they were to be kept operative even when the reindeer crowding which had inspired this system no longer actually existed. In a letter addressed to the Tuorpon Saamis and dated March 27, 1941, Malmström presented the following list:

Virihaure – Tjuolta:

Antaris Assar Blind	
Nils Petter Blind	Total, 1,011 reindeer
Tomas Annasson Labba	
Per Tomasson Labba	

Kerkevare – Kaska Tjavelk:

Guttorm Blind	
Gustav Omma	Total, 1,043 reindeer
Petter Parffa	
Lars Hotti	

Kåtnjunjes – Nuortvalle:

Anders Kuoljokk	
Guttorm Omma	
Henrik S. Omma	
Sara Pavval	Total, 2,207 reindeer
Petter Pavval	
Per Anders Pavval	
Nils Johan Pavval	

(Malmström, 1941)

Malmström notes that the Piltto family has moved to Kabla and points out that failure to comply with the above division can be punished with fines of up to 300 Swedish crowns. Note that, after almost five years in Nuortvalle, Hotti is still classed as a Kaska Tjavelk herder and is duly fined.

As mentioned in the previous chapter, the distinction between Viri and Kaska Tjavelk Saamis was of variable clarity. These Karesuando herders had adopted a kind of hybrid, herding system somewhere between the old,

predominantly western, Viri pattern and the predominantly eastern, Nuortvalle pattern. The Karesuando *families* tended more toward the Nuortvalle pattern. Their herds, however, showed great variation from herder to herder and even, for one specific herder, from year to year. So-called Viri – Tjuolta herders tended to keep their reindeer more in line with the old Viri pattern, while so-called Kaska Tjavelk herders tended toward the Nuortvalle pattern, with autumn use of the Kaska Tjavelk zone. But many Viri reindeer came east in August with the Kaska Tjavelk and Nuortvalle herds, and many Kaska Tjavelk reindeer stayed west all autumn with the Viri herd. In some years (as during the war especially), a Viri herder's reindeer would, on the whole, be distributed more on the Kaska Tjavelk pattern than on the Viri pattern. In other years, the pattern would be reversed. Sometimes a Kaska Tjavelk herder would have more head around Virihaure in the autumn than in the Kaska Tjavelk zone. Given this situation, I believe it far more realistic to regard the Karesuando herders (except for Guttorm Omma and Lars Hotti) at this time and until the late 1950s as constituting a single, basic, Viri – Kaska Tjavelk group. The herders themselves support this interpretation, regardless of the authorities' claims.

Even in the possible event of a summer division between old Viri and Kerkevare herders, this is hardly ground enough to define them as separate groups for spring and autumn as well. When summer separations were temporarily discontinued during the war, there was even less cause to see any distinction. This is not to say that without summer separations Kerkevare reindeer occupied the western end of Lake Virihaure to the same extent as the reindeer of Anders Blind and Per Labba, for example. The reindeer tended to adhere to their old habits, whether or not these habits were strictly encouraged. What it does mean, however, is that it was very difficult or rather meaningless to make any distinction at this time between the regular, eastward migration of Viri herders' reindeer in November and December and the supposed, sweep operation of Kaska Tjavelk herders. Both occurred at the same time and, moreover, their gathering was coordinated. Viri herders could gather in the Kerkevare area and Kerkevare herders could gather in the Viri area. Gathering parties could be of mixed membership. In fact, the herders never conceived of their mutual gathering and migration as being of mixed membership. To them, they had almost always been and still were basically one group, one which utilized both Viri and Kerkevare zones in the summer and both Viri and Kaska Tjavelk zones in the autumn.

Eventually the authorities also recognized the inappropriateness of distinguishing between old Viri and Kaska Tjavelk herders and listed them all instead as Kaska Tjavelk herders. Besides the intermission of summer separations during the war, little had happened to warrant this changed listing. The herders still followed what I have termed the Viri – Kaska Tjavelk, hybrid pattern. The authorities, however, had an ulterior

motive. They regarded the western end of Lake Virihaure as capable of hosting many more reindeer, that is, it was the perfect place to relocate more Karesuando Saamis, who would form a new Viri group. Even with the recognition that the old Viri – Kaska Tjavelk herders would still utilize the western end in summer and partially in spring and autumn (though officially not supposed to as Kaska Tjavelk herders), with the overall easing of the crowded situation after the 1936 winter catastrophe, the plans of the authorities were not completely unfounded.

The war had also had its effect in Karesuando. Although many Saamis had continued to migrate into occupied Norway according to the regulations of 1919, many had not. Many of them had changed their migration schedule and settlement pattern to suit an easterly shift. Moreover, the herds had swelled with good years. Crowding had again become a problem, and when facing the choice between resuming long migrations to Norway with heavy Norwegian restrictions (and the possibility of enforced slaughters) or moving south, many chose the latter. This time, the authorities attempted to entice herders south, rather than to command them.

No one said that we, specifically, should move, but the authorities spread sweet talk about fine grazing lands and much room. One spoke of a fine, reindeer-grazing area where there was hardly any reindeer herding. He who moved there would have the area almost all to himself, for there were so few people there. (Anna Margareta Labba, interviewed by Olsson, 1980:71.)

The movement of yet more Karesuando Saamis to Tuorpon met with considerable opposition from both the native Jokkmokk and the already relocated Karesuando Saamis, on the usual ground that there would be less room for their own herd growth. But the authorities were correct in their view that grazing at Virihaure's western end was not being used to full capacity, for many of the reindeer moved east in August (especially as summer separations had been neglected) and the total Tuorpon herd size was only about 4,000 head. No sooner had the chaos of the 1920s and 1930s begun to subside in Tuorpon than a new jolt was given.

The herding administration's new plan was to create a Virihaure group of new Karesuando herders based on the old original pattern used by herders such as Pava-Lasse, Heika Gubben and Parffa Gubben. The western end of Virihaure would serve as spring, summer and autumn land for the new group's *entire* herd—not a blurred, hybrid form. The old, predominantly westward, migration schedule, with long, sled-caravan moves, would be reinstated in keeping with the usual needs and habits of the newly arrived Karesuando reindeer and their herders. In 1944, six extended-family, herding entities arrived in Tuorpon from Kōnkāmā Village in the Karesuando district.

Seth Johannes Blind (1901—) (#48) ***** Anna Margareta Labba (1915—)
 |
 Per Nils (1939—) (#49)

Per Andersson Gunnare ***** Anna Maria Blind
(1890—1968) (#50) (1895—1972)
No children,
but foster-parents to siblings

Nils Henrik (1925—) (#51)
Lars (1928—)
Ella Kristina (1932—)
Per Gustav (1934—) (#52)
Jon Anders (1940—)

Olof Johannes Gunnare (1904—) (#53) ***** Inga Katarina Labba (1912—58)
 └── Per (1938—) (#54)
 └── Lars Henrik (1951—)

Mårten Nilsson Omma ***** Ella Kristina Nutti
 (1886—1960) (#55) (1895—1974)

|
 |
 | Nils Mikel (1920—63) (#56)
 | Ola (1922—) (#57)
 | Anders M. (1925—) (#58)
 Inger Ellen (1929—) *** Olof Henrik Blind
 (1932—);
 see chart 9

Nils M. Omma was already married upon arrival in Jokkmokk. He and four of his children met untimely and tragic deaths.

Along with these families came the old widow Margareta Hurri (1888—1952), mother of both Helge Elise, Nils M. Omma's wife, and Susanna Kristina, Lars P. Blind's wife.

Inga Kristina Labba's parents were Tomas and Kristina Labba. Their reindeer joined this new Viri group, but only Kristina Labba came to Tuorpon (once widowed). Olof T. Labba's active career in Tuorpon was brief. Their presence accounts for the name Labba contained in Manker's (1947) new, Viri-Group list. This Labba listed by Manker is thus not to be confused with Tomas Labba (#39) or Per Labba (#40), an easy mistake, for Manker lists only last names.

Chart 13. Karesuando families—L. Blind, S. Blind, P. Gunnare, O. Gunnare, M. Omma

Again we see the strong family bonds which united the families in this, the fourth and, to date, the last wave of Karesuando Saamis (aside from Johannes Orpus) to enter Tuorpon. Only three of these families, those of Lars Blind, his brother Seth Johannes Blind and their brother-in-law Per Gunnare (with foster-children, nieces and nephews on his wife's side) were actually assigned to Tuorpon. The Olof Gunnare and Mårten Omma families (with the Nils Omma family) followed without authorization; family bonds were enough. Under the stressful circumstances, the authorities could be quite lax about formalities. Olof Gunnare was a half-brother of Per Gunnare, and Helga Elise Hurri, the wife of Nils Omma and daughter-in-law of Mårten Omma, was a sister of Susanna Kristina Hurri, the wife of Lars Blind.

Moreover, this group shared ties with some of the Karesuando Saamis who had moved to Tuorpon earlier. Lars and Seth Johannes Blind were second or third cousins of Anders O. Blind, who had arrived in Tuorpon in 1926. Lars Walkeapää, a member of this last Karesuando wave, has told me that this contact with herders already in Tuorpon was very important to them. Even before arrival in Tuorpon, the thought that friends and relatives awaited them there was comforting. The newcomers would have much to learn of their new home environment from them (compare Åhren, 1979a:125).

This last wave of Karesuando Saamis coming to the Virihaure area (cf. *ibid.*:129) composed only briefly a new Viri group, distinct in migration pattern and following basically the old system of western grazing concentration which had ushered in all arrivals from Karesuando. Despite the plans of the authorities, this model for the new Viri Group was soon to be

abandoned.¹ The presence of so many other herders utilizing the western end of Lake Virihaure, members of what I have termed the Viri – Kaska Tjavelk Group, caused great mixing of herds. Late-summer separations would be necessary to comply with the authorities' ideal, and for the first two years or so after the war, with the general reinstatement of summer separations, this new Viri Group did divide and remain in Stalo (reindeer and herders) till November or December.

The emphasis in these separations in the 1940s, however, was somewhat different from that in the 1930s. In the 1930s, the authorities had made a major point of maintaining strict summer zones. Separations could be held throughout the summer, whenever mixing had occurred. In the 1940s, however, summer extensivity and herd-mixing was at least condoned, if not officially supported. The major concern was to see that the herds were more or less properly distributed in their autumn lands. The main reason behind the summer separations after the war (and these continued in places as late as 1950) was to facilitate eastward migration to the autumn lands, a move which could occur at different times for the different groups.

The Kabla Saamis, for example, still predominantly a native Jokkmokk group, moved east early and naturally wanted to migrate with a fairly clean herd, without pulling along large numbers of Tuorpon reindeer. Nuortvalle herders would also be moving east about the same time. Their reindeer habitually moved eastward early, and, if Viri – Kaska Tjavelk and new Viri herders did not want so many of their reindeer to follow, there must be a separation. The Kabla herders, now together with the Pärte herders in the newly formed Jåkkåkaska Village, would commonly host a separation at Alka in late July, just before proceeding east. Such separation was continued as late as 1965, when other summer separations in the area had ceased. The Tuorpon reindeer pulled out at this separation would be driven directly into the Jålli corral and subdivided according to Tuorpon groups. Tuorpon would gather in reindeer from its own summer land to the Jålli corral at the same time, so that the separating work would occur in a number of shifts and take many days. At Jålli, the Nuortvalle Group would separate (frequently with Varvek herders from Luokta Mavas Village) from the other Tuorpon herders of the Viri – Kaska Tjavelk and new Viri Groups. Nuortvalle herders would release their herd eastward and proceed toward Parka. Viri – Kaska Tjavelk herders would follow a couple of weeks later to Lastak, leaving behind (but only for two years) the new Viri herders till November.

The entire burden of separation into different, autumn-group herds

¹ It is interesting to note that, when they encountered reindeer belonging to the other, already established, Tuorpon herders for the first time, these newly arrived Karesuando herders were amazed by the wildness of these reindeer. This last group of Karesuando arrivals considered their herding form far more intensive than that practiced in Tuorpon at that time.

would thus not be placed on the Parka – Lastak divisions in August. In this way, the system of separation allowed more flexibility in the choice of autumn grazing-land utilization. The Viri – Kaska Tjavelk Saamis could choose how large a part of their total herd they might bring east to Kaska Tjavelk with the families and how large a part they might leave behind in the Viri area till later. After separation at Jälli from the Nuortvalle herders, the Viri – Kaska Tjavelk and new Viri herds were retained a while in the area “between the streams”, Stalojokk and Tukijokk. Just before the eastward move of the Viri – Kaska Tjavelk families to Lastak in early August, there would be a further separation between the Viri – Kaska Tjavelk and new Viri groups at Stalonjarga. Those Viri – Kaska Tjavelk reindeer separated here (those that were between the streams) would be driven eastward in a gathered mass. The rest of the Viri – Kaska Tjavelk herd would remain in the west till later with the new Viri herd.

Despite such separations, the new Viri reindeer, which were to be kept all autumn in Viri, were constantly being drawn eastward in July and August by the massive descent of reindeer. New Viri reindeer appearing at the Lastak and Parka separations would be pulled out with the Viri – Kaska Tjavelk Group. New Viri reindeer were never fully separated from Viri – Kaska Tjavelk reindeer in the Viri zones either. Moreover, later in the autumn, when the Viri – Kaska Tjavelk herders returned to the Viri area to begin gathering for the eastward sweep, this would occur just as new Viri herders were preparing their own move east. As their herds were mixed, it would have been meaningless to do anything other than cooperate, gather and migrate together. Why should the active new Viri herders remain in Stalo from August to November? Why bother with the August separation from the Viri – Kaska Tjavelk Group at Stalonjarga, when there was never any meaningful separation? In fact, all parties gained from cooperation and union.

The late-summer “corral occasions”, which had once been held to maintain strict, summer-zone usage and later to facilitate eastward migration only, were now continued basically for the opportunity they provided for calf-marking and castration. With increasing extensivity, these tasks had long since ceased to be possible without the herding of the reindeer into a corral. By the close of the 1940s, even Nuortvalle herders had ceased to divide their herd from the Viri – Kaska Tjavelk herd before moving east, and Viri – Kaska Tjavelk herders let their reindeer decide themselves how many would move east in August and how many would remain in the west for the sweep.¹

There were also powerful reasons for the new Viri Group’s merger with

¹ My own observations in the field in the 1970s indicate that much of the old function of late-summer separations has been taken over by the gathering operations for calf-markings. By gathering the herd for markings gradually further east as the summer progresses, one automatically separates a contingent of the total herd into an eastern segment, which is thereby “set up” for August separation at Parka.

the larger, Viri – Kaska Tjavelk group from the spring perspective as well. Many Viri – Kaska Tjavelk herders practiced early-spring (April) herd movement back to Viri with the sled supply run, and union for such efforts could be beneficial to all concerned. When extensivity had been necessary in the winter lands and the herds were mixed in spring, new Viri reindeer would move west with all the rest. Moreover, the families of Lars Blind, Seth Johannes Blind and Per Gunnare, instead of following them to Stalo in the summers, came to settle by Lake Karatj, bought homesteads, where they stayed essentially all year, kept cows and were “just like settlers.” Only the active herders went to Stalo. One can well understand that, with comfortable, permanent homes and families in the eastern lowlands, yet further incentive was given to the abandonment of herding quarters in Stalo for much of the spring and autumn periods.

It is difficult to give a specific date for the merging of the new Viri and Viri – Kaska Tjavelk groups, because such merging began sporadically and for a number of years seemed to come and go. But surely by 1950, one cannot speak of any real distinction between new Viri and Viri – Kaska Tjavelk herders.

Ironically, by the time Manker published his book in 1953, depicting group divisions and migration routes in 1945, his description had become totally outdated, certainly for Tuorpon at least. Manker’s account of group divisions and membership corresponds basically to that idealized by the authorities.¹ We have seen that the authorities considered the old Viri Group to have dissolved into the Kaska Tjavelk Group, a justified contention, especially during the war, but this conception fails totally to recognize the continued use of the Viri zone by both old Viri and Kaska Tjavelk Group herders in the kind of hybrid form I have described. By listing old Viri herders as Kaska Tjavelk herders and ignoring reality, the authorities and Manker could introduce the newly relocated Karesuando herders as an independent, new Viri Group and thus maintain neat categories. Actually, if anyone had insisted on the recognition of a Viri Group separate from the Kaska Tjavelk Group, Manker would have done better to list the *old* Viri herders in his Viri Group and the new Viri herders with Kaska Tjavelk. In the proof material for his book, preserved at the Nordic Museum in Stockholm, there is evidence that he was quite unsure how the herders should be categorized. It seems as if in desperation he adopted the official version. On the whole, old Viri herders were to continue to use the western end of Lake Virihaure in spring, summer and

¹ Manker’s 1953 list of Tuorpon-Group members differs only little from his 1947 list. Both are based on material dating from the early 1940s. By 1953, however, Manker had omitted the Ommas (Mårten and Nils Omma families) from the Viri Group. Margareta Hurri and Kristina Labba are also missing from Manker’s 1953 Viri-Group list. The lists are basically similar, however, in that in each case only members of the last wave of Karesuando herders are included in the Viri Group. But, as the next chapter will demonstrate, by 1953 the Viri Group was about to be revitalized by herders different from those listed by Manker.

autumn longer and more consistently than new Viri herders. Anders Blind and Per Labba, for example, have hardly changed their basic pattern in over 40 years.

I believe that Manker had an all too simplistic conception of herding-group organization, though I can heartily sympathize with his need to pinpoint some dominant structure and regard the situation at one particular season as reflecting major bonds of identity. But when camp location shows bonds with one group and herding collectivity with another group—when entities are not only split into smaller subdivisions, but these subdivisions are shuffled and recombined seasonally into different entities—then simple membership lists based on selective criteria must not be overvalued. Manker's threefold division of Tuorpon has greater validity if one accepts it merely as a description of winter tendencies. The new Viri herders did form an independent winter group at that time, but to apply this division scheme across the board is wrong. The real situation was far more fascinating.

Still the predominant division between Tuorpon herders, and a division which formed a part of almost every other distinction at this time, be it in camp location or herding cooperation and union throughout the seasons, was the Karesuando—Jokkmokk Saami split. Sten Sture Paterson (1943) in an unpublished report to Manker makes the interesting comment that "two of the Pavval families are from Karesuando." He means, of course, the Guttorm Omma and Lars Hotti families, who had joined Nuortvalle. So strong is the old family orientation of the Nuortvalle herding group that the newly arrived Omma and Hotti families from Karesuando are swallowed up in the category of "Pavval families." Aside from these two families (extended in 1946 by the arrival of Orpus), the Karesuando—Jokkmokk herding split was still very much in existence.

During the 1940s, many Karesuando families had petitioned the authorities to become Nuortvalle-Group herders and to be given access to Nuortvalle land. For those Viri—Kaska Tjavelk herders who were most interested in following the predominantly easterly, Nuortvalle herding model, the Kaska Tjavelk land zone was but a poor substitute for Nuortvalle. Kaska Tjavelk had limited grazing, troublesome grazing distribution and a high concentration of predators. The Nuortvalle herders, of course, protested against further Karesuando infiltration, and the authorities considered Nuortvalle lands well used and Kaska Tjavelk lands insufficiently used.

Just as the spring supply run with sleds can be viewed as an isolated element of the old, early-spring migration, so the late-autumn, sweeping operation of the Karesuando herders can be regarded as one of the functions of the old, late-autumn migration, which had brought herds and families east to the winter lands. At least one member from each of the Viri—Kaska Tjavelk Group families would head up toward the summer land with skis and backpacks in October. It could take them as much as

two months before the entire western area was swept clean and the reindeer gathered together for descent to the lowlands. Usually the work force split into two parts, the one covering Virihaure's western end and the area to the south, the other covering the eastern end far into Jákkákaska territory (before the construction of the fence along Jákkákaska's southern border). Usually the herds collected by these two groups would be joined before final descent to a lowland corral. Sometimes, however, one group had gathered a large herd before the other group and could not wait and, as a result, the reindeer were brought down in two separate stages. It is significant that the membership of these two gathering groups was totally arbitrary. That is, new Viri herders might gather at Virihaure's eastern end as well as at the western end. Official Kaska Tjavelk herders, such as the Parffas, might cover one area one year and the other area the next year.

Once in a lowland corral at Karats or Maitum, the reindeer would be divided into a number of different winter groups or maybe temporarily larger, combined groups until driven further and divided again into small sub-groups. Such a sweeping operation was also greatly advantageous to the Nuortvalle herders, who would be able to gain control over quite a number of their own reindeer, which otherwise would never have been brought down to the lowlands. Different herding groups often become dependent upon each other in these ways, especially with the increase of extensivity. One might say that the intensive effort of one group compensates for or makes possible the expanded extensivity of another group. As one might imagine, squabbles can easily arise over the point that those who benefit are not always those who have done the work. Such complaints increase with increasing extensivity, as work which benefits oneself becomes more and more impossible to distinguish from work which benefits everyone.

Finally, in 1945, came the official creation of Jákkákaska Lappby, which had been so long postponed by the turmoil of the war years. In proportion to the number of herders that both Tuorpon and Sirkas lost to this new Village, money was taken from the treasuries of Tuorpon and Sirkas to build a Jákkákaska treasury. Besides losing the Kabla Saamis and their grazing lands, Tuorpon also lost the Piltto family. The Pilttos had begun herding with the Kabla group as early as 1941. Piltto Gubben considered that the Virihaure area had become too crowded and, as one might expect, new family ties gave him the opportunity to change group. His daughter Inga-Maria had married the Kabla Saami Petter Lánta.

The 1940s, however, brought some new Tuorpon herders, besides those in the last wave of relocation. Erik Pavval, called "Norske Erik" (Norwegian Erik) to avoid confusion with Pära-Petter's son, Erik Axel Pavval, left occupied Norway to join his relatives in Sweden in 1942. He was a first cousin of the deceased Pava-Lasse (and thereby related to all Pavvals) and was part of the family which had hosted the native, Jokkmokk Viri

Group's reindeer on Norwegian grazing land in the summers (see p. 103). Johannes Orpus, another northern Saami from Lainiovuoma Village, joined Tuorpon with his herd in 1946. His move was not a matter of official relocation but rather because he had married a daughter of Lars Hotti. Both of these herders were therefore absorbed into the Nuortvalle Group. Similarly, Kalle Olsson, who was of mixed, Saamish—Swedish ancestry, was to be brought into the Nuortvalle Group through marriage with Lars Hotti's other daughter.

The officializing of Jákkákaska in itself cannot be considered to have occasioned any major changes in herding form, except that, in time, it brought with it the construction of a "lengthwise" fence, that is, a fence following the northwest—southeast slant of Village land, and seasonal reindeer movements. Fencing was placed along the new Village border between Tuorpon and Jákkákaska to prohibit too much straying over Village lines. One must bear in mind that, because of the policy of auctioning "whole-ears" (unmarked calves whose owners can no longer be identified, as the calves no longer follow their mothers), with the profit falling to the Village hosting the corral where the auction occurred, large-scale straying of reindeer during the summer into another Village's zone can mean considerable loss. For example, if Tuorpon "whole-ears" should stray into Jákkákaska, they might be gathered and sold at a Jákkákaska calf-marking, with the profit going to Jákkákaska.¹ Another important reason for the large-scale fencing of Jákkákaska borders is to protect the grazing land of this very narrow Village from exploitation by foreign herds. The rational herd size permitted Jákkákaska is only 4,500 head, indicating a low grazing capacity. Such fencing would also hinder all too great mixing and thus ease the job of separation later. The existence of lengthwise fencing across Tuorpon's northern border facilitates Tuorpon gathering. This fence, finally completed around 1965, was one of the main reasons why July herd separations between Jákkákaska and Tuorpon, such as those at Alka, became unnecessary.

The southern border of Tuorpon, however, had never been fenced and so many Luokta Mavas reindeer were mixed throughout Tuorpon spring, summer and autumn lands. The Arvas group of Luokta Mavas has more limited, summer-grazing lands, and their reindeer naturally follow the land's slope toward Varvek and Padjelanta along with the Nuortvalle reindeer.²

¹ I have heard even of instances in which herders from one Village have illegally gathered a little way into the territory of another Village, when they thought no one was looking, in order to pick up "whole ears". Herders have had to rush forth and assert their rights over their herds.

² Herders often use the expressions "moving with the land" or "moving against the land" or say that the land "pulls reindeer" in a certain direction. Anyone hiking in the mountains will experience the same thing. Moving lengthwise along mountain ridges is easier than moving up and down across them.

Map G. New Village boundaries after the creation of Jakkákaska Village (fences and roads not necessarily accurate for this time period — the mid-1940s.)

It must be remembered that the Arvas Saamis and the Nuortvalle Saamis "pulled together", that is, did not separate their herds but brought their reindeer to the same side of the separating corral during the August separations in the middle camps of Parka and Lastak. Division between them did not occur until they came to the essential autumn zones at the Rautare corral on the Nuortvalle side and at Arvas on the Arjeplog side.

Malmström, in his zeal for group divisions in the spring and summer as well as in the autumn, had instituted divisions between these Mavas and Tuorpon Saamis in the spring around the Skelta region and also later in the summer at the Jälli corral and on the Mavas side at a corral in Varvek. As high-summer separations subsided between Tuorpon groups and between Tuorpon and Arvas herders, the Mavas herders did not need to stay in Varvek all summer and waste effort on separations. As noted, the high-summer, corral occasions which had often been a combination of separation and calf-marking became more and more concentrated on calf-marking alone. In the interests of calf-marking, it could be far more advantageous for Mavas herders to camp on Tuorpon territory to facilitate gathering. They were no longer forced to contain their herds on their own territory all summer, which required that they camp on their own territory as well. Now they began to cross the Village border and camp near Stalajokk, and finally by the early 1950s they camped with their tents (often just "tourist tents") in the midst of Tuorpon's turf *kåtas* at Stalo. Of course, they could not build private, permanent dwellings on Tuorpon land. In Stalo, they could coordinate calf-marking activity with the Viri — Kaska Tjavelk Saamis, cover their interests at the calf-markings and even help with the gathering, as a large part of the herd was theirs.

The altered purpose of the summer-corral occasions also meant a change in camp location for the Nuortvalle Group. Nuortvalle herders began spending more and more time camped around Rovijaure rather than at Kåtnjunjes during the summers. A peninsula jutting from Lake Rovijaure's southwestern shore created an excellent natural corral for calf-markings. A number of Mavas herders came also to camp here, mixing with the Tuorpon herders of the Nuortvalle Group for basically the same reasons as they camped in Stalo. They would join in as full partners in the gathering and calf-marking at Rovi. Should a herd be gathered for marking at the Jälli corral (midway between Stalo and Rovi), a message would be sent to Rovi, so that the herders there might attend. Similarly, should a herd be gathered at the Rovi corral, Stalo herders would attend. As I have noted earlier, activity at the Rovi corral was, on the whole, later in the season than activity at the Jälli corral. Of course, this reflects the movement of the reindeer from west to east in late summer, but herders also coordinated their gathering operations, in order to stimulate and make more thorough this eastward movement. In late summer, a gathered herd might be driven into the Rovi corral, even though it is much closer to the Jälli corral, simply in order to bring it a bit eastward. In later

years, when herds decreased and Arvas and Nuortvalle herds did not mix as much with Viri—Kaska Tjavelk herds in the far west, the Mavas contingent in Stalo dwindled to almost nothing. During my field work in the 1970s, Stalo hosted one, sometimes two, Mavas herders in the summer.¹ The more easterly, combined, Tuorpon—Mavas contingent at Rovi continues at full strength to this day.

But, to return to the late 1940s, another incentive to camp at Stalo for the Mavas Saamis, a situation which was very prominent in the 1950s, was that, according to the Act of 1928, all herders were allowed to hunt and fish in all Village territories. Virihaure provided excellent fishing opportunities and could feed the herders all summer. Herders' hunting and fishing privileges were not to be confined to their own Village territories until the Herding Act of 1971. Moreover, the rapid development of air transportation to Stalo in the 1950s made this location even more attractive. Fresh supplies and mail could be flown in almost daily. There was no large lake near Varvek in which a seaplane could land.

The Nuortvalle and Viri—Kaska Tjavelk Saamis' herding involvement with their southern neighbors has always greatly exceeded their involvement with Jäkkäkaska to the north, even when the Kabla Saamis were officially a part of Tuorpon. The Mavas herders would leave Tuorpon territory toward the end of July, as their herd began moving eastward in company with the Nuortvalle herd. Mavas herders would follow Nuortvalle herders to Parka for the early August separations. Parka is, of course, as much a Mavas camp as it is a Tuorpon camp.

To summarize, the old purpose of strict summer division was never really to survive the disruption of the war, the decreased pressure for control resulting from the herding catastrophe of 1936 and the demise of farming. The old Viri—Tjuolta and Kerkevare—Kaska Tjavelk groups merged completely to form what I have termed a Viri—Kaska Tjavelk Group. In fact, they had never been successfully separated, despite the authorities. The introduction of a new Viri Group, created out of the last wave of Karesuando Saamis, which arrived in 1944, caused but a brief, blurred, three-group system. With their incorporation into the Viri—Kaska Tjavelk group, a basic, twofold division again prevailed until winter intensivity caused further subdivision.

From the herding perspective, even the twofold division was not clear until late summer, when separations were held to accommodate the descent of the Nuortvalle herders. The use of group names such as Kaska Tjavelk and Nuortvalle rather than Kerkevare or Kåtnjunjes in official records at this time reflects the emphasis on autumn lands as group

¹ Throughout the 1970s, Stalo also hosted one Nuortvalle herder, Sigvard Pavval. This Nuortvalle ambassador and the Mavas ambassador (alternately Alan or Martin Sjaggo) "roomed together" in a tent *káta* on the outskirts of the regular Stalo camp. At calf-markings, they cover not only their own interests, but, if need be, also the interests of their respective groups.

dividers over summer lands. Extensivity had thus pressed ahead in the western summer districts.

With extensivity spreading to the spring and autumn periods as well, a widening gap developed between the herding families and their reindeer. In the Nuortvalle Group, families followed the herd no further west than Parka. Separation from the herd was even greater and more extended in time for the Viri – Kaska Tjavelk families or, to be more precise, separation from their *whole* herd. The migration scheduling of these families shifted toward the Nuortvalle pattern, while the natural capacities of the Virihaure area and Kaska Tjavelk area in combination did not lend themselves so readily to a complete shift of this nature for the reindeer. As a result, we find a splitting up of the once-combined functions of migration. The movements of herd, families and supplies continued frequently as independent elements. New methods, such as the spring supply run by sled and the late-autumn sweeping operation, served old functions. One might view the Viri – Kaska Tjavelk herding system as a hybrid of the Nuortvalle system and the old, predominantly western, Viri-Group system. Similarly, increased, family – herd separation and increased herding extensivity for the Nuortvalle Group entailed certain steps toward the Viri pattern, such as a spring sled supply run to a permanent, tree-line camp, Parka.

From the social perspective, the twofold division between Nuortvalle and Viri – Kaska Tjavelk herders was apparent all year. The active Nuortvalle herders were based at Kartejokk, Rovi and Kåtnjunjes during the summer and came to Parka in early autumn. The Viri – Kaska Tjavelk herders were all at Stalo in the summer and only briefly at Lastak during the separations in early autumn. The autumn camps, Rakka and Puolle-måive, were, of course, separate.

Interestingly enough, despite the great unity within each of these two main Tuorpon groups, one can still find traces of older divisions or deeper family or other, seasonal, sub-group loyalties. The separation of Anders Blind and Per Labba in Lillselet during the autumn has already been mentioned. In a similar way, the study of *kâta* location, even within the same camp, can be quite revealing. In Staloluokta, for example, the families tend to cluster their *kâtas*, and one can also observe the effects of autumn or winter partnerships. Herding partners prefer to cluster together, but, as herding-group structure is so often changing, they tend to cluster according to the strongest and most lasting, herding bonds, these being generally, but not always, family bonds. As is amply demonstrated in this material, frequent mergings and separations in herding partnerships occur quite commonly on the group level. Individuals may change group, but most likely the whole group will change somehow together. As will be seen later, fission within a group occurs most frequently along old, latent, sub-group lines. Individual changes are almost always caused by family ties. In this respect, one might well claim that, due to advantageous

marriages across group lines, certain herders possess the ability to be more socially mobile than others. They are thus more able and more likely to switch herding-group membership.

Though his book was first published over ten years after his field work, Sten Sture Paterson (1956) presents an interesting but simplistic description of Tuorpon herding in the early 1940s. He emphasizes the increasing importance attached to the spring/autumn camps as a result of the modernization of transportation and communications. By the close of the 1940s, Tuorpon was indeed to enter a period of precarious, relative stability. Already by the time of his publication, however, Paterson's description was greatly outdated, and the development he noted, which placed increased emphasis on the spring/autumn camps, was in a very short time to cause their near abandonment. The eastward shift of herders in migration scheduling was to continue even farther, until each family's winter camp became its main home base.

Chapter 13

Further Eastern Shift and Group Fission (1950—60)

Most of the turmoil caused by the relocation of Karesuando Saamis, the accompanying increase in herd size, and the successive shifts in autumn grazing from Viri alone to Viri and Kaska Tjavelk, which were repeated with every new wave of Karesuando arrivals, had been resolved by the late 1940s. The following 15 years saw the introduction of no foreign herding entities, no climatic catastrophes, no changes in Village borders and no great problems caused by conflicts with farmers.

The late 1940s and early 1950s seem relatively quite stable. I believe that the stability of this period stemmed from the fact that herding form was in many ways freed from the rapid succession of new, overpowering determinants. Herders were no longer simply forced to react to new, external impositions to the same extent. Instead they became more in control of their own fates.

This short period of relative stability, however, was at best precarious. The Kaska Tjavelk grazing area is ill suited to serve as autumn land regularly for extensively herded reindeer over long periods. It is, moreover, a stronghold for lynx and wolverine. Furthermore, the increasing eastward shift toward Swedish settlements, in conjunction with longer periods free from herding activities, led to an ever-increasing attachment to modern comforts, innovations, use of new communications facilities and even part-time jobs. The world around them was changing too fast for herders to achieve any lasting stability.

For the life of the nomad, the 1950s must be seen as one of the greatest periods of modernization and of movement toward assimilation into Swedish society at large. It would be overly simplistic to regard this movement towards assimilation as one which was only forced or, on the other extreme, only freely chosen and beneficial to the herders.

The more herding is drawn into the web of the larger Swedish society, the more it is controlled by formerly external forces. To do full justice to the description of herding changes, one has to consider an ever-expanding circle of determinants. Reindeer-tax laws, Saami-housing restrictions, Saami military-service laws, to name but a few examples, all have bearings upon the herding enterprise. A diachronic survey of all such factors and

their effects would fill many volumes and is impossible here. Many interesting motivations for herding change must unfortunately be bypassed to allow for a rough description and essential explanation of herding changes.

Before turning to the effects of modernization, however, it is useful to recapitulate briefly and then expand the account of the herding form which was practiced from the late 1940s to the late 1950s.

The Nuortvalle Group

Because the course of extensivity spread from the west in the summer to envelop the spring/autumn lands further east, the description of herding changes has so far largely been concentrated on the bare-ground period. As the extensive method continued to spread, it began to gnaw at the edges of the winter period as well. The highly unstable and experimental, eastward shifts of the Karesuando Saamis in the 1930s and 1940s forced the Nuortvalle Group to make adjustments of course, but the basic scheme of Nuortvalle herding by this time had undergone a far smoother and less drastic change. Compared to the old Viri Group and each successive wave of Karesuando Saamis, the Nuortvalle Group had from the early 1900s been based further to the east, due largely to the topography and grazing distribution of the Nuortvalle zone. Change at Nuortvalle, however, was not simply a matter of adjustment to the turmoil introduced by the Karesuando Saamis. Pressures and possibilities within the Nuortvalle Group and independent of Karesuando-Saami influence were in operation, although on a seemingly calmer time-scale. But, with the close of the 1950s, the effects of modernization were to plunge both Nuortvalle and Viri – Kaska Tjavelk herders into a new era, heralded by a still further eastward shift, this time more evenly for both groups. In the late 1940s and early 1950s, however, the spring/autumn camps at Puollemåive and Rakka were still central hubs of herding activity for the Tuorpon Saamis.

When the Nuortvalle families returned from the winter lands by sled caravan to Puollemåive in late April or early May, their reindeer were released to work their own way westward. The pregnant cows could calve around Skeltavare, but just as often in those days much further west around Rovijaure and Staike (those that had passed the crosswise-fence barrier under snow cover). The oxen would, as usual, lag behind and provide the herders with pack animals for the westward move toward the end of June, though it was often a good deal of trouble to round them up. Note that in the early 1900s this westward move from Puollemåive had begun already 1 – 1½ months earlier. The jump in time is the difference between accompanying the herd to the calving land and not accompanying it. The Nuortvalle Group's eastern shift in the 1930s was mainly a

matter of stunted, summer-land penetration, some summer-land-camp changes and decreased mobility of the families, while the Karesuando Saamis had had to change not only their scheduling but also their autumn grazing-land use, migration form and autumn-camp location.

The Parka camp was reached around the end of June. Most of the families were to spend the entire summer here. Upon arrival at Parka, the herders took the opportunity afforded by the crosswise fence to have an early calf-marking. Many of the reindeer would still be east of the fence and many cows would have calved in the Skeltavare region to the east. Herders would spread out to the east and, aided by warm weather and the mosquitoes, gather these easterly reindeer against the fence and into the corral. The Mavas Saamis, who shared the Parka camp, would follow the same practice. Indeed, I have been told that the Arvas Saami Anton Sjaggo was the instigator of this method. After the calf-markings, the reindeer were released to the west of the fence. Only a few of the women accompanied their husbands further west to Rovijaure.

Once in Rovi, the herders would gather reindeer again for calf-markings on the peninsula jutting from the lake's southwestern shore. The camp at Rovi consisted of tent *kåtas*. Today there are two herding cabins for Tuorpon herders and two for Mavas herders. The lake had been stocked with fish, which the herders availed themselves of. As long as there were late-summer separations in the highlands, Nuortvalle and Mavas herders pulled their reindeer to the same side of the corral and released their combined herds toward the east, while the Viri—Kaska Tjavelk and Jákkåkaska Saamis pulled their reindeer to the other side together and drove their herds off westward. Later, however, only Anders Blind and Per Labba separated from the other Tuorpon Saamis to encourage western autumn grazing for their reindeer. Most Viri—Kaska Tjavelk herders were not (as yet) so averse to eastern, Kaska Tjavelk, autumn-land utilization and saw no reason to separate their reindeer from the Nuortvalle reindeer in the summer land, when this could be done at Parka. Later still, even this slight, summer division was to cease, but we can see in it a premonition of the fission to come in the Viri—Kaska Tjavelk Group.

In late summer, calf-marking and castration might occur again at Rovi, as the herd began moving eastward. While the reindeer were in the corral, herders caught the oxen they would need for the move to Parka. By gathering the herd in Rovi at the end of summer, the reindeer were speeded in their eastward progress. Once removed from the Viri area, it would not be long before they would be moving against the crosswise fence.

In Parka, the herders would be reunited with their families. The herders would remain in Parka for 2—3 weeks, until the great Parka—Lastak separations were over, near the middle of August. Usually the first of this series of separations would occur at Lastak. Whereas the Nuortvalle herd had wandered eastward freely and taken as much as 2 weeks to be

gathered into the corral, the Viri – Kaska Tjavelk herders brought much of their herd (at least in the earlier days) in a gathered mass directly to the Lastak corral, when they came from Viri around August 10.

After this herd at Lastak was divided, the Nuortvalle and Mavas herders, sometimes with Viri – Kaska Tjavelk help, set out to gather in the free-roaming reindeer pressing against the fence, mainly Mavas and Nuortvalle reindeer. Within a short time, there could be numerous separations back and forth between Parka and Lastak. Oxen would be picked from the separation corral for the move to autumn quarters.

When Lastak and Parka first became camps of importance in the late 1930s for all Viri – Kaska Tjavelk and Nuortvalle Saamis respectively, the Lastak camp consisted of turf *kâtas* in the Karesuando-Saami fashion, while the Parka camp consisted of tent *kâtas* (double-arch variety). Slowly, in the 1940s and 1950s, following the lead of Nuortvalle's Karesuando Saamis, Omma and Hotti, the Pavval Saamis had also begun constructing turf *kâtas* at Parka.

After the separations at Lastak and Parka, the reindeer, now in two parts, were released to the east of the crosswise fence to wander freely further down into the main Kaska Tjavelk and Nuortvalle zones. The herders reached Puollemåive by the end of August and remained there until the snows came, the lakes froze and the autumn separations were completed, usually sometime in November. The reindeer would thus be left on their own till late October, when gathering operations were begun, unless wolves were known to be in the vicinity, in which case guards were posted. Nonetheless, as in summer, herding continued to be mostly extensive.

With the coming of the snows, the Nuortvalle herders gathered together their reindeer and brought them to the corral at Rautare for autumn separation. A large, wooden, permanent corral had been built there to accommodate this big separation. In the past, only a small, simple, brush corral would be thrown up. Herds were cleaner then; intensivity had been maintained throughout the autumn period, and therefore the number of animals corraled was less, while the separating work was much easier. Now, with no real intensivity applied to the herds since their release in spring, mixtures were great and the separating work heavy. Mavas herders were also out sweeping their area at this time and would also host separations. Unlike their Nuortvalle neighbors, the Mavas herders gathered not only from their autumn zone, but also from their summer zone. Nuortvalle herders could rely upon Viri – Kaska Tjavelk herders to cover their mutual summer zone. As already noted, Viri – Kaska Tjavelk herders had been out since October, sweeping clean the entire western reaches and would also be descending around this time with the reindeer they had gathered to bring them to an autumn separating corral, usually at Karats. Nuortvalle herders would, of course, attend these other separations to pull out their numerous strays.

At these autumn separations, Nuortvalle would finally separate from Mavas, and the Nuortvalle herders themselves would divide into three winter *sitas*. When the autumn separations were over and each winter-*sita* group of herders had collected its reindeer from all the various corrals, they would split up and proceed to their different winter lands by sled caravan in company with their herds. The period of winter intensivity would then begin.

The large, extended, Lars Hotti family would move first to Talvatis at Karats, where Hotti had bought a house. They would soon depart toward Tårrajaur and later continue to the main winter quarters in Sudok. The Guttorm Omma family group would establish its winter base in Kitajaur, while all the remaining Pavvals would move as a team through Nausta and stay at Johannestorp near Kåbdalis. All of these families would rent winter space in convenient farmhouses, usually in so-called *bagarstugor* or outlying bakers' cottages.

Later in the 1950s, the Pavval group was to discontinue its long move to Johannestorp and stay instead at Maitum and Tårrajaur. With the purchase of a house in Tårrajaur in the late 1960s, the Pavvals no longer sought lodging in Maitum.

Around the end of April, these herders would break up their respective winter camps and move toward Puollemåive again with sled caravans and tent *kåtas*. Movement was best during the night, when the snow formed a hard crust. They would usually reach Puollemåive by early May, whereupon they would release their herds to continue westward. A few oxen would be temporarily detained for the spring supply run to Parka. Extensivity had begun again.

The Viri – Kaska Tjavelk Group

The herding form of this group during this period has already been largely explained. The families returned by sled to their spring/autumn camps, the main one being Rakka, about the same time in early spring as the Nuortvalle Group returned to Puollemåive. Unlike Nuortvalle practice, however, the different, separate, winter Viri – Kaska Tjavelk herds were often released directly from the winter land east of Rakka in conjunction with the families' move. Herds could be left near Ljunga or Pårtnak, for instance, while some oxen only were taken for the caravan needed for a family's move to Rakka. Thus Viri – Kaska Tjavelk reindeer would be mixing with Nuortvalle reindeer and even Mavas reindeer in the spring, as they moved westward.

With the end of summer separations and the complete acceptance of mixing in the summer lands, there was no pressing reason to maintain control of the herd and bring the reindeer west to the calving land in a

gathered drive. The westward move of the Nuortvalle herd would be slower and tend not to penetrate so far westward. It made little difference to Viri – Kaska Tjavelk herders to try to establish any greater distinctions between bare-ground reindeer groups than those automatically resulting from topography, the reindeer's habits and the situation arising from winter intensivity. Amongst themselves, Viri – Kaska Tjavelk herders had no reason for division, as they would form one group until it was time to depart from Rakka eastward for the winter lowlands many months later. Even such inveterate, old-style, Viri herders as Anders Blind and Per Labba gave up the practice of bringing their herds westward to Viri in orderly migration along with the sled supply run. According to the authorities, moreover, such a move of the Viri – Kaska Tjavelk herds (which the authorities acknowledged as Kaska Tjavelk herds *only* in the spring and autumn) would have been unacceptable. Only the reindeer of the new Viri Group were to use Viri pastures in the spring. Of course, this new Viri Group did not really exist as a separate entity by the 1950s, and Viri – Kaska Tjavelk reindeer had never fully evacuated the Viri zone in autumn or avoided it in spring, but for so-called Kaska Tjavelk herders to have openly flaunted the regulations would have been too much. The spring, sled supply run to Stalo undertaken by each family or *sita* would move westward without the company of a gathered herd. This is not to say, however, that Viri – Kaska Tjavelk reindeer could not have reached the Viri zone on their own long before the supply caravans.

Near the end of June, the families usually moved by boat toward Lastak, where they assembled a pack caravan and proceeded to Stalo, a move which could take 4–5 days. The families began to congregate in Stalo by the end of June. The herders would gather the reindeer for calf-markings at Jälli, at the Keddaure corral not far from Stalo, or also sometimes at the corral on Virihaure's western shore, this last alternative serving especially during the early years, when the new Viri Group tried to remain separate.

Large-scale preoccupation with summer fishing in Virihaure was made possible by seaplane traffic, which opened up possibilities of sales to external markets. The Saami hunter Sven Larsson, from Skaite, was the first to begin this enterprise. A number of different seaplane-freight companies have vied for the catches of the herder – fishermen. With the improvement of the seaplane service, boat motors and nylon nets, the fishing business in Virihaure was to increase dramatically in the 1950s, a development which could never have occurred without summer extensivity in herding. The time gained by the herders from summer extensivity could be spent fishing on an ever-widening number of lakes in the vicinity of the summer camp. A number of boats were hauled by reindeer to Stalo in the spring, frequently from Sulitelma in Norway. Small boats were carried from lake to lake, and tent *kátas* were to make a re-appearance, now utilized by northern Saamis as temporary, mobile, fishing quarters.

Fishing has provided excellent opportunities, especially for the older, retired herders and the small, less active herders. One might claim that the development of the fishing industry has itself caused increased herding extensivity. While this may be true for some herders, it is not necessarily so. Fishing profits also help the small herder to maintain a herding livelihood, which he might otherwise have to liquidate. Thus it can in some cases ensure a modicum of intensivity.

As noted, by the 1950s, internal, Tuorpon, summer separations had deteriorated, so that corral occasions were mainly devoted to calf-marking and castration. Summer separations between Villages, between Tuorpon and Jákkákaska, were to continue somewhat longer. On all these corral occasions, it was common to castrate all the available bulls over 4 years of age. Large-scale, bull slaughter in September for sale was not to become a possibility until the 1960s. Transportation facilities were still inadequate to freight reindeer slaughtered in the highlands to the lowlands profitably. The consumer market, the slaughterhouse industry and the herders themselves were soon to capitalize on the new, air-transport facilities to create the highly profitable, early-rutting-season, bull slaughter, when the bulls are at peak weight. The organization of this slaughter, however, demanded coordination between many parties. The slaughterhouse industry would have to develop mobile slaughter units capable of speedy, on-the-spot butchering, so that the meat would not spoil in the heat of the day. Roads would have to be built further westward to allow the slaughter-unit trucks to approach the mountains—often an indirect result of the hydro-electric-power, dam-construction epoch. Where the road did not reach the slaughter corral, the gap would have to be bridged by air transport. Helicopters would have to freight the dead bulls from the corral to the slaughter-unit trucks. For the herders, this arrangement would mean not only a special, early-September, gathering mission to bring the bulls to the slaughter corral, but also great changes in the husbandry task of castration. By allowing a bull to go uncastrated, herders could increase profits, for a bull in the early rutting season generally weighs more than an ox at peak weight. Then, again, bulls are often more difficult to bring to corral and liable to be lost as income to the herder altogether. Bulls are also among the first casualties of a very severe winter. With the advent of September bull slaughter, castration policy has become a multi-faceted, complex issue, over which there is much debate and discussion over and above what was already the case with the selection of tame oxen for the caravans or the selection of oxen for winter slaughter.

Nuortvalle herders range over only minor, summer-fishing waters, compared to Viri herders, and therefore the air service to Nuortvalle herders is not developed to the same extent. As fish is not flown out from Parka or Rovi, as it is from Virihaure, supplies are not as often flown in. Nuortvalle herders have had to rely more upon supplies stored from overland, spring supply runs (later to be conducted by snowmobiles

rather than reindeer caravan). Of course, supplies are flown into Nuortvalle camps, but, as air freight is expensive, there is usually an ulterior motive for the flight. Even today, the visitor to the Parka and Stalo summer camps can note considerable differences in the menu. Stalo herders enjoy fresh milk and fresh fruit and bake much bread expressly for sale to tourists. In Parka, powdered milk is more common, fresh fruit very rare, and bread is generally too valuable to be sold in large quantities. For many years now, Isak Parffa's family has run a tiny store in Stalo, stocked almost daily by the Lundqvist seaplane service.

Then, again, seaplanes and helicopters bring in an ever-increasing flood of tourists to Stalo. The Swedish Touring Club (STF) began by constructing a couple of *kåtas* near the village for hikers. Now the Swedish Forest Service (Domänverket) controls tourism in the National Parks. Much of the Tuorpon summer land, notably the Viri area, has (since 1962) been contained within the Padjelanta National Park, and the Forest Service has built and maintains a major tourist-cabin complex in Staloluokta. Administration of the National Parks in the area—Padjelanta, Sarek, Stora Sjöfallet and Muddus—seems to be far from settled. Different government departments are competing for control, and in the scramble the Saamis' interests are often ignored. While tourism can be beneficial for herders, too much of it is not, and tourism of an unregulated and ill-informed variety can be very damaging to the livelihood of herders. Nuortvalle herders are glad to avoid daily, summer, air traffic and streams of tourists, even if it means no fresh fruit, though they have come to benefit from air transport in other respects, such as for bull slaughter and family movements, just as much as Viri—Kaska Tjavelk herders.

The Lastak—Parka divisions have already been described, as has the Viri—Kaska Tjavelk, late-autumn, sweep operation, which gathered the reindeer still in the west for lowland, autumn separation at Karats, where the herd was split up according to winter groups. Of course, those Viri—Kaska Tjavelk reindeer already in the Kaska Tjavelk area since the Lastak—Parka separations would have to be gathered together and brought to corral as well. Viri—Kaska Tjavelk herders would also attend the autumn separations hosted by Nuortvalle at Rautare to gather strays. After these autumn separations, the families would split, usually into three or four groups, leave their spring/autumn camp at Rakka (or Lillselet) and proceed to separate, winter lands by sled caravan. Later in the 1950s, as herders acquired permanent homes further east, some families moved from Rakka eastward before the separations by boat, when the lakes were still open. Note the increasingly diminished dependence upon transportation by tame oxen.

Those families which constituted the last wave of Karesuando Saamis often formed one winter *sita*, although Mårten Omma and his sons were inconstant partners. As early as 1945, members of this group had purchased the homestead at Olstorp. Seth Johannes Blind was soon thereafter

to buy a homestead, Nygård, in Luvos. At this time, road construction ended at Luvos, where there was even a store. Together with Lars Hotti's purchase of the homestead at Talvatis, these permanent "Swedish homes", situated by roads, presaged another major eastern shift, the combination of spring/autumn quarters with winter quarters.

When the winter lands were not so heavily exploited by the timber industry and crisscrossed by roads, it was not necessary to move so far east in the winter under favorable climatic conditions. Yet herders *could* move far to the east and find excellent pasture. As eastern pastures have become ruined, herders have gradually come to make do with more westerly, lowland regions. As these regions have also become increasingly exploited, herders have sometimes been forced to brave the unsatisfactory conditions further east. This accounts for the confusing statements by herders to the effect that lowland-grazing destruction has necessitated deeper eastern penetration, on the one hand, but retention of herds in the west, on the other. Utilization of winter grazing came to demand more frequent moves, and the risk of mixing has increased. Herds are less inclined to scatter when grazing is not only good, but also undisturbed in large blocks. Reindeer scatter over land cut by roads and snowmobile tracks. They will follow trails, roads and other reindeer tracks. In the past, a number of different winter *sitas* could maintain quite separate herds in near proximity to each other. Herders in different winter *sitas* might come to buy homes very close to each other. In time, however, with the destruction of much winter grazing, close proximity of this kind could prove problematical, with herd-mixing. Intensivity became more difficult to maintain even in winter, intensivity's stronghold.

At this time, however, the families which had composed the last wave of Karesuando Saamis were able to spend both spring and autumn, as well as a large part of or all the winter, in their Olstorp and Luvos homes. The herd could be held nearby in Piertinjaure (some of the herders might even be quartered in shifts at a farmhouse there) or even closer in Luvos. Later in winter, if necessary, a move might be made to Lillån, Norvijaure and/or Maitum. At this time, it becomes very easy to confuse main living quarters with herder-guard stations, in keeping with the increasing separation of families and herds.

Anders Blind would usually form the nucleus of another winter *sita*, with grazing in the Stenträsk area. As long as Tomas Labba lived, Per, Tomas and Guttorm Labba formed a separate winter *sita* at Pärtnek, Norvijaure or Kåbdalis. Guttorm Labba, however, moved permanently to Norway and after Tomas died, Per Labba formed a winter group with his brothers-in-law Nilas Blind and Olov-Björn Blind and with Olov Gunnare north of Laddosjön, Pärtnek or all the way to Lillån. But, by the mid 1960s, Per Labba had built a house in Stenträsk and formed a winter partnership until his death with Anders Blind. This move must be seen in context with the revitalization of the Viri Group, which will be discussed

shortly. The other Viri – Kaska Tjavelk herders often formed yet another winter group, also in the Stenträsk – Maitum area.

It is important to note here that the number of winter *sitas* for the Viri – Kaska Tjavelk Group and their membership could change considerably from winter to winter. For example, the Mårten Omma and Nils Omma families might form a separate *sita* or join with Anders Blind, as might Per Labba and Olov Björn Blind. The intensity of winter herding demands much flexibility in the timing of moves between winter pastures and family residence to suit the highly changeable and precarious, grazing conditions. To record specific details on all of these winter *sita* grouping and pasturage shifts at this time is impossible. No one remembers more than certain basic tendencies and one must guard against allowing these to assume too great an appearance of stability. As with the Nuortvalle Group, the separate, Viri – Kaska Tjavelk Group, winter *sitas* would move back toward spring/autumn camp by the end of April. As noted, their herds would generally be released upon the departure of the herders from the winter land, and the reindeer would mix and move freely westward.

More information about Tuorpon herding in the late 1940s and early 1950s can be obtained from Manker (1953), who gives a schematic presentation of each group's migration route. I must point out, however, that Manker's presentation gives no idea of the enormous flexibility involved in the nomadic life. Manker's treatment of winter groups is deficient, as he persists in equating these simply with the larger, more stable, bare-ground-period groups. Another major insufficiency is that little distinction is made between the movements of the reindeer and the movements of the herders. As previously observed, their separation could be at times quite decided. This is surely why Manker comes to classify Viri – Kaska Tjavelk herders as Kaska Tjavelk herders only. A mere listing of group divisions, migration routes, dwelling types and seasons for moving, while containing much valuable information, is most inadequate for the explanation of herding form and change attempted here. I believe the most challenging task in a description of a nomadic herding Village is to give an idea of the organic unity or interdependence of its parts.

In the 1950s, a number of important changes began to occur. Crowding in the grazing lands was no longer a problem, and conflicts between herders and farmers were rare. Given this situation, the authorities relaxed their strict insistence on regulating grazing utilization according to group. The old rules remained, but the herders were left far more on their own. The authorities would intervene only if a quarrel arose. Utilization of the Kaska Tjavelk zone as spring and autumn land had been largely an alternative born of necessity. Under more favorable conditions, this was not an alternative valued much by the reindeer or their herders. Seasonally long dependence upon the Kaska Tjavelk grazing area had never been very attractive. The dearth of eastern, treeless mountains in this land strip

caused the reindeer to exhaust autumn grazing early and to scatter. Similarly, in spring, without good grazing or calving lands, Kaska Tjavelk reindeer caught in the east on bare ground were early squeezed against the crosswise fence in an effort to move westward. Most of the Kaska Tjavelk reindeer had already managed to get past the fence and on toward Virihaure ahead of the herders, before the latter came to Lastak, caught tame oxen for caravans and followed. With the separation of autumn land from spring land for much of the herd, the gap between the reindeer's location and the herders' location had widened. The poor Kaska Tjavelk grazing, coupled with the herders' problems with collective work organization (always a problem in big groups) and increasing devotion to more settled comforts, led to an extensivity which enabled the numerous predators in the Kaska Tjavelk zone to wreak havoc. It became plain to many Viri—Kaska Tjavelk herders that they must try to keep their herds out of this area.

Instead of releasing the major part of their herds into the Kaska Tjavelk area after the Parka—Lastak separations in August, they left most of their reindeer in the west and brought them down to the winter lowlands, directly in keeping with the usual sweep maneuver in November. Now that herders had formed stronger ties with eastern settlements, even when the majority of their reindeer came to spend autumn in the west, the families and herders moved eastward. Extensivity was both a cause and an effect of this herd—herder split. The herders' maintenance of the easterly shift, despite their reindeer's westward autumn location, reflects strongly the shift from dependence upon a natural economy to a cash economy. Not only was it no longer necessary constantly to keep in direct contact with the herd, but it could also be more comfortable and, with extra part-time jobs, even more profitable *not* to maintain such contact. Such lack of contact meant increased extensivity for the reindeer, which in turn meant an increasing attraction to and movement toward dependence upon a cash economy, modern market supplies and extra, non-herding income. A powerful vicious circle, or rather a spiral, which I have termed the *extensive spiral*, was thereby forged, a spiral which, if unchecked, will finally threaten the very survival of herding.

A major portion of the Viri—Kaska Tjavelk reindeer, it will be remembered, had not always been simply permitted near the end of July to wander freely toward Lastak. They had been gathered and driven eastward directly into the Lastak corral, in keeping with the eastward migration. Herders had even made short gathering expeditions from Lastak to bring in more reindeer from the west to the corral for the August separation. This practice of actively driving their herd eastward was abandoned at a time when summer separations ceased, and the reindeer were no longer gathered in keeping with the separation and prepared, thereby, for orderly, eastward movement. Most of the Viri—Kaska Tjavelk reindeer were quite content to stay in the west and utilize the

excellent autumn grazing of the Virihaure and Tuoddar areas. Thus, while Viri – Kaska Tjavelk herders did not actively hinder their reindeer from moving eastward with the Nuortvalle reindeer, they did not encourage them to do so either. Of course, many Viri – Kaska Tjavelk reindeer still appeared at the Parka – (Lastak) separations, and, as will be discussed in more detail in the following chapter, some Viri – Kaska Tjavelk herders later in the 1960s moved their reindeer with the Nuortvalle Group, in order to avoid releasing them into the Kaska Tjavelk zone. These Viri – Kaska Tjavelk reindeer could be recovered from Nuortvalle a few months later anyway at the regular, autumn separations.

When herders allowed most of their herd to remain in the west and did not drive them directly into the Lastak corral for separation, the importance of Lastak as a place for separations and therefore for August living quarters waned. Separations in early August would still be held at Parka, and Viri – Kaska Tjavelk herders would still have reindeer there, but there was no need to continue the elaborate and troublesome shuffling between corrals. All major separations would occur at Parka. Of course, the Viri – Kaska Tjavelk reindeer pulled out at Parka had still to be taken from Parka through the Lastak corral, in order to be released on the Kaska Tjavelk side of the Peuraure fence. Viri – Kaska Tjavelk families were soon to give up the pack-caravan move from Stalo eastward and would instead migrate by air to Kvikkjokk, thus bypassing Lastak entirely. Soon they would cease to inhabit Rakka as well. Lastak became a kind of herders' barracks for short-term, sporadic habitation till around 1965. Since then, Lastak has only been an occasional home for a passing herder or fishing party. As a vital point on the Tuorpon herding schedule, the Lastak camp faded gradually in the 1950s and became a thing of the past in the 1960s.

Little by little, Viri – Kaska Tjavelk herders with reindeer to pull out at Parka came to quarter themselves at Parka rather than at Lastak (especially those who first began to separate their reindeer with the Nuortvalle Group). They might stay with friends or throw up a tent for the brief period of intense work. A collective Village *kâta*, a so-called *tjelti* (čiel'de) *kâta*, was constructed in Parka with funds from the Village treasury to house non-Nuortvalle Tuorpon members or, as it turned out in time, newly enlisted Nuortvalle members from Stalo who had no summer residence in Parka. Jákkâkaska Village built a similar *tjelti kâta* nearby for its own Parka-separation representatives. In the late 1960s and early 1970s certain old, Viri – Kaska Tjavelk herders, i.e. new Nuortvalle herders, were even to build small cabins in Parka adequate for their brief stay.

We see here a crisis approaching in the Viri – Kaska Tjavelk herding form during the 1950s. Either the herders must accept the movement of a large portion of their herd eastward with the Nuortvalle reindeer and suffer the consequences of herd loss in the Kaska Tjavelk zone or else they

must combat the extensive spiral and actively encourage their reindeer to remain all autumn in the west. As will be seen, those who chose the eastern alternative tried to solve the Kaska Tjavelk problem by becoming Nuortvalle herders or rather Viri – Nuortvalle herders with a hybrid, migration schedule and grazing-utilization pattern similar to those of the Viri – Kaska Tjavelk herders, but with the Nuortvalle zone substituted for the Kaska Tjavelk zone. Late in the 1970s, we find the same kind of crisis splitting the enlarged Viri – Nuortvalle Group, this time because even further extensivity and encroachments by the military made the prospects of Nuortvalle autumn utilization problematical (see p. 223). The *laissez-faire* approach begun with the end of summer separations, when herders simply gave up encouraging their reindeer to adopt one pattern or the other, was but a step toward further extensivity and solved no problems.

Two major developments intertwined at this time to produce still greater extensivity and a stimulus to the choice of what I have termed the eastern alternative. The first has already been forecasted – the continued, eastern shift of herding families with the collapse of separation between spring/autumn and winter quarters. The second was the completion of the road to Kvikkjokk, which ushered in the new method of family migration by seaplane.

Gradually both Rakka and Puollemåive were divested of their central importance in the herding cycle. Bit by bit, herders were able to buy up cabins and houses further east, near to or directly in the middle of the essential winter lands. With the demise of farming and the modernization of the timber industry which replaced human labor with machines, the landscape was dotted with abandoned homes. Rather than just rent seasonal lodgings in the winter lands, herders could now take over these vacated homes. With new chances of obtaining financial aid and loans, herders were rapidly able to better their winter living conditions. With the great expansion in the road network, herders would be able to accommodate their herds in quite a range of different locations from one central location. The coming of the snowmobile a few years later increased this ability.

Moreover, from a herding standpoint, there was little use in spending time in spring/autumn camp. The herds were unguarded and spread often miles to the west. The Viri – Kaska Tjavelk autumn separations, usually at Karats, were already in the essential winter land. It was also a simple matter for the Nuortvalle Saamis to begin separations further east rather than at the Rautare corral. After gathering the herd in the late-autumn, sweeping operations, the herders could bring the reindeer directly to the winter lands for separation at Stenträsk or Maitum, for instance, near the newly established spring/autumn – winter home bases. Of course, the scattered reindeer in the easterly Nuortvalle and Kaska Tjavelk zones would also have to be gathered for separation, and Puollemåive and Rakka still afforded active herders good bases of operations for this job.

Even today, herders use their old homes in these camps as they might use regular herders' cabins built by the Village, that is, as barracks (often a number of herders together) during gathering work. Quick and easy snowmobile transport has even brought occasional habitation back to Puollemåive and Rakka in later years, but these visits by the families are often termed "vacation trips" by the Saamis themselves. It can be a pleasure to get away from the roads and the big towns. On the whole, however, these camps lost their essential, herding *raison d'être* as autumn separations actually became winter separations.

Until the latter half of the 1950s, however, Rakka and Puollemåive served also as important migratory stations for the families themselves. It was there that the pack caravans were exchanged for sled caravans and vice versa. Transportation of the families, supplies and all household gear was no easy matter. It was highly beneficial to have a camp located somewhere conveniently between summer and winter camps. Were the families to spend all autumn, winter and spring in the winter lowland homes, how could they ever expect to find tame oxen to form a caravan? Moreover, this would mean a huge move to the summer land without the partial benefit of sleds, not even as far as the spring camp. For the Nuortvalle herders who had tended to maintain winter intensivity until they returned to Puollemåive, it would mean that families would grow even more out of touch with their herds during the reindeer's move west from the winter land. Winter intensivity would have to be abandoned earlier. Similar problems would arise with the eastern move in late summer or early autumn.

It might be argued that intensivity need not be sacrificed merely because the families lose touch with the herds; the active herders need not lose touch. But, if the family—herd split widens and the herder—herd split does not, it then follows that the family—herder split must widen. The family—herder split has been steadily widening (many herders see their families for only 9 months a year), but it cannot be carried to extremes without increasing the herder—herd split reaction. Thus, the more the demands of the educational system and the comforts, jobs and security of eastern lowland living remove the families from their herds, the more the herders are also pulled toward extensivity.

Rakka and Puollemåive afforded herders considerable convenience, with relatively quick and easy access to settlement areas and supplies to the east, while at the same time they were situated far enough west to be of real value during migrations and gathering operations. Most of this was to change with the introduction of migration by seaplane.

The transition was, of course, gradual. Herders continued for a while longer to travel over land between summer camp and spring/autumn camp. The first shifts in spring/autumn residence were not at all so far from the old spring/autumn camps. The cabins bought by herders were largely concentrated at the eastern end of Lake Karatj, at Karats, Luvos

and Berghem, following in effect the precedent of Lars Hotti, who purchased the Talvatis homestead, and of the families of Lars Blind, Seth Johannes Blind and Per Gunnare, with their purchase of Olstorp and Nygård in Luvos in the 1940s. These homes were thus in a better location with respect to roads and easy access to winter lands, but also not so much further east than Rakka and Puollemåive. Many herders still occupy these homes today (1980), but others have based themselves in permanent houses even farther east.

The seaplane, which was to set its mark on the herders' lives initially by making possible large-scale, commercial fishing in the highlands, soon branched out into other activities which had a profound effect on the nomadic life. Pilots such as Frisk, Johansson, Hedlund and the various Lundqvists have been pioneers in the development of air communications with and transport to and from the remote mountain regions. The role of the seaplane has expanded explosively. The Lundqvist family business, still in operation today, though not the first to use seaplanes for the collection of fish from the mountain lakes in this area, has been the most influential developer of the fishing enterprise and, through combination with fishing interests, the most instrumental in changing the herding families' nomadic patterns. Besides the freighting of fish and supplies, the seaplanes could transport the herders themselves, their entire families, dogs and even goats (though powdered milk and the air delivery of fresh milk soon made goats superfluous). The completion of the road to Kvikkjokk enabled herders to fly up to Stalo, for instance, from a point quite far west. Supplies and gear could be transported to the plane all the way by road. Similarly, families could return from the high mountains all the way to their winter quarters in a matter of hours without any need of tame oxen. Of course, other locations besides Kvikkjokk could be and have been used. The Lundqvists, for example, have for many years flown out of Lusbybryggan and Vietas along the Big Lule River. Nonetheless, the Kvikkjokk road seems to have been most significant for the Tuorpon herders, at least in the early years of air migration. Kvikkjokk is a famous tourist locality, and much of the air traffic developed primarily for this market.

From the fish merchant's standpoint, the job of flying the herding families to and from their summer camps was a small price to pay for taking able fishermen to the mountain lakes. For those who did business with them—soon almost all who had fishing potentialities—the fish-marketing seaplane pilots offered innumerable advantages. Herders have commented to me with a smile that "In the lowlands at our house by the road we get the newspaper twice a week, while up here in the mountains it is delivered daily." Soon these seaplane pilots were flying herders from Staloluokta out to strategic locations for gathering operations at a reasonable price or, if the calf-marking tempo became too high and herders barely had time to run between the various corrals, the seaplane could

ease the journey. In a few more years, herders would be calling planes and helicopters out of the skies by walkie-talkie radio, and helicopters flying low would be used in gathering operations.¹ As one herder put it, "we have taken to the air." This use of the seaplane replaced one of the major functions of the spring/autumn camp. The need to shuffle bare-ground caravan gear with sled caravan gear was obviated. Frozen lakes did not hinder helicopter transports, and snowmobiles soon came to deliver the *coup de grâce* to the reindeer caravan. The use of tame oxen has survived to a very limited extent. Thus ended one of the major reasons for and benefits of a more intensive herding form. So important do the older herders consider the past contact between the herder and his tame oxen that they speak of herding epochs often as the time of the caravans and the time after the caravans. According to these older herders, it is quite evident from the abilities of younger herders whether they were born during or after the caravan period.

Group fission

In the late 1950s the tension within the Viri–Kaska Tjavelk, hybrid-herding group between those favoring predominantly western-grazing utilization and those favoring eastern-grazing utilization came to a head. The altered transportation facilities and settlement pattern (because of and resulting in greater herding extensivity) favored the predominantly eastern herding pattern. Some herders preferred to follow the trend to ever-greater extensivity even further rather than to accept the widened, herder–family split which would otherwise result from increased attraction to and dependence upon eastern "Swedish" settlement. Other herders felt that minimal herding requirements could not tolerate a further herder–herder split and that rather than be drawn into an extensive spiral it would be better to suffer a widened, herder–family split.

According to Anders Blind, certain Viri–Kaska Tjavelk herders began a selective slaughter policy to eliminate reindeer tending to remain all autumn in the west. These herders preferred to brave the difficulties of Kaska Tjavelk herding while edging closer to the utilization of Nuortvalle autumn land.

As soon as Lakes Peuraure and Karatj froze, mixing of reindeer from Kaska Tjavelk to Nuortvalle and vice versa could occur. With the herders

¹ There is, of course, a major difference between using a helicopter in gathering operations to spot flocks and position herders, on the one hand, and using the helicopter itself (often with a noise machine attached to its belly) to drive and block reindeer, on the other hand. In Tuorpon, this latter type of use first occurred sporadically in the mid 1970s for the difficult task of corralling the pre-rut bulls for September slaughter at the Valli corral.

already tending toward earlier settlement in the winter lands, strict separation of herds was enforced less and less in the autumn. While Nuortvalle herders may have objected to this development, Kaska Tjavelk herders may have found it advantageous. In any case, neither group seemed able or willing to invest the work necessary to maintain strict separation. One could always separate later, further east at winter divisions. In fact, as noted earlier, some Viri – Kaska Tjavelk herders, by 1965 at least, actually began pulling out with Nuortvalle at the Parka August separations.

One may well wonder how Nuortvalle herders, always so concerned with protecting group and grazing-land integrity, could allow Viri – Kaska Tjavelk herders (Karesuando herders) to release their reindeer into the Nuortvalle zone. It was not until the Herding Act of 1971 that all Village lands were open to all Village herders on the basis of a collective decision. At this time, the grazing areas of certain groups were to be respected and, had they wanted to, the Nuortvalle herders could have enlisted the aid of the Saami sheriff and his inspectors to prohibit this merger. Nilas Blind has given me an interesting account of Nuortvalle's seeming passivity. According to him, the old Viri – Kaska Tjavelk herders found it more difficult to break herding etiquette and force their reindeer upon the Nuortvalle zone. The older herders therefore stayed longer than usual in Stalo and let the younger generation handle the "tough talk" in Parka. The Viri – Kaska Tjavelk ultimatum to Nuortvalle was simply that, if Viri – Kaska Tjavelk herders were stopped from pulling to the Nuortvalle side, they would hold separations in the western highlands during their autumn sweep and leave all the Nuortvalle reindeer in their company to wander off rather than bring them down to the lowland winter corral, where Nuortvalle herders could easily claim them. Should the Viri-Kaska Tjavelk herders host autumn separations in the mountains, this would demand the presence of the Nuortvalle herders, who had never participated in autumn-sweep operations and did not look forward to starting. In effect, the Viri – Kaska Tjavelk Group played upon the Nuortvalle Group's dependence upon the Viri – Kaska Tjavelk autumn sweep to recover much of its herd.

But, to return to the 1950s, there were also Viri – Kaska Tjavelk herders who did not approve of increasing dependence on eastern grazing, who did not wish to merge their main herd with Nuortvalle at the Parka separations and who regarded such efforts as being motivated largely by the desire to take the path of ever-increasing extensivity. To these herders, notably Anders Blind and Per Labba, joined later by Olov-Björn Blind and the Omma brothers Nils, Ola and Anders, the best policy was to do the opposite, to maintain the current degree of intensivity and, if anything, to increase it. They opposed the policy of selective slaughter of western-oriented reindeer and wished rather to escape the Kaska Tjavelk problem by continued utilization of Virihaure's western end in spring and

autumn. To them, their eastern-oriented reindeer were more of a problem. Of course, they would also prefer to pull to the Nuortvalle side any of their reindeer which came to Parka, but it would be even better if these were kept to a minimum. With two such different reactions, the Viri – Kaska Tjavelk Group split. Or, according to Anders Blind, he and his partners simply continued with the basic Viri – Kaska Tjavelk hybrid pattern and the others “took out a divorce”.

The different factions within the larger Viri – Kaska Tjavelk Group, the one favoring the western part of the hybrid form and the other the eastern part, could not agree on anything, it seemed. Those favoring the eastern pattern began to withdraw from the western sweep operations in autumn and leave this job to others. The result seems to have been multiform chaos. The easterly oriented herders experimented with a number of methods (what some have called a lack of any method at all), but, by the end of the 1950s, the westerly oriented group had emerged as an organized unit. Although Anders Blind, one of its founders, has claimed that the others changed, while he had kept the basic hybrid form since the introduction of the crosswise fence in the 1930s, this revived Viri Group did come to show some important changes in the process of the Viri – Kaska Tjavelk Group split. While these changes in herding form cannot be considered new, they had not been practiced for a number of years. Most important was the revitalization of orderly, westward, spring migration with a gathered herd, a practice which had disappeared gradually in the 1940s with the Viri – Kaska Tjavelk merger and the decline of summer separations. Now, with the new split, it was important for the Viri Group to maintain the division obtained at the autumn and winter separations from the other Kaska Tjavelk (leaning toward Nuortvalle) herders.

Rather than allow their reindeer to wander freely westward after release in the winter land to mix with all the other Tuorpon reindeer, the active Viri herders drove their herd up to Stalo in early April along with the spring sled supply run, a step toward greater intensivity. In the first few years, the herd was released in the calving land upon arrival, and the herders returned to the east. But they soon began to guard the herd against wolverines and eagles throughout the calving period and to return to the east later, on the last, dwindling patches of snow cover before the spring floods—another, major, intensive step. Although to this day the Viri herders still have reindeer in Parka each August, by far the majority of their reindeer are kept during spring, summer and autumn at Virihaure’s western end according to the old pattern, a pattern of grazing utilization which has never really ceased but has been merged into other patterns and largely separated from the settlement schedules of the herders and their families.

While one can see clear differences in attitude and work methods between these new Viri-Group herders and the remaining Viri – Kaska Tjavelk herders (who after 1968 were accounted as Nuortvalle herders but

who might be better described by the designation Viri – Nuortvalle herders), it is more difficult to see differences with regard to strict, grazing-land utilization. Reindeer of both groups still followed the hybrid pattern. But due to the maintenance of intensivity, the gathered spring move to the western end of Virihaure, guarding during calving, steady, well-organized, autumn-sweep operations and therefore regular preservation of winter intensivity, most new Viri-Group reindeer formed a year-round entity, unlike the reindeer of the other herders. The remaining Kaska Tjavelk (soon Viri – Nuortvalle) herders came increasingly to depend upon the sweep operation of the Viri Group. It is difficult to give a precise date for the establishment of a separate, new Viri Group. Fission was gradual and has never become total. If one looks at work organization and relative herding independence as a steady entity, one can see the Viri Group forming already at the end of the 1950s. If one looks at grazing utilization, establishment of a separate Viri Group seems later, toward the close of the 1960s, when the other Viri – Kaska Tjavelk herders must definitely be accounted Viri – Nuortvalle herders. Note that SOU 1966:12 (p. 60) still divides Tuorpon into Kaska Tjavelk and Nuortvalle groups only, a categorization which does great injustice to the complex herding reality.

The various phases of this Viri Group's herding method constituted a system which is essentially the same as that practiced today. Suffice it to say here that the building of this group demonstrates a re-intensification of herding form. By checking the spiral of extensive development, this group, more than any other for which Malmström sought to legislate in the 1930s and 1940s, can be said to have achieved some kind of "middle way".

The Viri Group's herding form was made possible largely by the small size of the group and its limited herd size. As we have seen, if the western end of Virihaure is to serve as spring, summer and autumn land, herd size cannot be excessive. From the standpoint of work-force size, a small group of herders can often more easily avoid the complications of organization which permeate big collectives with an excess of active herders in relation to the reduced work load allowed by extensivity.

With regard to the reindeer, the herding form of this new Viri Group most nearly resembles that form of extensive herding brought by the Karesuando Saamis upon relocation and already practiced by a small number of native Jokkmokk Saamis in the Virihaure area. Yet, in the modes of transportation and scheduling of moves for the herders and the families, this new Viri Group is fully modern. In the very early 1900s, the Virihaure families had not moved down from the summer land until November or December, if at all. In the 1930s, the massive, eastward thrust of the reindeer had demanded that the herders follow. Now such motivations as part-time jobs and the beginning of a new school year for the children cause the families and herders to move down while the herd remains. New motivations to leave Stalo at summer's end were added

soon in the 1960s, with the opening up of possibilities of large-scale moose-hunting and bull slaughter in September, both hinging upon new transportation facilities. Family moves were freed from dependence upon tame oxen, and there was no longer any need or reason for the families to stay in the west for such long periods. Herders might fly directly to Parka or Stalo or follow their families to Kvikkjokk and then walk the short stretch to Parka, in order to be on hand when those reindeer which had moved eastward were rounded up against the crosswise fence. Viri herders at least would be back in the Virihaure district by early October. Rather than walk and carry skis, the herders could fly westward with their gear to begin gathering for the late-autumn sweep.

On the basis of their reduced physical contact with the reindeer and increasing estrangement from the old natural economy, it is plain that these herders in the Viri Group practice quite an extensive form of reindeer management by the old definitions. By the standards of the 1960s and 1970s, however, this group is referred to as "the intensive group". The name of their main winter quarters at Stenträsk ("Stone lake") has given rise to a pun referring to them as "Stone-Age herders". Even after the introduction of the snowmobile in the late 1960s, this group has still used sled caravans at times, simply because it has been difficult to bring snowmobiles west to participate in the late-autumn sweep and because sleds and tame oxen can be more efficient in very loose snow.¹ It is certainly true that by current standards their herding form is more intensive than that of any other Tuorpon group and more intensive than that of the native Jokkmokk herders of the Nuortvalle Group—a situation completely reversed from that of the early 1900s. In the late 1950s, it was a group of Karesuando Saamis who took up the banner of intensivity, not because it was a "type" that they knew best or because of a desire to revert to old traditions but simply because they considered the breaking of the extensive spiral the best way to survive as a profitable herding concern.

To summarize, during the greater part of the 1950s, Tuorpon herding was in a relatively stable stage of development, with a strong emphasis on a distinct spring/autumn period for each of the two main groups, Nuortvalle and Viri—Kaska Tjavelk, at the Puollemåive and Rakka camps respectively. During the summer (extensive) period, the herds of these two groups merged over the entire grazing territory. Although free to wander, Nuortvalle reindeer were still more habituated to relatively easterly, summer pastures and Viri—Kaska Tjavelk reindeer were more habituated to

¹ A small sled caravan was employed to freight the supplies of the active herders during the late-autumn sweep and drive eastward as late as 1975. In 1976, a snowmobile was disassembled and transported by seaplane to Stalo before the snows, so that it might be re-assembled and used in the eastward migration. Use of the snowmobile has so far proved successful, but Viri herders say that they may re-instate the sled caravan for this job when snow conditions demand it.

westerly zones. Despite seasonal mixtures of their herds, the two herding groups maintained strictly separate, settlement patterns all year.

The Kaska Tjavelk area, which had, from necessity rather than from great desirability, served as autumn grazing land for relocated Karesuando Saamis since the 1930s, was largely avoided by the close of the 1950s. Poor spring and autumn grazing and a much too high concentration of predators forced herders to seek alternatives. There were basically two alternatives, a strengthening of the western part of the hybrid pattern or a continued slide into emphasis upon the eastern part of the hybrid pattern. A radical decrease in herd size after the catastrophe of 1936 made the first alternative possible, as western lands were no longer over-used by summer's end. Gradual merging with the Nuortvalle Group solved the problem of eastern spring/autumn emphasis, while avoiding the Kaska Tjavelk zone for those herders favoring the latter alternative. Whichever alternative was chosen by the herders, the herding families were not about to counteract their earlier, eastward shift, which had brought so many benefits from longer contact with settlement areas. The seaplane had given the families a resource of great mobility, independent of the herd and the herders. In many ways (for example, the children's schooling and part-time jobs), the family members and even the herders had become strongly bound to a more easterly, settlement pattern. Greater extensivity and increased divorce from a natural economy offered herders and their families distinct advantages from greater separation from their herds. Too great a separation for too long a period, however, can begin a dangerous, extensive spiral. What is needed is a proper balance and a consideration of the different grazing-utilization alternatives; how to achieve the best balance of intensivity and extensivity was the dominant question at the close of the 1950s.

A small group of Viri – Kaska Tjavelk herders took the predominantly western, greater-intensivity alternative and reformed a Viri group. While the proportion of time spent in the eastern lowlands for most herders gradually increased, the new Viri-Group herders saw improvement only through intensification and instead lengthened the time spent with the herd in the west. They organized their herd into a separate unit for most of the year.

Herding families were to shift even further eastward in their migration schedule with the merging of the spring/autumn and winter camps. Rakka and Puollemäive, which, as Paterson (1956) noted, were in great use during the 1940s, were soon to lie largely vacant, as herders shifted their main home bases eastward to modern, winter-land quarters near roads. Whereas, a generation ago, most Karesuando Saamis spent the greater part of the year near the Norwegian border, now they (and the Jokkmokk Saamis too) spent most of the year in their winter homesteads. The completion of the road to Kvikkjokk and the introduction of seaplane transportation helped to establish the dominance of the winter camps.

These facilities also brought the possibilities of large-scale fishing, moose-hunting, pre-rutting-season, bull slaughter, etc. At the same time, one of the three main uses of the reindeer—as transport animal—was to become almost obsolete. The rift between herd and herder, which had already been widened by the cessation of regular milking, could now widen even more.

The eastern alternative chosen by most Viri—Kaska Tjavelk herders might have proved successful, if it had not been for military encroachment on Tuorpon's eastern grazing lands in the 1960s. These herders had chosen to take the risk of greater extensivity, unlike the new Viri-Group herders. They might have managed to establish a practical steady state in herding profits, avoided the extensive spiral and secured an increase in total profits from other jobs, if new developments had not upset their plans.

Chapter 14

Additional Problems in the Eastern Pattern (1960—70)

As we have seen, the trend toward a merging of spring/autumn and winter camps which had begun already at the close of the 1950s only increased during the 1960s. By the mid 1960s, no active herding family spent spring or autumn at Rakka or Puollemäive. The development noted by Paterson (1956) in the 1940s toward growing emphasis on spring/autumn camps can be seen now in its broader context as simply one more step in a series of eastern shifts—the same sort of shifts which have always characterized the individual herder's retreat from nomadic herding with bad luck or old age. Through the extensivity offered by modernization, herders could remain active, while also taking time to exploit other income sources. It had grown quite common for herders to take seasonal work with the timber industry. In later years, however, jobs grew scarce.

The eastern shift and the resulting rift between herd and herder allowed by bare-ground extensivity were to grow even wider and to affect winter herding as well, with the availability of new transportation facilities and the end of dependence upon reindeer for transport, among other things. Families were to remain all autumn, winter and spring in their permanent winter homes, regardless of the herd's location. The greater intensivity demanded in the winter could be maintained with the aid of cars and, in later years, also the snowmobile. Herders could leave home in the morning, travel quickly to the herd, even if quite distant, and return home by night. Herd location was no longer the deciding factor in camp location to the same degree.

With the beginning of extensivity in the summer lands years ago, there had also been a gradual change in the reasons for the choice of camp location. The location of a scattered, widely spread herd imposed less rigid demands on camp location. Similarly, in the winter lands, there were now new motivations governing settlement choice. Roads and quick access to large towns with stores, schools, postal services and clinics helped to guide choice and constituted obvious reasons for prolonged periods in permanent, heated homes.

Certainly winter intensivity could be and often is maintained, but with the contemporary encroachments on winter-grazing lands (see Chapter 15), it has become far more difficult. Many old herders, comparing their lives to those of their car-and-snowmobile-driving sons, attribute the decline of winter intensivity to laziness. Others add that with changing times the youth simply have not had the chance to learn: "They don't know how. One can't go to school in town and expect to become a herder during summer vacation." Indeed, the difference in herding abilities is striking between generations separated by just a few years. As noted, those herders who had grown active as young men at a time when reindeer caravans were still common and who grew up somewhat apart from Swedish society in a strong Saamish milieu share a far greater "reindeer knowledge" than those brought up with cars, seaplanes and snowmobiles. In addition, it is obvious that reindeer used to extensivity for months at a time in the bare-ground period will not without some difficulty submit to intensivity in the winter. There is thus no single reason for the advance of the extensive method into winter-land herding.

Some herders, helped by government loans, were able to build small houses themselves in the winter land. Most, however, made use of available housing. To some extent, family and herding-group bonds played a role in the location of the settlement in the winter land, but these bonds were not the only deciding factors. Herders wanted to be near to their main, traditional, winter-land tracts, and they also wanted to be near other members of the same herding group, but sometimes the realities of housing availability and feasibility compelled compromise with the maintenance of strict group identity in each small, new, herding settlement.

Anders Blind was the first to buy a vacated farmhouse in Stenträsk in 1964, and soon after the other members of the new Viri Group clustered around him. After all, their herd was usually kept quite intensively all winter, separated in the Stenträsk area, so that, come spring, the herders could undertake the orderly "intensive migration" westwards. The Gut-torm Omma family had always wintered at Kitajaur and bought a home there. Many members of the Nuortvalle Group bought houses in Tårra-jaur, where they were joined by a good number of Kaska Tjavelk herders. Nuortvalle and Kaska Tjavelk herders became neighbors for the first time, an event which coincided with the gradual merging of these two groups.

Along with the continued eastward shift, the old autumn separations were also shifted more and more to corrals further east and were thus delayed in timing. The Rahanoive corral, for example, was built in 1966. The Viri Group's late-autumn sweep continued as before and gradually came to take over more and more the remaining Kaska Tjavelk Group's sweep. Again, one can observe the situation in which the more extensive group becomes dependent upon the more intensive group. Nuortvalle and Kaska Tjavelk reindeer would also be brought east into the corral by the

Viri Group's sweep. The Kaska Tjavelk sweep operation began to atrophy, something which can be seen as a result of the increased comforts, inactivity and extensive spiral occasioned by the eastern pattern but which undoubtedly also had other causes. Herders in different groups usually give the most damaging critiques of each other. Kaska Tjavelk herders themselves emphasize other reasons for the atrophy of their late-autumn sweep, reasons which will be considered shortly.

Now that intensivity was not applied by the Nuortvalle and Kaska Tjavelk herders until their herds were in the winter land, rather than in keeping with the moves from the old autumn camps, it became less and less meaningful or controllable whether or not Nuortvalle reindeer remained on the Nuortvalle side, the south side, of Lakes Peuraure and Karatj, and whether or not Kaska Tjavelk reindeer remained on the Kaska Tjavelk side, north of these lakes. If the reindeer were still ungathered or divided into winter *sita* herds when these lakes froze, the mixture of reindeer between these two zones would be unavoidable. These mixtures, occurring after the Parka divisions, gave added impetus to the Nuortvalle – Kaska Tjavelk merger.

As we have seen, some Kaska Tjavelk herders had already begun pulling with Nuortvalle at the Parka separations; by around 1966, all Kaska Tjavelk herders discontinued the practice of separating their reindeer from the Nuortvalle and Mavas reindeer in the Parka corral. When I inquired whether Nuortvalle herders resented the merger of these last Kaska Tjavelk herders, the answer was usually, "Things had become a lot softer by then." Certainly the major elements of merger were already in operation—mixed herds and common winter-camp location—so that at this point there was no real possibility of protest. Whether or not Nuortvalle herders liked the situation, however, is a different matter, and one must never assume that one is told the whole story on such sensitive topics.

Matters of importance for Tuorpon, beyond internal Village affairs, were meanwhile being decided on high administrative levels. These matters were considered of such national consequence that the interests of relatively insignificant, herding Villages were not given much weight in the decision-making process, although they were to be powerfully affected by the outcome.

The latter half of the 1950s and all of the 1960s can be considered the hydro-electric-power epoch in Jokkmokk (cf. Anderson, H., 1978:132). The broader effects of this epoch will be discussed in a later chapter from the aspects of both grazing-land encroachment and job opportunities. It must be mentioned here, however, that, through the conflict of interests between the water-power and conservation blocks, a compromise was reached in 1961, the so-called "Peace in Sarek", which sacrificed certain waterways for the preservation of others (Nilsson, T., 1972). The waters of Stora Sjöfallet National Park were heavily exploited, while those in Sarek National Park were at least temporarily spared. The State Power Board

(Vattenfall) refrained also from the proposed Vuojat and Vastenjaure projects in areas which in 1962 were included in the formation of Padjelanta National Park. Much of Tuorpon's summer land has thereby (so far) been protected.

Other Villages, especially Sirkas, were very hard hit. The State has the power to expropriate any land from Saamish herding use in order to serve a greater purpose. During the water-power epoch, the State's right of expropriation was stated in §5 of the then current Reindeer Grazing Act of 1928. Compensation was paid to the Villages in question, but how this money was to be spent was also dictated by the State within bounds. Tuorpon has received little compensation payment from the State, for fortunately it has not been heavily hit by a major damming project. The Parki dam in the lowlands (damming Lake Skalka) has encroached upon Tuorpon grazing land and caused some herding adjustments. Its effects on Tuorpon have been mild, however, compared, for instance, to the devastation of the Vaisa area of Sirkas Saameby due to the Suorva dam. In Norway, the Siso dam project has caused some inconvenience for the Viri Group, whose herders regularly use the westernmost regions. Tuorpon has a limited, seasonal use of certain Norwegian grazing areas and has received some compensation for the Siso dam from the Norwegian State.

While Tuorpon herders can only consider themselves lucky to have been spared large-scale, water-power exploitation, the "Peace in Sarek" agreement was never ratified by Parliament (SOU 1976:28, p. 28) and by now has shown itself to be quite defunct. Later in the 1970s, the Jokkmokk municipal authority, pressed by the State Power Board and troubled by the decline in prosperity which accompanied the end of the water-power epoch, agreed to sacrifice waters protected by the "Peace" (see p. 421). Padjelanta Park may not offer the protection which Tuorpon herders hoped, and its creation has given the ever-expanding tourist industry a powerful position in the area.

Encroachment upon grazing lands in the last 20 to 30 years has been explosive in the north. While certain, major effects of encroachment upon Tuorpon directly will be considered here, Tuorpon herders are also swept into a larger, community sphere, where the indirect consequences of encroachment even upon the grazing lands of other Villages becomes of immediate importance. It seems only fitting that in the transition from the micro-level analysis of Part I to the macro-level discussions in Part II, a closing chapter should take up the issue of land encroachments. Nothing has influenced the determination of modern herd management as much as these encroachments. In this chapter, however, our focus must remain riveted to Tuorpon directly in the 1960s.

Just around this time, a quite unusual form of encroachment occurred, which separated Mavas from Nuortvalle to a much greater degree and cemented the Nuortvalle—Kaska Tjavelk herding merger. So powerful

was this factor that many herders consider it as the cause of Kaska Tjavelk's unification with Nuortvalle and, though I have mentioned other reasons, this new situation must be regarded as a sustaining pillar of the union. Herding-group changes are rarely sudden and complete. There is always an integration of numerous determinants. While it might appear that one specific event caused an enormous transition, closer examination frequently shows this event to be the drop that burst the dike.

The military had need of a missile base, a restricted area, and in the mid 1960s appropriated a huge, lowland zone of forest, lake and marsh enveloping Nausta, Udtja and Tjåura and thus a goodly segment of Tuorpon winter-grazing land. The Udtja forest Village fell within the missile field and, in order both to counterbalance the difficulties created for herding by Udtja by these military interests and to lessen the amount of traffic in and out of the military zone, the military paid for the construction of a long fence curving in a horseshoe around the northern and western edges of the missile field (not necessarily following the border of the military zone exactly). This fence will be referred to here as "the missile-field fence". With the construction of this fence, Udtja reindeer would be prevented from straying from the area, and the Udtja herders would not have to run in and out so much to gather them and bring them back. Udtja could develop as a self-contained, herding enterprise. Stray, free-roaming Tuorpon and Mavas reindeer would be kept from mixing in the Udtja herd and causing the need for troublesome separations.

Problems arose, however, because the area within this missile-field fence contained a good deal of Tuorpon land proper (see *Map H.*), and even the rest of the area had by traditional right always been open to Tuorpon winter grazing and as a main route of passage. The authorities maintained that the missile-field fence in no way restricted the Tuorpon herders' rights to utilize the zone. They were free to bring their herds across the fence. In practice, this would, of course, be impossible if the Tuorpon herders did not gather their reindeer and drive them in an assembled, orderly (intensive) fashion through the fence. Thus, late-autumn and winter intensivity became a requirement for initial utilization of the zone within the missile-field fence. The extensive herding form, which allowed scattered reindeer to wander unattended against the fence, resulted in a deflection of reindeer to the north and south. The western edge of the missile-field fence acted as a crosswise obstacle to reindeer movements and, as a result, reindeer in the Nuortvalle zone were deflected north into the Karats – Kaska Tjavelk area or southwards into Mavas territory.

Although there is good grazing east of the missile field, the lands along the northern edge of the fence are marshy and poor. There is no connected path of good grazing which reindeer can follow eastward around the missile-field fence. The extensively herded reindeer naturally found it better to stay in the Karats area, where grazing was good, rather than wander of their own accord over a long gap of poor grazing before

reaching better land further east. In effect, reindeer which had moved east in autumn were already hopelessly scattered long before the chance of establishing intensivity in the winter. Erik Pavval (#13) has informed me that, before the fence was built, herders could simply fetch their herd from the Nausta area. They were sure to find them there, naturally gathered on the excellent Nausta grazing (now within the fenced area).

The old Kaska Tjavelk herders came to have such difficulty re-gathering their reindeer in late autumn and, with their Nuortvalle partners, had to expend so much time and energy trying to protect their scattered easterly herd segments from predators, that they were not prone to send much of a work force west to participate in a westerly, sweep operation. Many herders attribute these problems in the eastern lowlands to poor herding method, rather than to poor circumstances. If reindeer are allowed to spread throughout the woodlands before the deep snows set in, they must also be re-gathered with the first snow. Otherwise, it is almost hopeless to re-gather them and move them, if grazing is good and movement difficult. Intensivity must be applied earlier.

To date, the problems and debates caused by the missile-field fence are not over. Tuorpon herders feel that they were bamboozled into accepting poor terms by the "brass" and could hardly protest, because of earlier demands for secrecy. Nowadays, the military zone is not so secret. Military interests have largely been liquidated there, but the fencing remains, and Udtja herders, of course, want to keep it that way. Some Tuorpon herders fear that, if they press the issue too hard, the administration will simply re-draw the Tuorpon – Udtja boundary to follow the fence, and this would be a worse situation than the present one.

In order to help to ease the problems that they had caused, the military in many ways sought to aid even the Tuorpon herding enterprise. They helped to pay for a number of utilities, for example, the very useful wireless telephone at the camp in Parka, but most important, in accord with the herders' wishes, they undertook the building of a new fence to stem the tide of increased Mavas – Tuorpon mixing, which had become common far east in the winter lands, due to the missile-field fence and the delayed application of intensivity. Actually, this fence had been requested by herders long ago, but its construction had never before been so pressing.

This new fence followed the district border between Arjeplog and Jokkmokk (this also being the Village border between Luokta Mavas and Tuorpon) and, running lengthwise, stretched from the western edge of the missile-field fence all the way to the Parka – Kvikkjokk crosswise fence, meeting it at Parka. For the first time, the Nuortvalle and Arvas areas were divided as natural herding units. As one would imagine, significant changes resulted with regard to herding-group cooperation and reindeer separations.

It now became necessary and, because of the problems mentioned,

Map H. Conditions in Tuorpon after encroachment by the military. The shaded area depicts the zone belonging to Tuorpon which is contained within the missile-field fence and is thereby largely lost to Tuorpon use.

highly advantageous, to divide Mavas reindeer from Nuortvalle reindeer at Parka. It was no longer necessary or possible for Nuortvalle and Mavas herders to "pull together", as they had always done before from Parka (and Lastak), and not to separate the reindeer until much later in the autumn. Now that these autumn separations were shifted eastward in place and time (that is, later), this new fence would compensate somewhat for the delayed application of intensivity over this stretch of land.

The frequent inability of Nuortvalle herders to bring their herd into the winter separation corral has caused considerable irritation in the neighboring Villages. Herders in other groups are not able to retrieve those of their reindeer which are mixed with the Nuortvalle herd. Henrik Blind (grandson to Heika Gubben) of the Viri Group has formed the habit of separating some of his reindeer with the Mavas (Arjeplog) herders, rather than with the Nuortvalle (Jokkomokk) herders at the Parka corral in August. His mother (born Kuhmunen) comes from Arjeplog, and so these reindeer are well cared for by relatives. Henrik Blind claims that it is easier to retrieve these reindeer from the Mavas herders than from the Nuortvalle herders. The continued eastern shift was not without great difficulties.

At Parka, the district-line fence met the crosswise fence in a new "T". While, on the one hand, the new district-line fence, completed in 1968, caused a disengagement of Nuortvalle and Mavas herding to a considerable degree, on the other hand, it created greatly strengthened bonds between Nuortvalle and Kaska Tjavelk herders. Tuorpon had become a more unified, herding entity as the result of this new artificial hindrance. Actually, at this point one should not speak of Kaska Tjavelk herders as forming an independent group. They had become Nuortvalle herders completely from the herding perspective, but I have chosen to continue to use the term "Kaska Tjavelk" so that the reader will know which contingent of herders within the larger Nuortvalle Group I mean. From the herder perspective, the merger was never complete. The Kaska Tjavelk contingent still spent the summer at Stalo with the Viri Group, and they had no permanent homes in the Nuortvalle area. Although Kaska Tjavelk and Nuortvalle herders came to work together as a group in gathering and separating their combined herd from other groups, the reindeer of the original Nuortvalle Group still stayed further east in the summer land, on the whole, than did the reindeer of Nuortvalle's Kaska Tjavelk contingent. During the summer, therefore, there was little change in group organization from the 1950s; Kaska Tjavelk herders were in Stalo, and original Nuortvalle herders were in Rovi.

Now that the Kaska Tjavelk contingent of the Nuortvalle Group followed the eastern pattern, gatherers (Nuortvalle and Kaska Tjavelk) would set out from Parka to comb the western tracts as far as Stalo (not the western end of Virihaure, as this was the Viri Group's affair) and drive the reindeer collected into the Parka separation corral in August, for Mavas

herders to separate out and move their reindeer south of the district-line fence. In effect, the Kaska Tjavelk herders' late-autumn, western sweep was replaced by early-autumn, western, gathering expeditions. The ideal plan of the Nuortvalle herders was already to have vacated the western reaches by the end of August, in keeping with the Parka separations. Seen in this light, one can well understand the atrophy of the Kaska Tjavelk herders' late-autumn, western sweep. Of course, ideal plans in herding are hardly ever fully realized. The herds belonging to each of the different Tuorpon herding groups would be somewhat split, as always in the autumn according to the hybrid pattern. Those Nuortvalle reindeer left in the west after the Parka gathering expeditions would be brought to the lowlands later in the Viri Group's regular, late-autumn sweep and eastward migration.¹

As noted, already in the late 1950s, Kaska Tjavelk herders had begun to favor eastern autumn lands for the main part of their herd. They had begun gradually to utilize the good autumn grazing of the Nuortvalle area and now, because of the new district-line fence, they would not suffer loss of reindeer into Arjeplog. By this time, the original Nuortvalle Group was small. Herd size was also reduced; the winter of 1965 had been very bad. The Nuortvalle area was more than adequate to contain all the enlarged Nuortvalle Group's reindeer. A unification of Nuortvalle and Kaska Tjavelk herders also brought the advantages of increased manpower to the original Nuortvalle Group. The Kaska Tjavelk contingent's unification with Nuortvalle in its pursuit of the eastern pattern also helped to close the gap between the herder and his family which the continued, easterly shift in settlement pattern for the families entailed. With access to the Skelte-vare zone, their reindeer would not move so far westward so early in spring. With snowmobiles and cars, Nuortvalle herders could better bridge the herd — family gap in the spring than could, for instance, the Viri herders.

Despite these positive factors, the enlarged Nuortvalle Group faced grave problems. The missile-field fence was highly problematical for the extensive-herding method. The fence tended to scatter reindeer to even greater extensivity. An increase in group manpower, coupled with the general decrease of man-hours required for extensive herding, enabled herders to take turns on the job and gain even more freedom from herding chores but also to embark upon an extensive spiral. Greatly increased demands for cash, with a more Swedish life-style, and the steadily rising number of reindeer needed to provide the same standard of living pushed herders closer to the point of extensive spiraling. As noted earlier, great

¹ It is interesting to note that the difference in tameness grade between Nuortvalle and Viri reindeer has become so great that, when driving its herd eastward in keeping with the late autumn sweep, the Viri Group purposely speeds by the Karatj area in order to avoid mixing with Nuortvalle reindeer. Less tame reindeer can have a very disruptive effect on a gathered herd.

problems arise for herd management when strong, extensive pressures clash with strong, intensive pressures. The reindeer's worst predators, wolf, wolverine and lynx, were put under legal protection in the 1960s.

Conservationists have called attention to the dwindling population of predators and so, instead of providing incentives for their reduction, the law provides predators with (various degrees of) protection. As a result, the decrease of the predatory animals has stopped, and in many areas their numbers have increased considerably. Although predator concentration can be quite high in certain specific areas (Tuorpon, for example), Sweden as a whole may still host a small predator population. Conflicts are therefore bound to occur between conservationists intent on preserving a predator stock in its natural habitat from a national perspective and herders intent on preserving their local herding livelihood.

The law has not yet achieved a solution fair to both sides. Herders are legally allowed to protect their herds against the wolf, for example, but a herder is not allowed to hunt the wolf. He must come upon the wolf "red-handed", in the act of eating a reindeer. The herder is not allowed to carry his rifle on his snowmobile; it must be packed down in the sled. And he cannot keep his rifle and his rifle bolt in the same place. Nor is he allowed to trail the wolf at all, except on skis. In short, he is legally incapacitated. The herder's only real protection against predators lies in his ability to scare them off by his presence. This form of defense was not fully successful even in the intensive-herding days, when the herd was under constant guard and gathered in one place. It becomes all the more difficult with the reindeer spread out in the extensive-herding form. A herder cannot be everywhere at once, and so he must accept substantial losses.

The law attempts to compensate the herder for these losses. The Swedish government pays a set sum in compensation for every reindeer which falls a victim to predation and whose carcass can be found. Of the reindeer which are victims of predation, however, only about one-third or one-half is ever found. Herders suffer far greater loss through predation than they are compensated for, but without the carcass as proof, they have no chance of obtaining payment. Moreover, payment goes to the individual owner only if his mark remains readable on the victim. In many cases, there is no possible way of telling who owned the reindeer. In that case, payment goes to the Saameby on whose territory the carcass was found. Also in this case, the owner must accept total loss.

The sum paid in compensation is generally less than the slaughter value of the particular reindeer, but, more importantly, "money gets no calves". A herder can receive reimbursement for his entire reindeer herd, but, if he has no reindeer, he cannot continue with his herding form of livelihood. In no respect is the monetary compensation for reindeer lost to predators as desirable as the reduction of the predatory species for herders under current conditions.

Another often-heard argument—that predators kill off the weak and sick reindeer and thus help to select a healthy stock—has little validity in areas of tame-reindeer breeding. It is not surprising, however, that, in a land which has been practically devoid of wolves for a considerable period (according to the experts), popular knowledge of the wolf's behavior and effects on tame herds is poor. Opinions readily fall prey to propaganda, and the age-old and highly detailed knowledge of predators possessed by the herders, a knowledge rooted in practical experience, is blithely ignored as biased. I believe that the only general rule that can account for the selection of an object of predation is that the predator takes what it can get. In certain areas, the predator has the best chance with sick, weak or injured reindeer, but, when confronted with a gathered herd, predators do not ask how the reindeer is feeling before making a kill. Even where herding is quite extensive, predators often take the choicest healthy animals.

One has observed that the polar wolf attending tame reindeer is excessively bloodthirsty. Makridin claims that many cases are known where a smaller polar-wolf flock upon a single occasion killed up to a hundred or more reindeer.

In contrast to this, the polar wolf attending wild reindeer shows much greater restraint with the wild reindeer and kills rarely more than he needs to live. The explanation to this is naturally not "consideration" for his wards, as is sometimes said. The explanation is simply the polar wolf's inability to catch the fast-footed and tough wild reindeer . . .

. . . One has often observed that the wolf seldom takes thin animals from the reindeer herd. His usual victims are well-fatted reindeer, which are not as fast or tough as the thinner animals. (Härma, 1980:41.)

Härma is here relating the results of research in the Soviet Union. Makridin, referred to above, is head of the Soviet Hunting Department's research laboratory in Narjan-Marsk. I believe his view cannot be considered partial in the Swedish dispute and, moreover, the Soviet Union is blessed or cursed with many hundreds of thousands of wolves. One might argue that the wolves in Sweden are "forest wolves" and not polar wolves, as in the Soviet Union, but, even if there is a distinction to be made here, I doubt whether it is pertinent to the discussion.

This is not to say that herders necessarily desire the extinction of all predators (see Baer, *Dagens Nyheter*, May 8, 1979). Many Saamis recognize a certain similarity between the wolf's struggle for survival and that of the Saamish minority (for example, Baer in *Samefolket*, 1979, no. 2, p. 31). Of course, the wolf is a link in a larger, ecological chain. Many smaller animals, for example, foxes and crows, feed off of the remains of a wolf's kill. The ecological balance in an area purged of predators must be changed in many ways. The wolf's role as food supplier to other species may be only partially compensated by other predators, but this still means lost reindeer. Certainly the conservationists and the National Environment Protection Board (Naturvårdsverket) are justified in their concern for the wolf, both in its own right and as a part of a larger ecosystem. But

the reindeer herders and the Saamish culture are also parts of the larger system. As long as the survival of predators is maintained at great cost to the survival of a herder's livelihood, peaceful co-existence can be no more than wishful thinking. It would not be long before those Tuorpon herders who followed the eastern pattern would be brought to their knees by the change in predator policy (see p. 437).

Fortunately, not all developments in the 1960s were negative for the herding enterprise. Positive factors can be seen as coming generally from increased transportation and communication facilities (often, however, indirect results of land encroachments). Mention has already been made of the snowmobile, which burst upon the scene in the 1960s. Small, portable walkie-talkies became standard herding equipment, and with them herders can not only coordinate gathering expeditions more effectively with each other, but can also make contact with airplanes, if need be, to send or receive messages. When on the moose hunt in September, herders can make one kill, call a helicopter to freight it home and proceed after another moose.

The road to Kvikkjokk was not only to facilitate the herding families' air migration, but, in combination with the helicopter, was also to bring about the highly profitable, pre-rut slaughter of reindeer bulls at the Valli corral. In fact, the entire slaughterhouse industry has expanded so rapidly, due both to land encroachments, necessitating an expanded road network, and State rationalization policy, that many herders feel themselves, and justifiably so, under increasing threat of being transformed from a boss of the herding enterprise into a mere worker controlled by big entrepreneurs.

The change to a cash economy and limitation of the reindeer to the role of meat producer have totally altered the foundations of herd management. The welfare of the herders is now intimately bound to the success of the slaughterhouses and the sale of meat to the southern provinces or even abroad. The husbandry decisions of a herder are no longer based upon his needs, satisfied by his reindeer in terms of food and clothing directly. Of course, this trend has been in progress for a long time and herders still enjoy a partial natural economy, but with the enormously expanded capacity of the slaughterhouse companies to market reindeer meat and to give the herders a decent price, sales have increased by many times and herders draw *direct* benefit from their reindeer less and less. As noted, with a more modern life on a more Swedish pattern, the herders cannot help but acquire a wide range of modern needs, which must be satisfied with money. This change puts power to satisfy needs into the hands of the buyers, the market, the meat-subsidy policy, etc., elements of which will also be taken up in Part II. Most of the meat produced by the Swedish herders is consumed by the non-Saamish population.

Most of the marketing and sale of reindeer meat in Sweden is handled by one slaughterhouse firm, Simonson Inc., officially known as "Same-

produkter AB". There are other, smaller, competing firms, some even organized by the Saami herders themselves. Only a small fraction of a herder's meat production is sold by him directly to local consumers, though the case may be somewhat different for very small herders. Most of the meat is channeled through the slaughterhouses, predominantly Simonson's. A look at the business operations of the Simonson slaughterhouse company will clarify the role of the slaughterhouses in the determination of herd-management form.

The Simonson company was originally a Swedish family business founded in the 1940s. The company's primary source of meat at that time was not reindeer, but cattle sold by the numerous small farmers throughout Lapland. Farming declined rapidly after the Second World War under the State agricultural-rationalization policy, and the slaughter of cattle dwindled. The importance of reindeer meat and moose meat rose with the increasing scarcity of beef. The last cow was slaughtered at the Simonson slaughterhouse in 1956. In 1964, the company was restructured into a share-holding corporation. Herders could obtain stock in the company, which, along with certain membership advantages, gave them incentives to sell to Simonson rather than to other slaughterhouses. Much of the rapid rise and success of the Simonson company can be attributed to this policy. Five of the eight members of the board of Sameprodukter AB are Saami herders, as is the chief director. John Simonson himself and his sons, however, retain a controlling interest in the company. The company has expanded. Besides the original slaughterhouse in Harads (not far from Jokkmokk) in Norrbotten province, an additional slaughterhouse has been built in Jämtland province. Altogether there are 55 full-time workers employed at these slaughterhouses. Operating from these two locations, the company is in a position to do business with almost every reindeer herder in Norrbotten and Västerbotten.¹

A number of remarkable innovations have led to the full development of the slaughterhouse business, a development which can be seen as both a cause and an effect of the extensive-herding trend. The slaughterhouse business could never be what it is today without the collectivization and extensification of herding. Nor could herding have progressed so far in the extensive direction as it has if it had not been for the marketing potential of the slaughterhouses. As noted, various forms of land encroachments have cut up the lowland grazing zones especially and laid down a large road network, with the result that reindeer herds have been prone to spread and herders have had to move them from point to point

¹ Recently, in 1979, Sameprodukter AB has expanded rapidly and developed a large, moose-meat business. A new slaughterhouse has been opened for this purpose in Uddeholm, Värmland, and Simonson's full-time employees now number about 75. It is still too early to note how this enterprise will affect the reindeer-meat branch of the business, but most likely it will expand its markets and capacity.

more frequently. Because of this, it became common for herders to transport their reindeer by truck. Stray reindeer were to be found at lowland separation corrals in an ever-expanding circle and with the new roads it was quick and easy to drive them "home". In time, huge, double-level trucks were designed with special precautions for the reindeer's safety. One such truck can transport over a hundred reindeer at once and obviously they could be used to transport reindeer to the slaughterhouses. Truck transport of living reindeer was at first an extreme measure taken by herders during the bad winters of the late 1960s. Many reindeer had to be moved hurriedly to better grazing in order to keep them from starving. There are now even mobile slaughter units, trucks which function as slaughterhouses and in which all but the final processing and packaging of meat products can be done. In short, a slaughterhouse company is no longer confined to local operations.

Due to the great climatic variability and its resulting effects on herd size and reindeer numbers available for slaughter, a slaughterhouse must have a wide range of sources of meat if it is to ensure a stable production and income. John Simonson has told me that this assurance of regularity of supply is necessary for him to attract and retain buyers of his meat products. Should he lose buyers, he will in turn not be able to give the herders as good a price for their reindeer. Many reindeer may be put up for sale in Jämtland, for example, whereas a catastrophic winter may have practically eliminated all sales in Norrbotten. There are even times when Sweden as a whole cannot provide the slaughterhouse business with enough reindeer. In this event, reindeer meat is imported from the Soviet Union and processed and packaged in Sweden. The import of Soviet reindeer serves as a safety valve for the Swedish slaughterhouse business. Sameprodukter AB has even sent representatives to slaughterhouses in the Soviet Union to confer on butchering methods and standards of hygiene.

Herders are often divided in their support of Simonson. They must acknowledge that it is largely due to the salesmanship of John Simonson that reindeer meat has conquered a large market and is sold at a high price (compared to the situation 10—15 years ago). In achieving this goal, John Simonson has become nationally a fairly well-known figure, "Lapp-Simon", as part of his advertizing campaign. He has been instrumental in developing the reindeer-meat market and thereby in raising the price paid to herders. However, some herders question whether one can fully equate what is good for Sameprodukter AB with what is good for them. They question, for example, whether the import of reindeer meat from the Soviet Union does not reduce the meat price they might otherwise obtain.

In a motion in the Swedish Parliament (M 1968, I K, no. 482) by Mr. Wikberg and Mr. Carlsson, who profess a pro-Saami stance, tariff protection was asked for reindeer meat, so as to put it on a par with other types of meat, for which such protective legislation already exists. John Simonson, however, counters such arguments by claiming that he has built up

such a demand for reindeer meat that the Soviet import does not in the least flood the market and reduce prices. Instead it is a safety measure taken to keep prices high, and the demand for meat is greater than his ability to supply it (personal comm.).

Other herders feel that Simonson has been tricking them with his profits from the reindeer's horns (see p. 340). Some feel that a cooperative slaughterhouse company owned and managed by the herders themselves would suit their interests better. Supporters of Simonson, however, can point out how poorly things have gone for such cooperative ventures. "But is this not because Simonson has muscled them out of business?" ask his adversaries. Most arguments evaporate at the corral, for Simonson is big enough to make it his policy to be on hand whenever and wherever the herders want to sell, and he usually offers the best price.

The road to Kvikkjokk, helicopter transport and the presence of one of Simonson's mobile slaughterhouse units formed the constellation necessary for Tuorpon herders to practice the large-scale, pre-rut slaughter of bulls. The grazing around the Valli area has always been attractive for the bulls in late August and September. At this time of year, they tend to become "loners" and to make their way to the Valli area to build themselves up for the fight over the reindeer cows to come. Their horns harden and they become more aggressive and less tame. From the Valli mountain, it is all but impossible to drive an explosive herd of pre-rut bulls down to Kvikkjokk. Such a move might be possible if a path were cut through the forest covering the mountainside, but this Saameby proposal has met with resistance from, for instance, conservationists. The bulls can be corralled up on Valli mountain, however, and, from there, five dead bulls at a time can be flown by helicopter to the waiting slaughterhouse truck below. The trip takes only two minutes and, should it take much longer, there is the possibility that the meat will acquire a bad taste—a problem avoided in cold winter temperatures.

As mentioned earlier, the pre-rut slaughter of bulls is seasonally critical, due to hormonal effects on the taste of the meat. Reliance upon helicopter transport not only adds cost to the slaughter procedure, but also means that the slaughter is dependent upon decent flying weather. If the weather is poor for a long time, the slaughter may have to be called off. Moreover, it is both difficult and bad for the bulls to keep them corralled for a long time, waiting for the weather to clear. Tuorpon herders must rush from the separations at Parka to the moose hunt, which is unfortunately always scheduled for a four-day period in the first week in September, and then dash off immediately to gather the bulls to the Valli corral before the critical time has run out. Slaughterhouses will often not accept bulls slaughtered after September 15.

Despite these narrow variables, bull slaughter at Valli is usually quite successful and highly profitable for the herders. Not only have the bulls reached peak weight, but their hides at this time of year are in the best

condition. Of course, the institutionalization of this kind of slaughter has occasioned considerable alterations in husbandry tasks and herd composition. Whereas before it was most profitable to castrate most of one's bulls, now it can be more profitable not to do so. Each herder must take many factors into consideration in forming his castration policy. As already mentioned, pre-rut bulls become loners and hard to handle. Many are missed in the Valli gathering operation, and there is a greater chance that a bull will be lost to its owner for good than an ox. According to rational ideals, calf slaughter should be even more profitable than either bull slaughter or ox slaughter (see p. 339), a debatable point.

To summarize, despite complex layers of interlocking group identities, the Tuorpon system had collapsed to form a basic, twofold, herding system, which, remarkably enough, though both quite extensive and modern in herding form, is in many ways similar to the system extant in the early years of this century, before the arrival of any Karesuando Saamis. There are enormous differences in settlement pattern, communications, lifestyle, transportation methods, new sources of income, etc., but, from the reindeer's perspective, despite reduced tameness grade and diminished husbandry uses, grazing-land utilization and timing of grazing-land utilization are almost in complete conformity with the old Village pattern in 1910. At that time, the Viri Group was smaller than the Nuortvalle Group. Viri-Group reindeer used the western end of Virihaure in spring, summer and autumn. Nuortvalle-Group reindeer were kept south and east of Virihaure and utilized a separate spring/autumn land. These patterns, the western pattern and the eastern pattern, as I have termed them, seem particularly well suited to Tuorpon conditions. Certainly, should herd size ever attain such numbers as in the 1930s or should new waves of Karesuando Saamis arrive, the situation will alter. Barring such events or the alteration of other determinants beyond certain bounds, this twofold system seems to be the most stable of all for Tuorpon.

One might say that, after years of experimentation and adaptation to the changes they to a large extent themselves imposed, the Karesuando herders carried Tuorpon's herding system (as far as grazing-land utilization and the timing of such utilization for the reindeer are concerned) full circle. Without a doubt, the Karesuando herders changed herding forms and adapted themselves to their new neighbors and new environment every bit as much as they compelled the native Jokkmokk herders to adapt themselves to their arrival. The forces of extensivity came like a flood and swept away the minor variations between Karesuando and Jokkmokk herding forms. Because the intensive—extensive duality has been placed under the spotlight in so many studies, the very marked changes of the Karesuando Saamis' herding form toward that of the Jokkmokk Saamis in other aspects of herding form have often been neglected. Indeed, in dealing with a form of livelihood so intimately bound to natural determinants, the approach of the relocated Karesuando

Saamis' herding in many aspects to the native Jokkmokk Saamis' herding must be viewed as a matter of course.

In modern times, however, the western and eastern patterns have acquired secondary characteristics; the western pattern tends to require or maintain greater intensivity in herding form than the eastern pattern would normally demand. Military encroachment, however, combined with the legal protection and high concentration of predators, has imposed a need for greater intensivity, which clashes severely with other extensive pressures and possibilities. The eastern pattern in Tuorpon came to face terrible problems, which, as we shall see (p. 444), resulted in a Nuortvalle-Group split in the 1970s.

The 1960s can be regarded as one of the worst decades for the destruction and loss of grazing lands due to various forms of encroachment. Tuorpon has so far been relatively lightly damaged, but both the State Power Board and the timber companies have plans which, if carried out, would strangle the Tuorpon herding concern. The closing chapter of Part I will discuss the major forms of land encroachment and their effects upon herd management. Such effects are not merely negative from a herding perspective. The roads which have been built to bring heavy machinery to the sites of dam constructions can open up valuable transportation possibilities for herders. Helpful innovations and damaging encroachments come often hand in hand, with multiple, far-ranging effects. The development of the slaughterhouse industry and the institution of a pre-rut, bull slaughter at Valli illustrate this point. Nonetheless, once grazing land is lost, the potential reindeer capacity of a Saameby is lowered, as is consequently its supportive capacity for the herders, usually despite all manner of compensating financial payments or applied technology. It is vital to see the connection between grazing-land encroachments and the need to rationalize herd management. Land encroachments lead to changes in the resource/consumer ratio on many different levels. The damming of a lake has an immediate relation to the Saami minority struggle, as well as to administrative, herd-management programs and herding in the local area.

The problem of spiraling extensivity with regard to the Tuorpon herders following the eastern pattern has been mentioned. While in Tuorpon this problem was first felt by herders in the Nuortvalle Group or rather it hit them hardest, it is a problem inherent in the entire herding occupation and has been largely exacerbated by land encroachments. In order to understand how this problem develops and the attempts made to solve it, one must face the topic of herding rationalization, the State-supported program of herd-management modernization and increased productivity which took hold in the 1960s and led to a new Herding Act (RNL) in 1971.

Chapter 15

Land Encroachments

The grazing lands of the Saami Villages have suffered accelerated and drastic encroachments during the post-war period. Not only have these lands been cut up by roads and tracks, making the maintenance or establishment of winter intensivity more difficult, but their grazing capacity has also been reduced. A reduction in grazing capacity itself may well result in a higher reindeer/grazing ratio and increased pressure for extensivity in this way as well, but what usually follows is a reduction of the reindeer limit (rational reindeer population) allowed the Village commensurate to the grazing lost. As a result, the Village, as a whole, has a reduced supportive capacity for its members, and with the ever-rising subsistence minimum in reindeer, such reduction is damaging for the herders, to say the least. Young Saamis who might otherwise continue the family's traditional herding livelihood look at the accelerating rate of land encroachment and opt for a more secure future. The preservation of the natural habitat has become a major rallying cry of the Saamish minority movement. The worry over grazing-land exploitation is evidenced in all manner of Saamish utterances, from the poems of Paulus Utsi (1974) to the declarations of the Swedish Saamis' Parliamentary Organization (SSR).

Although Tuorpon Saameby has been relatively lightly hit by land encroachments in modern times, as we have seen, this is far from saying that it has escaped unscathed. In Tuorpon, the worry over the future is great. Many an old Tuorpon herder has told me: "Had I known what would happen to the grazing lands when I was young, I doubt I would have stuck with it." It is quite understandable, then, that the Saamish youth wonders about facing the same exploitive trend from a start which their fathers viewed as practically representing the end.

Of course, one must also regard the spread of agriculture and settlement in the north as a form of grazing-land encroachment. As we have seen, however, this source of conflict largely disappeared after World War II. Other forms of encroachment will be discussed briefly in this chapter, especially those of the modern period. The major interests that conflict with reindeer-herding are mining, the timber industry, hydro-electric-power dam construction and tourism. Although these various interests have been competing with herding interests for quite some time, it is only

relatively recently, in the past 30–40 years, that the encroachments have reached such a scale as to seriously threaten the herding livelihood in many districts. According to § 5 of the Grazing Act of 1928 and later § 26 of the Herding Act of 1971, the State can expropriate any grazing land from herding rights for a purpose of “greater importance” or “major importance from the public perspective”.

Although each of these various competing interests exerts certain specific pressures on the herder, their effects on him are far more than simply additive. The encroachments are in no way distinct from and unconnected with each other. The herder faces a huge complex of integrated encroachment. For example, a road which is constructed through grazing territory to be used for the specific purpose of transporting the heavy machinery needed for the building of a hydro-electric-power dam may not in itself do much damage to herding territory. In fact, as we have seen in the case of the Valli, pre-rut, bull slaughter, herders welcome some roads for the increase in mobility that they provide. After the dam is built, however, the road remains, providing the timber industry with an excellent means of reaching once inaccessible forest areas. As a result, large tracts of winter-grazing land will be rendered unusable.

Of course, exploitation of the Saamis’ grazing lands is but one aspect of the massive, overall exploitation of Norrbotten by both foreign interests and larger, national (southern) interests. For hundreds of years, Norrbotten has been milked of its natural resources and received little benefit in return. Today, Norrbotten is in the throes of a severe crisis. In the past, a large labor force was necessary to build up the resource-extraction industries in Norrbotten and to lay down the communications network for the transportation of these resources. But, once the initial surge of development had subsided (and further northern development was even restrained by southern groups of industrial interests leery of competitors), the large labor force was left stranded.

The “Norrbotten problem” seems to have become chronic. After numerous government investigations, plans and aid programs to “save Norrbotten”, little has been accomplished, and realistic planners concede that the current crisis represents but the tip of the iceberg. Between 15,000 and 20,000 people are without jobs in Norrbotten, and 5,000–6,000 young people must leave the province yearly to find work (Lundmark, 1971:113). The unemployment problem in Norrbotten is by far the worst in all of Sweden (Öström, 1978:80). Schools, clinics and many other public services have been closed down in the sparsely populated areas. In 1968, the Norrbotten County Administration (*länsstyrelsen*) presented its plan for the development of Norrbotten up to 1980. This report, BD80, states that, with the current trend, Norrbotten will lose 80,000 people, that is, 30% of its population, by 1980.

Sharp critique of the policies governing Norrbotten’s industrialization and development has been leveled by Brox (1970), Lundmark (1971) and

Öström (1978). Öström has applied the metropolitan-satellite (center-periphery) paradigm of A. G. Frank (1969) in his analysis of Norrbotten's ills. In his view, the reasons for the massive concentration of people in the big cities, in the south especially, are to be found in the exploitive policies of the government and big business. Norrbotten is the supplier of enormous amounts of raw materials and energy, but the greatest gains from these raw materials have not been made in Norrbotten or devoted to Norrbotten's welfare. The periphery has served the center, and most of the advantages or subsidies granted to the people and businesses in the periphery have been granted simply to ensure the existence of the needed labor force, industrial capacity and transportation network for most efficient exploitation: "Our experiences so far indicate that the answer to the question of Norrbotten's underdevelopment is that the region is subordinated to external interests. To develop under someone else is *the real meaning of being underdeveloped.*" (Öström, 1978:2.)

Ever since Sweden's first great king, Gustav Vasa, declared in the 16th century that all unsettled wilderness "belonged to God, ourselves and the Swedish Crown and to no one else", the whole of Norrbotten and not just the Saamis' reindeer-herding has been increasingly drawn into a new peripheral (sub-system) status.

The BD80 report tries to explain the mass emigration from Norrbotten by hypothesizing that people prefer to live in more populated centers with more educational possibilities, public services, commerce, sport activities, job opportunities, etc. Brox (1970) rejects this hypothesis. Most people are forced to move for want of jobs. The only explanation that BD80 can offer to account for all those who stay in the sparsely populated areas is that these people suffer from an "insecurity factor" when contemplating the move. At every turn, the real problems of exploitative industrial policy are veiled (Lundmark, 1971:107 ff.). Both Brox and Lundmark raise the question whether such administrative reports truly seek to present the objective facts or whether they rather seek to justify an already established policy.

It is not my purpose in this chapter to follow the history of metropolitan-satellite relations with regard to the Swedish State and Norrbotten. Öström and Lundmark give most convincing summaries. It is important, however, to be aware of the larger context of herding affairs. As Brox (1972) has indicated, many of the problems facing the Saamis stem from their position in the periphery. It is not enough to analyze Saami problems from the viewpoint of the Saamis' special ethnic or legal status. The herding industry is underdeveloped, like so many other satellite industries.

The topic of land encroachment is closely connected with that of Norrbotten's industrial development and exploitation. For my purpose here, a brief sketch of the interrelated advances of the mining, water-power and timber industries must suffice. Large-scale tourism is a late-

comer on the scene. After a more general discussion, consideration will be given to Tourpon in particular with regard to each of these major forms of land encroachment.

A sketch of early northern industrialization

The iron-and-steel industry is one of Sweden's most important industries today, but the first mines in Lapland were silver mines. The Crown needed silver to pay its war debts and to show its foreign creditors that Sweden was a wealthy nation. These early silver mines of the 17th and 18th centuries proved of little worth and gave much trouble. While iron-ore deposits were known from early times, the ore had too high a sulphur and phosphorus content to make mining very profitable by contemporary methods. Moreover, transportation difficulties were to harass the mining industry for centuries. It was not until 1888 that the railroad from the Gällivare-Malmberget mines was completed to Luleå on the Baltic coast. This line was built by the English, who had bought up the unprofitable mines and were threatening to make a success of them with the new railroad and the sudden world demand for Lapland ore. The Thomas process made the phosphorus content of the Lapland iron ore no longer a hindrance to cheap production. By a remarkable manipulation, the English were ousted from their holdings by the Swedish State in conjunction with certain organizations of Swedish high finance. In 1902, another line was completed from the great iron mine at Kiruna out to the Atlantic coast at Narvik in Norway. These lines were not connected to the larger Swedish railroad network until much later. Much of the labor force which had built the railroads was absorbed into the mines.

Mining was and still is a large industry also in the central region of Sweden, but the smelting furnaces were run on wood. As the woods to the south were consumed, the prospects in Lapland became more and more attractive. To promote the early mining industry, the State gave settlers in Norrbotten considerable benefits and made it possible for them to pay their taxes by supplying wood for the mines (Öström, 1978:11). Both the mining industry and the railroads that it was dependent upon were in great need of electric power. In 1910, the first hydro-electric-power dam construction in Norrbotten was begun at Porjus, not far from the mines at Gällivare-Malmberget. Demands for further dam construction kept pace with the development of the mining industry.

The first sawmills were also located in the interior, for they were dependent upon water power from the high waterfalls. As the use of steam power spread, however, the sawmills could be located according to other criteria. The mills moved to the Baltic coast, where export was easy and where logs could be accumulated from a vast network of lumber-floating channels along the rivers and lakes. While the mining, hydro-electric-

power and timber industries tended to form a tight constellation of industrial development, in which the success of one was of great importance for the success of the others, in time they were to widen their horizons. Although the interrelation of these industries is still great and capital from one industry is often invested in another, the water-power and timber industries have grown into industrial giants in their own right.

At first, the availability of great amounts of cheap electrical power in the interior attracted all kinds of industries. Porjus, for example, became the site of numerous small industries. But, in a few short decades, techniques were developed which enabled electricity to be transported over long distances without major loss of power. In 1938, a 600-mile-long power line stretching from Porjus southward to Västerås was completed. With similar lines, electric power from anywhere in the interior of Norrbotten could be exported efficiently to the coast and to the south. Industry no longer had to go north (Lundmark, 1971:33).

The State granted private timber companies logging privileges over huge forest zones, privileges which were justified on the scanty grounds that these timber companies had to keep the lumber-floating channels clear and that this was in the national interest. Under the attractive State policy of granting settlers specially attractive land rights and building aid, the population of Norrbotten's interior more than doubled in the period from 1870 to 1900. Many of these people were employed, at least seasonally, in the timber industry. The sawmill industry culminated around 1900. The easy profits to be had from the felling of virgin forests had been reaped. Between 1909 and 1937, the number of workers in the Norrbotten sawmills decreased by 50%. Only the biggest companies with the most capital could afford the investments needed to ensure decent profits. The others found it easier to shift their capital to other businesses (Lundmark, 1971:41). A major reason for this decline was also that Norrbotten no longer produced much in the way of finished wood products. Instead, lumber was shipped to southern factories, which were better able to produce a high-grade finish and thus bring in the best prices. By 1937, Norrbotten exported about half of all its lumber (Lundmark, 1971:42).

The same story was repeated in the iron industry. The ore was refined elsewhere. When the ironworks in Luleå went bankrupt, England was again turned to as a prospective buyer. When England showed an interest, the central-Swedish iron companies hastened to buy up the Luleå ironworks and dismantled it in 1932, in order to stifle this source of potential competition. An ironworks in Norrbotten, Norrbottens Järnverk, was re-established in 1944, but it refines only about 4% of the ore which is produced in Norrbotten (Lundmark, 1971:57 ff.).

Attention must now be devoted to a discussion of the administration of these major industries, their legal foundations and their conflicts with each other, mainly in the post-World War II period, a period which well deserves to be called the great age of northern industrial encroachment.

The State's physical planning and reindeer management

In the late 1960s, all four of the major industries discussed in this chapter—mining, water power, timber and tourism—began to become emmeshed in a single, centralized, ongoing program of social planning and resource management, what was called the State's physical planning. This planning was started in 1966 on the initiative of the Minister of Communications in an attempt to clarify the prospects and needs for the utilization of natural resources. Later, this work was transferred to the Ministry for Civil Service Affairs. Its results were presented in SOU 1971:75 and led to Prop. 1972:111, supplement 2. In this bill, it is stated that:

The development within the mountain area toward a more differentiated livelihood, amongst other things, through increased tourism, has in the last few years been marked and indicates that this development will continue at an increased tempo. It must, then, in my opinion be directed in such a way that Saamish interests are not injured and preferably in such a way that the Saamis themselves gain a part in the development's positive aspects. It is therefore appropriate that representatives of the reindeer livelihood and the State administration of this concern be able to contribute to the planning work already in its preparatory stage. (Prop. 1972:111, p. 143.)

This same bill takes up the question as to whether or not Saamish herding rights constitute a legal claim to the resources that is of more weight than other conflicting interests. In its answer, Prop. 1972:111 invokes RNL (the Herding Act of 1971, i.e. SFS 1971:437) and the preliminary work for it, Prop. 1971:51 and JoU 1971:37, in which it was firmly maintained that the herding industry must surrender its claims to grazing land only if a certain land area is needed for a reason that is of "vital importance from the public perspective". Of course, such a phrase leaves the question open to a wide range of interpretation.

If, in constructing a scale for the assessment and comparison of vital interests, cost-profit calculations rather than cost-benefit evaluations are given priority, then the herd-management industry must accept a very subordinate position in relation to the great industrial giants. The value of the total reindeer stock in Sweden is approximately 60 million crowns. One thousand, two hundred tons of meat are produced annually. On the average, the Swedish population consumes 0.25 kg of reindeer meat per person per year. The annual receipts from reindeer-meat production amount to about 15 million crowns. The technical facilities for reindeer management are valued at about 48 million crowns (SOU 1973:52, p. 227). While these figures indicate an industry of no small importance to the thinly populated, northern regions, it is certainly no match for the huge mining, hydro-electric-power, timber and tourist industries with regard to capital.

The physical planning encompasses large geographical areas, including the mountains, coasts and rivers. Parliament accepted most of Prop. 1972:111, which called for continued work, especially on the local level, to draw up the definitive guidelines for the plan. Much of this continued work has been presented in Prop. 1975/76:1, Prop. 1978/79:213 and SOU 1979:54 and 55. In July 1974, the Norrbotten County Administration (*länsstyrelsen*) presented its community plan for implementing the intentions of the physical planning. The reindeer-management situation was handled by the County Administration in its *Overview planning in Norrbotten's mountain regions*, issue no. 10, 1974. A further report of the County Administration was issued in 1977 and its results concerning reindeer management are reflected in Report 44, 1978, parts 1 and 5, of the National Board of Physical Planning and Building (Statens Planverk). Another recent link in the chain of herd-management reports to be made within the context of the physical planning is the Norrbotten County Administration Planning Section's report 1979:18, *Handlingsprogram Rennäring*.

Three basic goals are given in Prop. 1972:111 for the State's physical planning: (1) to document the long-term desires which different interests have with regard to the land and natural resources and to make an inventory of the resources necessary to meet the known demands, (2) to analyze to what extent there are conflicts between different claims and to clarify the consequences of the alternative ways of utilizing the natural resources, and (3) to draw up guidelines for the thrifty management of natural resources which may be in great demand in the future or which are especially sensitive to environmental change. The planning programmers realize the necessity of the integration of all levels of government organization throughout the country. They profess strong, ecological views and shoulder the responsibility of making difficult decisions in favor of different contesting parties (SOU 1979:54, pp. 15 – 16).

Certain geographical areas have been specially designated, in keeping with the physical planning. According to the guidelines for the mountain regions presented in Prop. 1972:111, certain "roadless mountain regions" were to be spared heavy exploitation. The National Board of Physical Planning and Building and the National Environment Protection Board (Naturvårdsverket), together with the communities and county administrations, reviewed the borders of ten specified, roadless areas (see Map B in SOU 1976:28). Eventually, the issue was modified in the form of Prop. 1977/78:31, so that in the end 14 "unbroken mountain regions" were designated. Most of Tuorpon Saameby is included in one of these regions.

In SOU 1979:54, it is suggested that new legislation be passed to protect areas of essential importance for fishing and reindeer management. Part of this protection refers to the unbroken mountain regions.

In the proposed, new, plan-and-building law it is indicated that within the unbroken mountain regions land use should not be allowed to change to such a

degree that the character of the region is strongly affected and that nature conservation and recreation interests be given special consideration. (SOU 1979:54, p. 192.)

Thus, it appears that in the State's physical planning a high degree of centralization and co-ordination has been achieved in the allocation of natural resources (on the national level).¹ Herd management takes its place among all the other interests in a continuous and far-sighted, planning operation under a single (and at least therefore less contradictory) management program.

... there is a need to coordinate the planning of different communities and there are interests of national importance which make demands upon land: big industries, energy production, defense, etc. There are also large interests to conserve certain areas for agriculture, recreation and nature, care for places of cultural interest, etc. It is important for all that lakes, water-ways and the ocean are protected against pollution and poisoning.

There is, however, no plan for all of Sweden which regulates where one should or should not build and how land and water should be used for different purposes. There is no State Physical Plan.

The State's physical planning is instead in part a method to clarify the different demands on land and water resources which are of national interest, and in part a system of plans and rules for land utilization which shall guarantee that these national interests are observed. It has its origin in the prosperity and industrial expansion of the 1960s...

The State's physical planning constitutes a give-and-take between community planning and State guidelines. It is a *constantly ongoing process*, which is influenced by administrative and political decisions in communities, counties and the nation. (*Rennäringsnytt*, 1980, no. 6, p. 3.)

While the systemic awareness reflected in the co-ordination of the State's physical planning is to be applauded on many counts, it fails to consider the regulation of many of the runaway systems (for instance, population and capital investment) which occasion the needs and interests to which it must respond.² In such a situation, the pressure can only mount against the legal protection of grazing lands for Saami herding. Conceivably, it may be of "vital importance from the public perspective" that herd management disappear altogether. Thus, whether the unified and goal-conscious plans of the physical planning will be beneficial to herd-management interests and Saamish cultural interests or whether

¹ The planning programmers are well aware of the necessary relationship of the planning to the larger world ecosystem and to the resource-management programs of other nations. Sweden constantly seeks to further the cause of international resource management (SOU 1979:54, p. 17).

² While many of these growing needs are caused by runaway systems in other parts of the world, over which Sweden has little, if any, control but by which it is unavoidably affected, there are still steps which Sweden might take of its own accord, as it strives for increased international co-ordination. Of course, Sweden alone cannot solve its problems, but it can make the best of them. Certainly, the survival of Saamish herding and Saamish culture, the survival of any minority, is in part a world responsibility.

these plans will simply arrange a more efficient demise for them is still an unresolved question.

Upon the question of the exploitation of Same-Ätnam (Lapland), the limit has now been reached where no further exploitation and/or destruction of land can be allowed to occur. Should this still be allowed, it should be done with the full awareness on the part of the exploiter that the sum of all previous encroachments—whereof tourism is one—causes further encroachment to result, in that the majority society pulls out the foundation for the Saamis to live on as an ethnic minority in the Swedish society. (Omma, SOU 1973:52, p. 230.)

Industrialization *per se* is not necessarily opposed by the herders and Saamis; it is industrialization beyond a certain cost-benefit threshold (critical limit) for them that they oppose. Had no industrialization and accompanying land encroachment ever occurred in Lapland, it is most probable that the Saamis themselves would have demanded the benefits of modern technology and been willing to sacrifice a lake or water-way to provide themselves with electricity (see "The dilemma of culture and living standard," p. 293).

Had Lapland been an independent nation, it might well have proposed contracts with its Swedish neighbors for the capital investment and technical ability needed to construct a dam in return for a portion of the electric power produced. This initial industrialization, essentially for the benefit of the Saamis, might then have resulted in a population expansion (as it has; see *Fig. 4*, p. 297), new desires and the need for further industrialization at the expense of reindeer management. Hence, many of the same types of conflicts and dilemmas would have evolved. This is not to say that land encroachments should all be accepted as inevitable but that, unless runaway systems are controlled, the problems of conflicting resource utilization and the demands for cultural adaptation generally cannot be avoided.

Mining

Sweden is a land rich in mineral resources of many types. Depending upon world needs, different minerals will rise or fall in importance. Iron ore, however, is always in demand, and Sweden possesses an estimated 4% of the world's iron-ore deposits. Ninety per cent of the iron ore in Sweden is to be found in the Lapland ore-fields. For many years, Sweden has been one of the world's leading exporters of iron ore. Swedish steel has a world reputation for quality, and the export of ore is one of the Swedish State's greatest sources of income. In 1966, Swedish iron-ore exports were valued at 1,006 million crowns. In the same year, 21.8 million tons of ore were produced in Lapland and 6.2 million tons at the central Swedish mines. Eighty per cent of this total production came from the three major,

Lapland, mining zones of Kiruna, Malmberget and Grängesberg. Ninety-six per cent of this Lapland ore was exported (SOU 1969:10, p. 71).

The ore produced at the central Swedish mines contains both high and low degrees of phosphorus, while the Lapland ore regularly has a high phosphorus content. Lapland ore has been coveted by many nations, notably Germany. Of course, the price of any ore is largely dependent upon transportation costs and, because the transport of ore requires such complex facilities, it is most efficient if the ore deposits are concentrated in one general area. In Lapland, the ore-fields are extremely large and are therefore suitable for rationalized production. The production costs of the Lapland mines are only one-third of those at the central Swedish mines.

In Sweden, even large iron-ore deposits have been hard to find, because they frequently lie vertically. Yet most of the sites known today in Norrbotten were found before 1727. Large new finds were made around 1895 in connection with the start of the Kiruna and Malmberget mines. Prospecting between 1915 and 1920 was conducted largely by the Northern Swedish Ore-field Company, and after 1940 by the Swedish Geological Survey (SGU), the Johnson Group and the Stora Kopparberg, Boliden and Luossavaara-Kiirunavaara Aktiebolag (LKAB) companies. Currently, about half of the prospecting is done by the SGU and half by private companies.

For the mining industry in our land to be maintained and to expand, it is necessary that the known ore reserves are further inspected and that access to these resources is gradually increased through the discovery of new mineral deposits. For this purpose, widespread prospecting and investigating have been carried out in the country for a long time. (SOU 1969:10, p. 73.)

While the SGU has carried out investigations for ore deposits since the 1920s, its largest engagement in this effort was between 1963 and 1972 in response to the recommendations of Prop. 1963:164. The ability to find mineral deposits increased dramatically with advances in geology and with the realization that the creation of mineral deposits could be linked to observable geological structures. Hence, geologists began to learn where to look. New methods were developed to turn prospecting into a science—gravimetric, seismic, radiometric and magnetic methods and, by the end of the 1930s, also geochemical methods.

Once found, the mineral deposits come under a highly involved structure of ownership rights, which has been undergoing repeated revision. In Sweden, there are three basic systems of mineral mining rights: (1) the land-ownership system, (2) the concession system, and (3) the mining-claim system. The applications of these different systems depend upon the type of mineral in question and its location. Under the land-ownership system, the mineral deposits are owned by the owner of the land where the find is made. The concession system brings the right to search for and mine minerals under the licensing authority of the State. The claim system

allows anyone who finds a mineral deposit to obtain private rights to exploit the find.

From early times, the iron-ore deposits in Lapland which were located on State lands came under the claim system. However, there has been a long and gradual process of bringing these claims under State control, so that they may be utilized in the nation's best interests. In 1899, the Crown ensured itself a *jordägarandel*, a land-owner's portion, of claims on Crown land. Between 1902 and 1939, new claims were not permitted at all on Crown lands in Norrbotten. In an "ore agreement" of 1907, the State gained the right to exploit the Luossavaara ore-field and in another ore agreement of 1908 the State gained possession of a number of other large ore-fields in Lapland. A State ore-field system was founded in 1910, in 1927 the State took over all the claims of the Grängesberg Iron Ore Company in Norrbotten and in 1957 redeemed the Grängesberg Company's stock in LKAB. In the great mineral inventory carried out by the SGU between 1963 and 1972, the State established many important claims of its own (SOU 1969:10, p. 113).

LKAB is now more than 95% State-owned, and the State owns outright or through a State company about 98.7% of the known ore reserves in Norrbotten with an area of at least 10,000 m². Moreover, the State has a land-owner's portion or a 50% Crown share in most of the private mines. Many of the State's own ore reserves lie for the most part within areas designated under the State ore-field system as State mining zones, where claims from other parties are not even permitted (SOU 1969:10, p. 101). As the State also owns the railroad which transports the ore, it is certainly doubtful whether any mining business could survive or follow a policy in Sweden contrary to the State's desires.

Under the current ownership situation, the utilization of Sweden's iron ore will surely be compatible with State interests, but this has not always been so. In the early years of the present century, it was hotly debated whether or not to retain a claim system of ownership for iron ore with all the mismanagement of resources and foreign speculation of the times. Upon numerous occasions, the concession system was proposed to safeguard national interests, and the final result was a kind of hybrid. In 1916, foreigners were banned from establishing claims, as were any Swedish companies operating under foreign commissions or with foreign investments. A number of investigations, including SOU 1924:16 and SOU 1927:14, led to a bill, Prop. 1938:40, for a new Mining Act. This bill was accepted by Parliament after some minor changes and took effect in 1940 as law. The claim system was retained in general for iron ore, for it was considered conducive to large-scale prospecting, a desirable but expensive endeavor and one that should be stimulated. However, claims were to be granted by one of four Mine Inspector's Offices.

According to this Mining Act (SFS 1938:314), anyone can file a claim with the Mine Inspector's Office to prospect over a specified area for

certain "claimable ores" (not all ores come under the claim system). Should such an ore be found in this area, the claimer then has the right to obtain a license to establish a mine at a designated spot (*utmål*) in the prospected zone. Prop. 1974:32 proposed certain partial changes in the regulation of this procedure to stimulate more rational management. Size restrictions were to be relaxed and time limitations imposed. It was further suggested that the State should secure the right to redeem any mine to safeguard the best interests of the nation. Prop. 1974:32 was passed, with minor adjustments, to constitute the new Mining Act of 1974 (SFS 1974:342), the one now in effect.

Similarly, another bill, Prop. 1974:146, sought to revise earlier legislation of 1886 with respect to the minerals, notably uranium and coal, which fall under the concession system. This bill was also passed with minor adjustments and constitutes the current Minerals Act, which came into effect in 1975. Legislation concerning mining and mineral deposits of all kinds has only been touched upon here and is under almost continual adjustment as the relations of the mining industry to national interests, world economy and politics change. To date, it is the iron-ore industry which is of greatest importance to Sweden and which, because of the great scale of its Lapland operations, has occasioned most conflict with herding concerns.

The protection of industries and interests which conflict with mining has been dealt with in numerous laws, the Building Act, the Public Roads Act, the Nature Conservancy Act, the Water Act, etc., but the owner of a mining claim has a powerful position in relation to other interests. Of course, compensation must be paid for mining encroachment, but, under the Mining Act, there are but a few specified hindrances to claims to mining rights. The Saamis' land rights are equated largely with other property rights (SOU 1969:10, p. 121) and form no hindrance to the application of the Expropriation Act. The right of expropriation is, of course, fundamental to any government. Moreover, the authority of the State to diminish or revoke herding rights on any territory is written into the Herding Act itself. Even in recent times, the Saamis' prospects of obtaining proper consideration and compensation were rated as poor, previous to the new Herding Act of 1971, by the State's own investigation (SOU 1969:10, p. 121). As will be seen in Chapter 18, the lack of adequate protection for Saamish interests against heavy, modern, land exploitation brought about a declaration from the Parliamentary Commissioner for the Judiciary and Civil Administration in 1967 and further impetus toward the passing of the Herding Act of 1971.

Section 3, chapter 2, of the Mining Act of 1974, however, does specify certain hindrances to the granting of prospecting claims. Among these (point 2) is a restriction on taking out prospecting claims within the National Parks. While the National Park status of (part of) the grazing territory of some Saamebys (among them Tuorpon) gives them some

protection against mining encroachment, the Mining Act goes on to declare that this hindrance can be waived by the State, depending upon the strength of the mining argument. Similarly, the designation of the "unbroken mountain regions" was meant to protect these areas from heavy encroachment and may do so to some extent, but:

According to the Industry Department's memorandum about the mining industry in the physical planning (SIND PM 1977:1), the development in the long run concerning the mining industry's expansion will be toward a pressure upon the regions within the unbroken mountain chain. The mining of iron ore in Kiruna, Malmberget and Svappavaara will probably stagnate, according to the Industry Department, in the mid 1980s, which means that more of the untouched reserves in this area will be utilized, maybe already in the 1980s. (Lantbruksstyrelsen, 1978, Report 44, part 5, p. 26.)

The future of the mining industry and its future threat to the herding enterprise are difficult to foresee. The estimated ore reserves in Norrbotten are about 3 billion tons and at the 1966 rate of production, 25 million tons per year, the great Lapland mines should be able to continue for 100 years. The life expectancy of these mining complexes may be lengthened by the recent discovery of new fields at great depths. Production of this ore, however, would be considerably more expensive. But the world economy, rather than simply the extent of the iron-ore reserves, will dictate the future of the Swedish mining industry to a great extent. In fact, what we consider "ore" is related to the price it will bring.

Evaluation of the question of ore reserves is hampered because ore is not a clearly defined concept. Ore can be defined as a mineral combination of such quality and quantity that it can be processed economically. The size of the ore reserves is therefore to a large extent dependent upon ore prices . . . (From a mining conference in 1966, quoted in SOU 1969:10, p. 99.)

While the Lapland ore-fields are large and the ore is of good quality for rational production, new mines have opened in Canada, South America, West Africa and Australia which offer the Swedish companies stiff competition. These new mines are often opencast mines and can therefore produce ore at very low prices. At one point in the 1970s, the Swedish steelworks found it cheaper to import ore from Brazil than to use Swedish ore. LKAB's transportation costs are about 10 times greater than those of its competitors in Australia (Stephansson, *Norrländska Socialdemokraten*, August 6, 1980). Furthermore, new methods have been developed to handle ore of low phosphorus content, so that the Lapland ore is no longer more attractive on account of its high phosphorus content. Lapland ore must compete by the efficiency of its production, a far more precarious position. According to Stephansson (*ibid.*), there has been no tendency toward increased rationalization in the Swedish mines to meet the threat posed by the opencast iron-ore mines in other parts of the world.

By the mid 1970s, LKAB was in a crisis situation and was able to

continue only with the help of State subsidies (see Prop. 1977/78:172 and Prop. 1977/78:96). Its labor force was reduced (gradually, through natural wastage without replacement) by 1,500 persons. Still, as the LKAB chief Sven Johansson expressed it in a newspaper article, LKAB's current mining enterprise will probably continue for at least 30 years more (*Norrländska Socialdemokraten*, July 9, 1980).

The current crisis has called for almost total revision of the mining industry's future plans. Only two decades ago, it was possible to regard the industry's place in the greater community from an entirely different vantage point. At a conference in 1966 concerning the utilization of ore deposits, it was maintained that:

One must judge the mineral-reserve question also from other aspects than that of simple business economics, especially when the entire community is dependent upon the utilization of the ore deposits for its maintenance, as is the case with regard to Kiruna and Malmberget. In such cases, the optimal mining rate should be decided with consideration for the desired life expectancy of the communities and of the social expenses of different types related to the exploitation. Such considerations can motivate delay of a certain mining project, which from the perspective of business economics might have been justifiably started earlier. (Quoted in SOU 1969:10, p. 100.)

While social considerations of the above nature may inspire the delaying of mining projects, on the one hand, such considerations can also stimulate further exploitation, on the other. According to Nils Magnusson, of the Swedish Geological Survey, "By mining some of the smaller iron-ore deposits now, population centers can be created at more sites within Norrbotten's inland zones and counteract that depopulation which is occurring in many places" (Magnusson, 1956:65).

The above statements were made during a period, the 1950s and 1960s, which has been called the "golden age" of LKAB's activity. Since then, LKAB has suffered huge losses, especially in 1977 and 1978. The depopulation of Norrbotten continues, but the mines in their crisis situation must give first priority to profitability and rationalization rather than to the creation of jobs. Instead, mining jobs disappear and the depopulation of Norrbotten is only intensified. Production rationalization favors the concentration of activities on large ore deposits; under the conditions of harsh competition, only a very few small mines can prove profitable.

Large mines, such as those at Kiruna and Malmberget, will cause much injury to the herding in their localities. The herders in Rautasvuoma and Laevas Saamebys, for example, have been severely handicapped in their migrations by these Lapland mines. The negative aspects of mining encroachment for reindeer management include loss of reindeer through accidents in the heavy traffic, the damaging of fishing waters, the ruin of traditional migration routes and, of course, a certain direct loss of grazing land.

Besides the physical inconveniences to herding due to mining encroachment itself, a major mining operation will bring about the estab-

lishment of large towns, which occupy grazing areas and create an increase in traffic. Moreover, these towns will host Swedish laborers to form populations which dwarf the Saamis in the community. Hence, the mining industry especially must be regarded in a wider political perspective, for a community with a fairly permanent and large, non-Saamish majority will not be so considerate of the Saamis' situation. Much anti-Saami sentiment can be found in these northern towns. The Saami herder's right to hunt and fish in the area, for example, is often resented by the Swedish mineworker, who does not consider the historical development of this situation but finds himself born into it.

It appears that, in Lapland, the mining of other minerals than iron-ore will increase. Many valuable deposits have been found in the mountain regions, and with the current unemployment and economic crises in Sweden and Norrbotten especially, it is doubtful whether all of these finds will be bypassed out of regard for conservation interests alone. Nor will the unbroken mountain regions designated in Prop. 1977/78:31 present a strong enough obstacle to prevent troubled communities and a troubled mining industry from advocating that these regions be prospected and maybe exploited (see *Norrbottens Kuriren*, August 7, 1980, and SOU 1980:12, p. 281). In a low-flexibility situation, even the threat of serious health problems may be suppressed to the advantage of a mining proposition. Intense controversy and protest have been occasioned, for instance, by the recent preliminary work by LKAB for a uranium mine (Sweden's first) at Pleutajokk near Arjeplog (see *Norrbottens Kuriren*, September 3 & 6, 1980).

Currently, the Tuorpon area does not suffer from any inconveniences caused by mining activity. Magnesium deposits have been found in the Tarrekaise zone, and quartz and limestone have been found in the Norvijaur-Flakaberg zone. A small-scale operation around Norvijaur may prove profitable and has recently been suggested by LKAB (see *Norrländska Socialdemokraten*, July 9, 1980). Sizable iron-ore deposits have been located just north of Tuorpon and, if ever they prove profitable enough to mine, it is possible that Tuorpon will feel the effects. Iron ore has been found at Kallak, near the eastern end of Lake Skalka, and the titanium and iron-ore deposit at Ruotevare in the Jåkkåkaska Saameby has been known for a long time. Because of the special quality of this ore, the Ruotevare find is quite attractive (see SOU 1963:36, pp. 12 ff.).

Dam construction

In Sweden as a whole, the production of electric power began its great march northward already at the turn of the century. Sweden's industrial development was dependent upon cheap electricity from water power. In

order to ensure access to the desired rivers and lakes, the Water Act of 1918 was created (Sundin, 1979:79). This act remains intact today without any major alterations. It was under the Water Act of 1918 that the Water Courts were founded at Luleå, Östersund, Umeå, Stockholm, Vänersborg and Växjö. These courts were to consider the legal aspects of the different dam-construction projects within their jurisdictions. The court will often conduct an extensive investigation at the dam site and file a report concerning the eventual effects that the dam will have on other interest groups and on the environment.

The other interests which are to be given consideration under the Water Act are fishing, transportation, timber-floating and agriculture. Herding is missing from this list and first received the same protective status as fishing in 1961 through a change in the Water Act (Sundin, 1979:81). Those interest groups which stand to be injured by a dam construction can bring their suits to the Water Court. The Saameby, for instance, is given legal assistance by the State, and the herders are urged to present their views and list potential losses and desired compensation. A settlement is then reached in the Water Court. The SSR has frequently protested this system, which in effect places Saami interests under a State lawyer against State interest in a State court.

In deciding whether or not a dam project is permissible under the Water Act, the economic gains from the project are weighed against the losses suffered by the other, recognized, interest groups. According to the Water Act, the project is permissible if its net benefit is more than three times the value of the damage to agricultural fields and farm pasture and twice the value of other property. Compared with the enormous profits to be made from most dams, no combination of conflicting interests can effectively block their construction on such economic principles. Once property value is lost to one dam, the advocates of the next dam in the area will have that much less trouble in demonstrating a two or three times greater economic value than what remains. Other clauses which may bar dam construction under the Water Act are totally open to opinion. For example, the dam shall not be built if "a great many people" are made homeless, if fishing of "vital importance" suffers "substantial" loss, etc. (Sundin, 1979:80).

In the early years of dam construction, conservation interests were caught slumbering. In 1951, however, the Swedish Touring Club (STF) petitioned for an official State inquiry to determine which water-ways were still untouched and which were objects of construction plans. This petition was supported and complemented by the Swedish Mountaineering Club (SFK). The SFK demanded that all manner of conservation interests be heard and that certain rivers and water-ways be given complete protection. Conservation groups managed to stop and hinder dam construction at a number of sites, but, while the courts debated the issue and the water in question was not to be touched, the State Power Board

New and old pictures of Tuorpon herding and herders.

All pictures taken by the author, unless otherwise specified.

*Staloluokta, summer home
for many Tuorpon herders.*

*Anders G. Omma marks a
calf by notching its ears with
his unique, personal pattern.*

A reindeer's ear, marked in two different ways. The Saamish pattern of notches can be read on a running reindeer at considerable distance.

Lars Anders Blind delivers a calf to its rightful owner for marking.

Besides the marking of calves, other husbandry chores, such as the castrating of bulls, may be performed in the summer; here, a young bull is being thrown to the ground.

The herd separations at Parka begin around August 10. Nils Anders Blind pulls one of his reindeer to the Jokkmokk side of the corral, while Elli Karin, his sister, scares and prods the reindeer from behind.

Alf Teilus, from Udtja forest Saameby, walks one over to the Jokkmokk side at Parka.

A bull has been slaughtered for household consumption outside the Valli corral during the large, pre-rut, bull slaughter in September.

Five dead bulls at a time are transported by helicopter from the Valli mountain corral to the road's end in Kvikkjokk, where the slaughterhouse truck waits.

December 1975. Nils Anders Blind leads the small sled caravan and covers the rear of the Viri Group's herd on its eastward migration to the lowlands.

As the reindeer are gathered from the west, they are corralled in the lowlands for both separation and slaughter. The swirling herd surrounds itself with a cloud of snow mist.

Around the perimeter of winter separation corrals, there are frequently numerous booths or "kontora", into which herds can be broken down according to various, shifting, group constellations.

The herder looks for his mark in a sea of reindeer.

The exhausting work of herd separation is interrupted for coffee and a cigarette around a fire outside the corral. Separations are exciting events, which often the entire family attends.

Another winter chore is the reindeer count. Henrik Blind carries a paint brush on the end of a stick. A red paint spot signals that a reindeer has been counted and recorded under its owner's name. Henrik knows most of their ear-marks by heart.

Ann-Katrin Blind asks her mother to check the reindeer-count list to see how many of her reindeer are present.

The Winter Fair at Jokkmokk in February 1977 included a caravan of protesting Saamis and Swedes rather than the usual reindeer caravan. The protest was directed at the plans to dam Lake Sitojaure.

Early April. The spring migration has begun and the Viri herd is taken westward over the frozen Lake Peuraure back toward Staloluokta.

Snowmobiles are useful in transporting herders and supplies during spring migrations. They can also be employed sparingly to control the herd.

The winter has been poor; the reindeer are weak and grazing is scarce. Therefore, the snowmobiles carry also bags of artificial fodder. Here fodder is spread upon the ice of Lake Peuraure and the reindeer line up for lunch.

In the spring, snow conditions are ideal for making a supply run by snowmobile to Staloluokta. En route, a herder pauses to catch a meal beneath the ice of Lake Tarra.

While snowmobiles are useful, they cannot adequately substitute for a herder on skis with a good dog.

Along the migration route and dotting the mountains in strategic places are herder cabins, such as this one at Kura by the Tarra Valley.

The herd scatters and merges as might a flock of birds. Herders must be ever watchful and properly positioned to avoid loss of reindeer.

*April. Home again at
Stalo. Spring migration is
over and the calves will soon
be born.*

*Eva Brita Mulka, born
Granström, 28 years old,
from Tuorpon. Photogra-
phed by Lotten von Düben
in 1868.*

*Photograph: Nordiska Mu-
seet.*

*Lars Anders Ammasson
Pavval, "Pava-Lasse" (#4).
Copy from private collection.*

*One of the few existing pic-
tures of Henrik Persson
Blind, "Heika Gubben"
(#30), third from left. Copy
from private collection.*

Nils Johan Per Persson Pavval, "Nilhsok" (#15), his wife, Inga Kajsa Pavaadt Pavval (#3) and their foster daughter, Sigga Maja Kuoljokk (#18), ca. 1925. Copy from private collection.

From left to right, standing: Mattias Kuoljokk, Prosten Lindgren, Saami sheriff Malmström. Seated: Landshövding Gärde, Harald Grundström, Anta Pirak, Inga Pirak, Landssekreterare Sundberg and (standing) Nils Anti Gruvvisare. At the home of Harald Grundström in 1933, in celebration of Pirak's book. Copy from private collection.

The inhabitants of Staloluokta gathered together upon the occasion of a visit by the preacher Hjalmar Westeson, who had this picture taken, with himself included, in front of the Piltto's kâta, ca. 1927. Copy from private collection.

The inhabitants of Parka, a mixture of Jokkmokk Saamis, Karesuando Saamis and Swedish guests, ca. 1950. Copy from private collection.

(Vattenfall) often went ahead and built the road that would be necessary for construction, should they win the case, transported the machinery to the site and erected the electric-power lines. Then the Board could point out that much money had already been invested in the project, as an incentive to the court to grant permission (Borenus, 1979:26).

In 1952, a committee of conservationists and certain administrators was formed to consider water-power issues. In 1954, a list was printed of waters worthy of high protective status and was presented to the Department of Agriculture. The same year, this committee appointed a delegation to take up negotiations with the State Power Board. A large inquiry led by Prof. Beskow, in keeping with these negotiations, finally resulted in the aforementioned "Peace in Sarek" by 1961. The concrete terms of the "Peace" have long since been by-passed, but the role of the conservation group's delegation was taken over by the National Nature Conservancy Board (Statens naturvårdsnämnd) in 1963 and later by the National Environment Protection Board (Statens naturvårdsverk) in 1967.

Regardless of the decision in the Water Court, the final decision to build or not to build a dam on a proposed site is turned over to Parliament. The question of compensation payments, should the dam be built, is left to the Water Court. A number of settlements may be made with individual herders, but the greatest sum paid to compensate herding interests is split, half falling to the Saameby in question and half falling to the Saami Fund (Samefonden). Once a settlement is agreed upon or determined by the Court, heated disputes often erupt in the Saameby over the manner of distributing the compensation. That portion of the money going directly into the Saameby treasury can be spent only for the good of the Saameby's collective herd management. But a dam will not affect all the members of a Saameby equally.

Some families will lose their homes and grazing areas, while others may suffer few ill effects. Those who have suffered the most feel that they should receive most compensation, but, instead, the money turned over to the Saameby is to be used for the good of all. These money matters can cause much enmity within the Saameby. The same arguments apply on the inter-Saameby level to the money given to the Saami Fund. Why should all Saamis benefit from the suffering of one Saameby? If Saamis in general are to benefit from grazing-land compensation, why do not the Saamis in general have certain rights over the grazing lands? These questions will be considered in Part II. Suffice it to say here that the State recognizes herd management as a pillar of the Saamish culture. A blow to herding is therefore a blow to the Saamish culture and impairs the rights of all Saamis to maintain their culture. In effect, the money going to the Saami Fund compensates a different loss from the money going to the Saameby.

As part of the larger physical-planning effort, the Sehlstedt Report was commissioned to examine the feasibility and consequences of continued

water-power exploitation in various areas, including southern Norrland. This report, SOU 1974:22, was presented in 1974. Similarly, the Ekström Report was commissioned to examine the same issues in northern Norrland. This report, SOU 1976:28, was presented in 1976, and it is this report which deals with the waters of the Jokkmokk parish. I shall have occasion to return to this report later in the chapter, in discussing the dam-construction projects threatening Tuorpon.

According to estimates made in 1974, the economically valuable and harnessable water-power resources in Sweden can yield a total of 95 terawatt-hours (TWh) per year. Of these, 60–61 TWh have already been harnessed by existing dam constructions (SOU 1976:28, p. 12). In 1975, the Swedish Parliament ordered a continued water-power development to supply 5 TWh more by 1985. In the Sehlstedt and Ekström Reports, the remaining, undammed waters have been rated from 1 to 4. A water given a rating of 4 is considered to have the highest conservation priority. According to SOU 1976:28, it would be possible to harness 2–3 TWh by further dam construction by 1985 without damaging areas of major conservation value, that is, by choosing objects rated 0 or 1 or maybe 2. It would also be possible to harness 5 TWh more with equally little damage if the period of construction were extended. But to harness 5 TWh by 1985 will require exploitation not only of objects rated 0, 1 or 2, but also of waters rated as 3 or 4.

In 1977, the Parliament accepted Prop. 1977/78:57 concerning rules for the State's physical planning of water-ways in northern Svealand and Norrland. According to this bill, all water-ways rated at conservation value 4 should be spared from exploitation, along with the Torne, Pite and Vindel Rivers. After special consideration, the Kalix River was also, temporarily at least, spared. This does not mean, however, that these waters *will* be saved. The Water Court must still pronounce on any construction project presented to it. Apparently, it means only that the State has finally conceded that conservation aspects alone afford the *possibility* of stopping a dam project (Nylén, 1979:14 ff.). While the State has come to show an interest in protecting the country's remaining, unexploited waters and has graded their conservation value, the difficult decision remains whether it is better to meet energy goals slowly, with the sacrifice of many lower-rated waters, or more quickly, with the sacrifice of fewer, higher-rated waters (SOU 1976:28, p. 18).

In 1969, a State inquiry was commissioned to examine the Water Act and to make suggestions for changes. It was hoped by many (a hope fostered by the committee's directives) that this meant that further water-protection measures would be included in the Act but, when the committee's report (SOU 1977:27) was presented, it became plain that such was not the case. The suggested law is instead geared to the streamlining of the process of water exploitation. Noteworthy is the proposed consideration to be given to general energy policies and employment policies. In short,

this proposal seems to have been made to comply with the Parliament's 5-TWh-by-1985 goal. Apparently, however, the Parliament has already altered its energy plans (Sundin, 1979:82).

Sweden has recently (1980) held a national referendum on the use of nuclear energy and, while certain general guidelines have been determined, the basic condition of energy policy in Sweden is chaotic, to say the least. In the flurry of changing energy policy, the matter of whether a specific water-way is to be exploited or spared seems to be decided on the roulette table. Throughout the nation, various "action groups" have been formed to guard the remaining free waters. Laevas Saameby, for instance, has formed its own action group for the protection of Kalix River. And in Jokkmokk the group called "Inte en Droppe Till" (Not Another Drop) watches over Lake Sitojaure in Sirkas territory and Pärälven in Tuorpon.

The direct physical effects of constructing a dam in grazing territory injure the herders' economy in many ways. The most valuable grazing areas by the old lake shore, often excellent calving lands for the reindeer, are flooded.

The snow cover is thicker over the lands farther away from the water-way zone, for these lands lie higher. Therefore, one usually grazes such areas as soon as one comes down to the winter land. By then the snow has not become so thick. As is well known, the month of March can be very rich in snow and then it is important to have the water-way area's grazing "in the back pocket". (Laevas Saameby's action group for Kalix River, 1979:152.)

The value of grazing zones can never be measured by the quantity of land units alone.

Saami villages by the old lake or river shore are flooded. Moreover, fishing possibilities for the herders in the area are often totally destroyed. The reproductive cycle of the fish is often injured by the unnatural rise and fall of the water level. Debris and the branches of uncleared, drowned, forest trees wreak havoc with fishing nets. The sudden, large and unnatural changes in the water level of an artificial reservoir make the mooring of boats a difficult problem and cause much extra work and loss of property (see *Samefolket*, 1978, no. 10).

Reindeer-migration routes and ford locations across rivers may be eliminated. New and difficult routes must be taken. There is always less snow on a frozen river and good grazing along its banks, thus affording the reindeer a popular and often vital feeding track. The frozen rivers and lakes are also important transportation routes for the herders. Changes in the water level under the ice can make travel dangerous. Migration scheduling may have to be altered. Unnatural fog banks in the reservoirs can settle on the surrounding moss and lichens and make this grazing unusable when the vapors freeze on the plants.

Only some of the most common ill effects of dams on the herding enterprise have been mentioned here. Certain indirect effects, often the most serious of all, have already been noted — road construction, reindeer

deaths from traffic (with increased frequency of illegal reindeer-hunting) and expansion opportunities for the timber industry and tourism.

One experiences an insecurity for the future, both socially and economically. The result is insecurity and impoverishment of the entire Saamish life-style, the foundation of the Saamish identity, which in turn is tied to Sameätnam, the geographical area which to us Saamis is "home", that is, Saamiland.

By what has been said here, we Saamis mean that the exploitation of untouched rivers must be regarded as a further threat to the Saamish culture. (Laevas Saameby's action group for Kalix River, 1979:153.)

More than any other parish in Sweden, Jokkmokk has opened itself to water-power exploitation and built a temporary prosperity upon the income and jobs that this industry has offered. In all of Norrland, Jokkmokk parish has been the host of most dam-construction projects (17) and has supplied the nation with 3,128 MW of electricity per year. The parish with the next highest production of electricity is Pajala, with a mere 452 MW per year. Even in 1976, when the study was made, Jokkmokk contained one of the largest work forces of water-power employees (SOU 1976:28, p. 247).

The water-power epoch ends at the beginning of the 1980s in Jokkmokk parish. The knowledge that the projects are ending has still not caused the government to offer alternative employment within the parish . . .

Water power worth nearly 2,000 million crowns in the consumer chain is produced yearly from the Lule River. The State Power Board pays the County Administration about 5 million crowns yearly for general use in the community affected by dam constructions . . . (Öström, 1978:17.)

Despite the disproportionately massive exploitation of water power already in the Jokkmokk parish, it is here that the State Power Board poses some of its most serious threats to conservation interests. It is precisely because Jokkmokk has experienced and geared itself to the temporary prosperity afforded by the water-power industry that it is so hard hit by its decline. Jokkmokk has foolishly contented itself with jobs rather than a higher proportion of the monetary gains from the electric power it produces.

Unlike the long-term, population concentrations resulting from the opening of a major mine, the construction of a hydro-electric-power dam requires only a temporary work-force, which is then disbanded once the dam is built or sent to work elsewhere on a new site. A large mine creates a town around it, but a dam rarely creates more than a temporary barracks at the end of a rough, newly cut road in the middle of the wilderness. In the early days of dam construction, the job took a long time, the electric power could not be exported over long distances cheaply, and small towns had time to establish themselves. Some still survive, despite the end of the construction work, but most, small, water-power towns flourished and died.

However, the last 20 – 30 years have witnessed such a frenzy of dam

construction that a considerable part of the Jokkmokk community labor force has been given almost permanent employment, moving from dam to dam, often within a relatively narrow radius. The community becomes geared to an artificial prosperity, which suddenly turns sour once the nearby rivers and lakes are dammed and jobs disappear. The seriousness of this let-down was recently exemplified when the Jokkmokk local authority, rather than face widespread unemployment, offered one of its few, large, still-undammed lakes, Sitojaure, rated as worthy of the highest conservation efforts by SOU 1976:28, to the State Power Board for damming. The local authority had to acquiesce in the further demands for new sites by the State Power Board because of the employment issue. The need for more electric power was an issue hardly mentioned by either the local authority or the State Power Board in the furious debates that followed. The Board wanted jobs for its men, and the local authority needed these jobs to keep the population level in the community high enough to ensure funds from the State to help to maintain the social services.

The damming of Sitojaure would provide 300 men with jobs for 3 years only, while it could very well destroy the herding capacity of the Sirkas Saameby for all time. This action by the local authority, solicited by the State Power Board, sparked off one of the few Saami protest demonstrations ever seen in Sweden (see p. 421).

Within Tuorpon Saameby, there are four suggested projects which threaten the herding industry: (1) the Stalojokk project, (2) the Pasta project, (3) the Tarraättno project, and (4) the Pärälälven and Peuraure-Karatj project (see SOU 1976:28, pp. 150 – 163).

For the Stalojokk project, a dam is suggested on Stalojokk, 6 km from the point where it runs into Lake Virihaure. Not only would a large zone on Virihaure's western end be flooded by the creation of the new reservoir, but the effects on Lake Virihaure itself would be quite noticeable. Tuorpon herding, especially that of the Viri Group, would be severely injured. There are also other reasons why the Ekström Report, SOU 1976:28, places this water in protection class 4. Areas of archeological and botanical interest would be lost. The surest protection, however, is that this project by itself would cost a great deal, without giving enough in return (SOU 1976:28, p. 154). The Stalojokk project will probably never be seriously considered, unless the larger Vuojaättno project (along with the Huorso project) is constructed. The Vuojaättno project would be extremely profitable but devastating for Sirkas and Jåkkåkaska Saamebys especially and even for Tuorpon. Padjelanta National Park would be ruined and Sarek National Park would be severely damaged. The consequences of a road this far west in the summer grazing lands would be enormous. This area was spared largely due to the "Peace in Sarek" and, more than any other area in Sweden, exploitation of this zone would make a farce of the Swedish National Park system and the National Environment Protection Board.

In the Pasta project it is proposed to create one huge reservoir out of Lakes Pastajaure, Skallojaure and Rovijaure. Water from this reservoir would be released into Tarraättno, and therefore this project is directly connected with the Tarraättno project. Construction of the one would probably lead eventually to construction of the other. For the Tarraättno project, a dam would be constructed 4 km upstream from Njunjes. As a result, the level of Lake Tarraure would be raised by 32 m. A large portion of the famed Tarra valley would be flooded. Water from this reservoir (along with that from the proposed Pasta reservoir) would then be diverted through an 18-mile-long tunnel into Lake Tjaktjajaure, which is already a reservoir formed largely by the great Seitevare dam. From Seitevare, there are also other dams already built downstream, so that the water would be utilized again and again. If this tunnel were built, the water from the three branches of Kamajokk would also be diverted into it. In combination, these projects are very attractive economically, but the losses they would impose can hardly be estimated. Much of Sweden's prized and internationally famous nature reserves would be destroyed. Tuorpon herding would be terribly damaged. Both the Viri Group and the Nuortvalle Group would suffer. Calving land and summer, spring and autumn lands would be lost. If Tuorpon herding managed to survive this encroachment, its entire structure would have to be altered. Fortunately, the voice of the conservationists is loud in the protection of this area. It is a favorite hiking ground for tourists and is well known throughout Sweden.

The last of the proposed projects, the Pärlälven and Peuraure-Karatj project, would probably be the most devastating for Tuorpon if constructed. As the historical material presented here has so amply demonstrated, the Pärlälven water-way has become the spinal cord of Tuorpon herding. The project calls for a damming of Lake Peuraure which would raise its level by 12 m. Further downstream, Lake Karatj would also be dammed and its level raised by 1.5 m. The water would then be led over to Parkijaure, where it would progress over a number of already constructed dams. Valuable spring/autumn and winter grazing would disappear. Key grazing spots would be lost and even the calving lands by the Skeltevare mountains. Moreover, Tuorpon would sustain severe damage to its major migration route. The wildlife along the Pärlälven water-way is remarkable. Fishing would be ruined. According to the State's own report, "Pärlälven composes the only freely running water of any size within the Jokkmokk region" (SOU 1976:28, p. 162). Fortunately, all of the threatened waters within Tuorpon have been granted protection class 4. The question is whether this is enough to protect them. In Tuorpon, the stakes are high, for the construction of any of these projects would cripple the herding concern.

The timber industry

Considerably more than half of Sweden's total land area is covered with forests. An area of about 23.5 million hectares or 57% of the total land area can be profitably utilized by the timber industry. Of course, some areas attractive to the timber industry are set aside for other purposes. There are also wooded areas which cannot profitably be logged and re-afforested in a continuous, long-term program.

The timber industry is of the utmost national importance to Sweden, as regards both the economy and employment. In the 1970s, the income from the export of timber and timber products constituted 20–25% of the country's total export income. In 1975, the gross production value of the timber industry was about 36 billion crowns or about 10% of Sweden's gross national product. Despite the fact that Sweden contains only 0.6% of the world's afforested land, Sweden is responsible for 2.5% of the world's logging, 3–8% of the staple goods of timber production, and 8–25% of the world trade in these goods (Prop. 1978/79:110, p. 10, and SOU 1978:6, p. 92).

Currently, Swedish timber is used in a wide variety of internal finishing industries: sawmills, pulp mills and fiberboard and plywood factories. Close to 300,000 people are directly or indirectly employed within the industry and, although the number of employees has decreased considerably recently, due to widespread mechanization, the timber industry is still one of the country's major employers. The number of persons employed directly in forestry work declined from 114,000 in 1960 to 60,000 in 1975. In many sparsely settled, northern regions especially, the timber industry is one of the few sources of employment. It has also been a major source of part-time employment, thereby providing opportunities which the local reindeer herders have been quick to incorporate in their yearly plan of resource management.

While its labor force has decreased radically, the logging operations of the timber industry have almost doubled in the last 50 years and, simultaneously, the timber reserves have increased by about 40% through increased replanting and improved care. Today, the regrowth of the forests is about 75 million cubic meters of timber per year. The total amount of logged timber per year rose from 50 million cubic meters in the mid 1950s to 75 million cubic meters in the early 1970s. In fact, the consumption of timber has at times been greater than the regenerative capacity.

The Swedish timber industry, that is, the forestry and wood industries, are now in a situation which differs from that which has obtained during the last half-century. Most significant is that the wood industry's demands for timber, when operating at full capacity, for the first time exceed the timber quantity which can be delivered over a long term under the current forestry program. (SOU 1978:6, p. 41.)

This situation, the dearth of "middle-aged" forest (40–60 years old) in

Norrland and parts of Svealand and the resultant logging beyond the regenerative capacity, must be followed by a decrease in industrial capacity in the coming decades.

Of course, one way to avoid the consumption of capital timber resources and yet to meet the high demands of industrial capacity is to rationalize forestry operations heavily, i.e. to optimize the regenerative capacity and the production of timber. More than any of the other industries discussed in this chapter, the timber industry, because it is based upon a *regenerative* resource, is comparable in its State rationalization program with that proposed for reindeer management. Further similarities will be noted in Chapter 18.

The rationalization of the timber industry has been a continuous process, but its greatest development has occurred only in the past two decades. Previous to the current Forestry Conservation Act (1979:429), which took effect in 1980, the same forest legislation was not applicable to all forest owners. Forests owned by the State and the Church were objects of separate legislation. Joint-stock-company forests and public and private forests were subject to the Forestry Conservation Act of 1903, which was revised in 1923 and again in 1948 before the final version in 1980. Now all owners must abide by the guidelines of the Act. Obviously, the forest reserves of the country as a whole could not be adequately regulated if the different owners could operate more or less independently of each other. Co-ordination of forestry policy was essential for rationalization and proper conservation. It is important to regulate the amount of timber cut in each area and its age. After logging, it is necessary to ensure that all owners replant and cultivate a new forest crop properly.

Besides raised profitability, there were other motivations for a revision of the Forestry Conservation Act. A long-sighted and co-ordinated logging and replanting program would not only increase production but would also secure steady employment opportunities. Centralized regulation was, therefore, attractive from the viewpoint of regional policy as well. Lack of co-ordination in forestry policy might cause a good job market to crash in a certain district. On the average, 100–130 years is required for replanted pine forest to reach the point at which its rate of growth makes it most suitable for logging. If an entire district is logged at once, forest jobs will disappear afterwards. Each district must strive for an annual steady state of production and regeneration.

To the profitability and employment motivations must be added yet another incentive for law revision. The 1960s and 1970s saw the passing of a Nature Conservancy Act and the organization of the State's physical planning. The Forestry Conservation Act of 1948 was bolstered repeatedly with nature-conservancy considerations. In 1974, two amendments were made, one linking the Forestry Conservation Act with the Nature Conservancy Act and the other requiring that reports be made of any logging activity. In 1977, an amendment was made requiring that forest

owners control insect pests. Certainly, forestry concerns and nature-conservation concerns overlap considerably.

Forestry operations, when conducted according to the guidelines which are currently contained in the Forestry Conservation Act of 1948, ensure that consideration is given to the limitations presented by Nature. Many of the regulations in forestry legislation are, therefore, advantageous for conservation interests. This applies to such things as the rationing regulations for the old forests and the protection rules for the younger forests. Even the demand for quick re-cultivation methods and the protection of woods near the mountains benefit conservation interests. (SOU 1978:6, p. 97.)

In other respects, of course, the operations of the timber industry may be directly opposed to conservation interests. And conservation interests may cause certain forest zones to be removed from timber production.

The investigation report entitled *Ends and Means in Forestry Policy* (SOU 1973:14) was considered inadequate to deal with the new situation which had arisen, and a new government investigation was ordered. It was plain, however, that a revision of the Forestry Conservation Act was in order. The new investigative committee was directed to give first priority to the establishment of a continuous, timber-reserve report. With knowledge of the fluctuating quantity and quality of the timber reserves, it would be possible to compose a total industrial program, so that forest lands could be "utilized in the best way from the community perspective" (SOU 1978:6, p. 24) on a long-term basis. A partial report from this investigative committee, DsJo 1975:1, demonstrated the feasibility and necessity of centralized forestry prognosis and led to the foundation of the National Board of Forestry (Skogsstyrelsen) for this purpose.

The directive to the investigative committee further stressed the importance of deliberations with the Conservation Committee, which was then in the process of revising the Nature Conservancy Act (1964:822). Both forestry and conservation legislation came to adjust to each other.

In its final report, SOU 1978:6, the investigative committee presented three alternatives for a forestry program. The first alternative was calculated on the basis of the contemporary situation, the same amount of fertilizing, for instance, but with increased, selective thinning of deciduous trees to ensure the maintenance of logging at the rate of 75 million cubic meters of timber over a 100-year period without endangering regenerative capacity.

The second alternative was considerably more ambitious. It proposed that the imported, fast-growing, North American contorta pine be planted on 14% of the forest lands of Norrland and northwestern Svealand, that the area of land fertilized be tripled from 150,000 to 450,000 hectares per year, that half of the forest moorlands be drained during the next 20 years and that 25% of the swamp lands be drained and fertilized during the next 40 years. This alternative would raise the timber production gradually from 75 to 89 million cubic meters per year.

The third alternative took into account the industry's production possibilities, if restrictions should be placed on fertilizing and the spraying of chemical poisons to kill deciduous trees—restrictions such as those proposed by many local environment-protection groups. In this case, the proportion of deciduous trees to evergreen trees would rise, occasioning a drastic decrease in profits. Timber production would sink to only 69 million cubic meters per year. According to the committee, this alternative would cause local communities to suffer sizable increases in unemployment (Prop. 1978/79:110, pp. 18 – 19). SOU 1978:6 recommended that the government accept alternative 2, an alternative which would be disastrous for the herding industry.

SOU 1978:6 led to Prop. 1978/79:110 for a revised Forestry Conservation Act, which was discussed in JoU 1978/79:30 and accepted. Thus, the Forestry Conservation Act of 1948 and a Royal decree of 1894 were replaced. In the new Forestry Conservation Act of 1980, both State and Church forests were brought under the same legislation, along with the forests of the other owners. In the revised law, forestry conservation was given an even more prominent role. The existing County Forestry Boards, one in each of the 24 counties, were given greater powers and responsibilities to supervise the activities of the various owners and to offer them basic information and expert services. Fortunately for the herding industry, alternative 2 was not adopted; however, it was not rejected either. Instead, it was considered unwise to force a forestry program in any direction over such a long period (Prop. 1978/79:110, p. 20).

Nonetheless, certain guidelines were confirmed. The contorta pine was to be introduced on a limited, trial basis. Chemical preparations for the destruction of deciduous trees were not prohibited, although it was advised that new methods should be developed for the job. While the fertilizing of forest lands was accepted and recognized as a useful method of increasing production, it was not considered that the State should stimulate this process even more. Research and further development were recommended in this field. On the matter of creating or improving forest land by drainage, Prop. 1978/79:110 was favorable but advised coordination with conservation interests. To regulate draining, the new legislation demands that any such activity shall be reported.

The national goals of the timber industry were declared to be full employment, economic growth, regional balance, balance in foreign payments and the application of good methods of environmental conservation (Prop. 1978/79:110, p. 12). Production was to be kept at a steady rate of high intensity, although it was recognized that some variation would have to be allowed (even to the point of consuming capital resources for a short period), in order to adjust to the shifts in the national economy. By achieving a high degree of rationalization, it is hoped that the demands for timber will not come to press the availability too hard. It is also stated that eventually the goal of the timber industry is to become self-sufficient and

independent of State financial aid (Prop. 1978/79:110, p. 17, and SOU 1978:6, p. 104).

To achieve these goals, certain means were specified. The first of these is, of course, the Forestry Conservation Act itself, through which the complete cycle of logging, clearing, replanting, cultivating and thinning is regulated for all forests, regardless of owner. Information about these requirements and the services to help owners to meet them are provided by the County Forestry Boards. Owners must report important aspects of their forestry activities, their plans or the condition of their forest property. In this way, insect control, for example, becomes more efficient, and logging can be rationed in certain regions to ensure more steady employment on the local level.

Another major factor which helps to meet the goals of the State's forestry program is the system of government aid. Proper forest care and cultivation can be very expensive and, where, for instance, the profits from the timber on a property cannot cover the costs of proper replanting and cultivation, it is possible for the owner to obtain State funding for such needs (SOU 1978:6, pp. 35 ff.). A number of earlier Royal proclamations (*kungörelser*), notably 1948:239, 1974:472, 1943:530 and 1952:793, designated State funds to ensure rational forest cultivation and the construction of forest roads for efficient timber transportation. Prop. 1978/79:110 called for increased, government, financial aid.

The taxation system forms yet another means of stimulating the different forest-owners to comply with the State's program. In the years to come, the logging in the State and large company forests will have to be reduced and, if the same rate of production is to be maintained, logging in privately owned forests will have to increase. Apparently, the taxation policy for forest has had an inhibitory effect rather than a stimulating effect on logging. Measures to reverse this situation are now being devised (Prop. 1978/79:110, p. 32).

Usually, rational policies require large-scale operations and, where the land is divided amongst many owners, that is, where the structure of land ownership is poor, much money is lost if these separate owners cannot join together in large co-operatives and share the use of heavy equipment, for example. While co-operation is encouraged by the State, the structural rationalization of the forest lands is also promoted by the National Land Survey Department, when possible, by regulating the sale of land entities so that larger units are formed.

Because of the broad expanse of its operations and the enormous influence it has on the environment, the timber industry comes into conflict with the maintenance of places of cultural interest, with nature-conservation interests, tourism and, of course, reindeer management. Not only does the timber industry encroach upon others, and thereby become responsible for the payment of compensation, but its own operations may be encroached upon, so that forest-owners will receive compensation.

Land which is set aside as a nature reserve may require that its owner be compensated for his losses in timber sales. Other areas may be designated nature-conservancy zones (*naturvårdsområden*), in cases in which some active forestry conservation is still needed, but these do not require compensation payment. Land use can continue but under careful regulation.

The timber industry claims an "ecological perspective" (SOU 1978:6, p. 12) and, as mentioned earlier, the new Forestry Conservation Act contains within itself a large number of rules for the protection of the environment. Section 4 of the Forestry Conservation Act of 1980 maintains that it shall not be applied in opposition to the Nature Conservancy Act (1964:822). Section 18 stipulates that forests which are difficult to regenerate because of their unfavorable position or which are necessary to prevent or shield against the effects of heavy erosion shall be specially designated as forests difficult to regenerate (*svårföryngrad skog*) or protected forests (*skydds-skog*).

The forests in most of the western mountain regions of the north, largely those areas west of the Forest Cultivation Line, which was drawn in the 1950s, fall under the designation of forests difficult to regenerate (for a map of these areas, see *Skogsstyrelsens författningssamling* 1979:3, p. 37). According to § 19 of the Forestry Conservation Act, a special license is required to log in protected forests or forests difficult to regenerate. Most winter-grazing areas, however, do not qualify for protection from such zoning. Nature-conservation interests are further promoted in part by § 21, in which the State reserves to itself the right to interfere in most aspects of forestry care, in order to ensure that proper consideration is given to the environment in a long-term perspective.

The Forestry Conservation Act is what is called a "framework law" (*ramlag*), which stipulates the minimum demands for rational forestry. Under this law, most normal conservation demands are met with respect to forestry. Should stricter protection be deemed necessary, the Nature Conservancy Act comes into effect, as is the case with respect to moorland or swampland drainage and the plowing of cleared forest land. If further protection is desired, an area can be designated as a nature-conservancy zone and, if this is not enough, it can be made into a nature reserve (Prop. 1978/79:110, p. 53).

Of course, the timber industry plays a major role in the State's physical planning. In one of the latest publications concerned with this planning, SOU 1979:54, it is stated that:

It is important that the winter-grazing lands be given better protection, as winter grazing is an essential for reindeer management. This can be done voluntarily by localizing in time and space forestry activities in the winter-grazing lands, so that continuous grazing areas are always accessible for each Saameby to the necessary degree. Within the framework of the consideration rule in the Forestry Conservation Act, the National Board of Forestry in conjunction with the Board of

Agriculture should inform owners of the regulations for the practice of forestry operations in areas which are of importance for reindeer management, such as resting places, gathering places, herding facilities, etc. Co-operation between the County Forestry Boards and the County Agriculture Boards with respect to reports and logging can contribute to the adaptation of forestry activities to reindeer-management interests. (SOU 1979:54, p. 47.)

Now, with the introduction of the new Forestry Conservation Act of 1980, all forest-owners have been given the responsibility to report their major logging activities. This has made it possible finally to show the combined effect of all forestry activity over a wide region on one continuously revised map. Moreover, in 1971, a special working group including representatives of both the herding and the timber industries was established with the co-operation of the County Agricultural Board in Norrland, where the conflicts have been worst. Not only is much of the winter grazing of the mountain Saamebys located in prime forest areas, but the forest Saamebys have their year-round grazing in these same areas.

Remarkably enough, in the government forest investigation, it is stated that "Reindeer herding's increasing demand for grazing must not be accommodated in such a way that timber production is curtailed" (SOU 1978:6, p. 96). In most Saamebys today, if there is an increasing demand for grazing, it is a demand born of desperation arising from an earlier *reduction* of grazing land in the wake of encroaching industries, among them the timber industry. If a major encroachment occurs which deprives the Saameby of important grazing capacity, it is probable that the Saameby's fixed, rational, reindeer population will be reduced. In this case, the Saameby may readily come to have a reindeer population which approaches the new limit. Certainly, a Saameby in this situation will want more grazing, but I feel it is misleading to call this simply an *increasing* demand. Few, if any, Saamebys have not suffered a decrease of grazing capacity through the years. In effect, there has been an increasing need for grazing due to an accelerated decrease in grazing capacity. Even if a Saameby's grazing demands were simply due to the expansion of its reindeer population alone, it seems odd to find such demands being categorically refused, on the one hand, while similar expansionistic demands by the timber industry (such as those demonstrated in alternative 2 in SOU 1978:6) are recommended, on the other. If the physical planning's recommendation of co-operation and open communication between the timber and the herding industries is to have any meaning, then the Saamebys must have the chance not only to express themselves on forestry activities, but also the opportunity to cancel or to postpone such activity.

I have tried repeatedly but unsuccessfully to obtain a map of all forestry activities in the Tuorpon grazing lands. Until very recently, however, when the new Forestry Conservation Act came into effect, the records of the different forest-owners were not necessarily assembled and entered on

the same map. As the logging and replanting cycle takes about 100–130 years to complete, a proper map which indicates even a crude categorization of forest conditions must be compiled slowly over many years, unless a massive inventory is undertaken. Moreover, as the intensity of forestry activities is so great, any single map would soon be obsolete. Instead, I have tried to summarize the kinds of problems which herding suffers at the hands of the timber industry.

Both herding and logging are territorially based industries which strive for high productivity per land area. The reindeer . . . is best adapted to a forest ecosystem established without human conditioning and free from natural catastrophes, while logging, to gain a high lumber productivity, would rather cut off the forest's development before the natural ecosystem is reached. (Lantbruksstyrelsen, Meddelanden 1976:3, p. 26.)

All the conflicts between the herding and the timber industries derive from this essential difference. Those logging practices which negatively affect herding can be divided, for the sake of presentation, into three main categories: the actual cutting of large, forested areas, the ensuing preparation of the forest floor for replanting, and the weeding out of unwanted trees or defoliation of birch woods.

(1) The logging of old forest, in order to make way for the growth of new, salable forest, deprives the reindeer of the hanging "beard" mosses, which accumulate only on old trees. This moss constitutes one of herding's most essential grazing alternatives during a difficult winter. When the snow has a hard crust, which prevents the reindeer from digging down to the food below, the mosses hanging on the old trees become an extremely valuable substitute. The gradual elimination of old forest, therefore, is quite harmful to herding. Moreover, the optimum growth period for new forest calculated to maximize profits is apparently less than the period necessary for the beard moss to replenish itself fully. The timber industry loses profit if it allows new forest to remain uncut too long. The rate of growth of the trees decreases at a certain age, and it is better to cut many times and replant than to let one crop grow old.

Once the forest is cut, the ground is exposed to a great increase in sunlight and, with the elimination of the tree-root network, is less able to hold water. As a result, much of the ground vegetation dries up, especially those plants which are suitable for reindeer grazing. During the winter, the open expanse of logged forest land will tend to acquire packed drift snow from the effects of the wind. Forest lands which, due to logging, present the reindeer with a scattered patchwork of grazing promote extensivity, as does the simple reduction of grazing capacity.

(2) There are a number of methods of preparing the ground for a new forest crop. One method is to burn off the ground vegetation. Another is to scrape away unwanted growth and plow the soil. Burning destroys all reindeer grazing for at least 20 years. Plowing turns under about half of the land surface and makes the area difficult for the reindeer to traverse.

Especially when covered by deep snow, stumps and piled forest debris can be harmful to reindeer. According to the latest program of improved forest care, post-logging debris is to be cleared away. Reindeer will benefit from this practice, although it seems to have been motivated by the need to control insects by depriving them of decaying wood.

We should not forget in this respect the threat of wetland drainage already mentioned. In this way, the timber industry seeks to create new forest land rather than just to prepare old forest lands for a new tree crop. Wetlands offer the reindeer some of their choicest grazing.

(3) In order to aid the regrowth of young pine trees, a common practice is to spray the new forest from the air with a poisonous preparation, trichlorophenoxyacetic acid, which destroys all deciduous trees while sparing the conifers. This practice is under strong attack from both herders and conservationists (see, for example, *Norrländska Socialdemokraten*, March 26, 1980). There is reason to believe that the poison affects more than just trees. Herders claim that the reindeer become sick and may die, should they eat any leaves in a sprayed zone. The timber industry does not consider the ill effects of chemical spraying to be proven. However, when the draft bill for revised forestry legislation was circulated for observations from different interest groups, many responses claimed that the effects of fertilizing, draining and chemical spraying were but little known (Prop. 1978/79:110, p. 19). In short, there does not seem to be any proof that such methods *are not* harmful either.

With respect to forest fertilizers at least, recent evidence indicates that the practice is indeed harmful to reindeer management. Not only do the fertilizers impair the growth of reindeer mosses and lichens, but both fertilizers and trichlorophenoxyacetic acid, according to the herders, also impair the reindeer's ability to find food in the winter or cause him to shun it. The reindeer sniffs through the snow to locate food before he digs down to reach it, but the presence of fertilizer may alter the ground scent. The recent work of Olof Eriksson at the Reindeer Section at the Swedish University of Agricultural Science in Uppsala demonstrates conclusively that the Saamis have been correct in their claim that fertilization reduces the grazing activity of reindeer. The "cratering" of reindeer (digging down through snow after grazing) in zones fertilized with ammonium nitrate was only half that within control zones. Cratering within zones treated with urea was only about one-tenth of that within control zones (Eriksson, O., 1979).

Of all the forms of land encroachment discussed in this chapter, that by the timber industry has been the one which has most seriously affected the reindeer management in Tuorpon. Not only has encroachment in the winter lands altered the number of reindeer which can be supported there, but herding form has also had to be adapted to criss-crossed and patched grazing lands, which are far less able to contain gathered herds. Of course, Tuorpon's total reindeer population is currently low (largely due to heavy

predation). Herders claim that the real extent of damage to their winter lands will become apparent when other herd-growth inhibitors are overcome and winter grazing again becomes the predominant bottleneck determining total reindeer population. When this occurs, it is probable that the use of artificial fodder will become increasingly necessary.

The Board of Agriculture (*lantbruksstyrelsen*) has been commissioned to map the different Saamebys' winter-grazing situations. This work is necessary for the Saamebys to assert their needs and, in conjunction with the maps of forestry activities, should promote improved understanding between the timber and the herding industries. Some idea of the extent of forestry encroachment on Tuorpon grazing lands can already be gained from the series of maps made by the National Board of Physical Planning and Building, in conjunction with the Saamebys, as part of the larger description of reindeer herding's land utilization of 1974 (see Statens Planverk 1975, Report 20, part 3).

Tourism

The tourist industry is a relatively late addition to the list of grazing-land encroachers, at least to the extent that it ranks as an industry. It could never have made the rapid development that it has in the north, had it not been for the effects of the other industries already mentioned. The mining, timber and hydro-electric-power industries laid the roads and railroads and brought in the service facilities with the rise in population and the establishment of urban centers in the interior. Upon this foundation, the tourist industry could expand and at the same time draw advantage from the backlash of nature conservation which met large-scale, industrial expansion. The greatest tourist attractions within the Jokkmokk local-authority area, for instance, are its National Parks, which were largely created through compromise with the State Power Board.

In the 1930s there was little concern about international tourism and even internal recreation in Sweden. The State offered the Swedish Tourist Traffic Association (*Svenska Turisttrafikförbundet*) some financial aid, but it was not until the passage of the Vacation Act (*semesterlag*) in the late 1930s that the tourist and recreational demands on the Swedish environment began to rise steeply. By this Act, each Swedish worker was guaranteed a minimum paid vacation in the summer. In 1939, the State founded a Recreation Bureau (*Fritidsnämnden*), but the planned investigations of the growing need for adequate facilities were postponed by the war.

SOU 1973:52, from which much of this sketch of tourism's evolution is taken, notes three major aspects of post-war development: (1) easier international travel, relaxation of visa requirements, etc., (2) interest in and acceptance of tourism as a good way in which to bring foreign

currency into the country, and (3) the raised living standard throughout western Europe, which led to increased international tourism and also increased the number of short tourist trips by people within their native countries.

In the late 1940s, an international European Travel Commission was founded to attract foreign vacationers (mainly from the USA) to Europe. As a result, the Swedish authorities instigated an investigation of tourist traffic, which was published in 1951 as SOU 1951:49. The conclusions of this investigation were directed toward the centralization of Sweden's existing tourist organizations, but these suggestions were largely ignored. Such organizations had begun to proliferate and to compete with each other. In 1962, another inquiry was started, the Recreation Inquiry, which was published in three parts (SOU 1964:47, SOU 1965:19 and SOU 1966:33). The first of these was a series of soundings made to get an idea of the current recreational habits and desires of the people. It concluded that outdoor recreational needs would double in 10 years and that, because of this, there would be inevitable conflict between the building of recreational facilities and conservation interests. The second part of the report asserts that a basic social goal is to maximize the number of people enjoying a rich, recreational life and attempts to designate the ways in which this should and can be achieved. The third part is an inventory of existing facilities and suggests that the government should drastically increase its aid for new projects and its stimulation of collective planning.

As the long series of inquiries and bills concerning tourism continues, one can clearly discern a movement toward the encompassing of tourist concerns within a wider plan for the regulation of all areas of resource utilization. Thus, when the National Environment Protection Board (SNV) was founded (to a great extent in response to the demands of conservationists concerned over the destruction of water-ways by damming), the Recreation Bureau was dismantled. Its interests were to be taken into consideration by the larger National Environment Protection Board, which had a broader perspective and therefore a better chance of co-ordinating policies and handling conflicting demands. Later, of course, this trend would bring tourism into the State's physical planning. Further government investigations and reports concerning tourism include DsH 1966:2, SOU 1969:29, SOU 1969:49, SOU 1967:50, SOU 1967:61 and SOU 1973:52. Undeniably, tourism has become a large industry and a great concern of the State.

In accord with Prop. 1975:46, and in a manner similar to the creation of the unbroken mountain regions, six out of a total of 25 "primary recreation areas" were designated in the western mountain regions and in other reindeer-herding zones. These primary recreation areas are to be developed within the scope of the physical planning for the recreational needs of the nation and for the establishment of a prosperous tourist industry, goals for which State funds have been appropriated (Prop.

1978/79:100, bil. 13). The primary recreation areas overlap with the grazing territories of 17 Saamebys (see Lantbruksstyrelsen & Statens Planverk, 1978, Report 44, part 5, p. 18). Most of the western mountain regions of the Jokkmokk community are already included in National Parks. No part of the Jokkmokk local-authority area has, therefore, been included in any of the primary recreation areas. The 17 Saamebys that are affected by this recreation plan, however, may be seriously injured if the respective local authorities under whose jurisdictions the Saamebys are arranged let themselves be carried away by profit considerations, without proper regard for the land rights of the herders, rights which have been guaranteed a strong position in both the Herding Act and even in the Building Act. The County Board has cautioned the local authorities upon this point, but nonetheless, just *how* strong is strong?

In an area such as Norrbotten, which suffers from serious unemployment, new job opportunities are avidly welcomed. For the herders who desperately need part-time work in combination with herd management, so that they can remain in the core area, a certain degree of industrialization may be quite beneficial. The Saamis naturally take advantage of the tourists' presence to sell them handicraft work, fresh fish or a boat trip. In some areas, tourism may not have expanded beyond its more positive aspects for the herders. Some herders see increased involvement in tourism as their next "safety belt" to help them through hard times, once their fishing waters have been exhausted. In other localities, however, tourism has threatened the very existence of the herding enterprise.

A large skiing resort, such as that at Åre, will occasion grave problems for the herders round about. The presence of many skiers on the slopes will render certain grazing tracts useless. Only those Saamebys (such as Tuorpon) which have part of their territory within the National Parks or nature reserves are to some extent protected from the indiscriminate use of snowmobiles by the public. Reindeer have been chased and herds scattered. Moreover, the snowmobile tracks themselves will cause a herd to disperse. The Saamis, who have always been in the habit of leaving their belongings about, unprotected from other human beings, are beginning to find them stolen or destroyed. Herder cabins have been broken into and ransacked. Especially within the National Parks, the heavy concentrations of hikers can cause problems, and the tourist uninformed in the basic rules of herding is a potential threat. In his hurry to get a good picture, he may ruin an entire gathering operation.

Probably the worst threat of the tourist industry to herding is the construction of large, vacation-cabin projects. Local authorities are often pleased at the prospect of attracting new guests (spenders) into their areas. Furthermore, the actual construction work will provide the community with many job opportunities. The municipality and a private contractor may therefore come to a mutually favorable agreement. Snowmobile rental agencies may see a grand opportunity to double their businesses etc.

When all these are in favor of the construction project, herding interests can often be ignored.

This situation was illustrated in the long and hard-fought battle over the Brattli project between the local authority and private contractors, on the one hand, and the Frostviken Saamebys with the help of local conservationists, on the other (see Åhrén, O., *Samefolket*, 1975, nos. 6–7, pp. 167 ff., and 1976, no. 4, pp. 102 ff.). The proposed 750–1,000 houses to be built on 7,000 hectares of grazing land for an estimated 4,000 tourists would in no way harm the Saameby, it was said. Moreover, it was argued that the actual reindeer population was far below the rational reindeer population in the area. The “game of Brattli” is unfortunately an all-too-common example of the kinds of politicking and corruption which may confront a Saameby. In this case, the project plans were shelved after massive protest and the exposure of improper dealings. It has been said that the legal battle to save Brattli was for the Saamis as important a case as the famous “Tax Mountain Case” (Skattefjällsmålet) (Åhrén, O., *Samefolket*, 1976, p. 102).

In an investigation which continues the work of the State’s physical planning, it is stated that:

Conflicts exist between reindeer management and different forms of tourism, recreation and vacation-cabin building, more or less over the entire mountain regions of the herding territory. It is desirable that the communities strive to localize facilities for recreation and tourism in such a way that herding interests will be injured as little as possible. The size of the facilities should be adapted to the effects that the herding can be presupposed to tolerate. (SOU 1979:54, p. 47.)

While herders may be thankful for the consideration that this statement offers, they cannot help but be dismayed by the attitude that herding can be supposed to “tolerate” any degree of encroachment at all. In a situation of almost no flexibility, in which the ideals of rationalization recommend the reduction of the herding population by 30% and in which large numbers of herders accept a low living standard in order to cling to their traditional livelihood in their home areas, it seems inconceivable to speak of toleration. Obviously, if the herding livelihood must bow to a conflicting interest, it will be hurt in some way. Most likely, grazing capacity will be reduced, as will the herd size and the supportive capacity of the Saameby for its herders. Even if herd size does not decrease, productivity or certainly potential productivity will. Where potential supportive capacity is consumed, the Saamish culture must accept a further reduction in potential strength of herder membership (see Chapter 16). The above quote implies a kind of compatibility which hardly exists today. *Of course*, one should try to minimize the necessary injury.

Should a Saameby be composed of only a few, very wealthy herders, so that they may well survive some encroachment themselves, nonetheless the future survival of the Saamish minority has been impaired. The State’s

physical planning does not seem to recognize cultural organisms and interests as having a place in its ecosystem.

With the current legal structure, it looks as though the herders will find difficulty in obtaining substantially increased gains from the continued expansion of tourism. As will be discussed more fully in Chapter 19, the Saameby is not permitted to engage in economic activities other than herd management. The Saameby cannot start its own tourist business. However, as I shall argue, paradoxical as it may seem, the time may not be distant when even non-traditional occupations will be permitted the Saameby in order to maintain the Saamish culture and the herding livelihood. While one cannot expect the Saameby's privileged position to be unlimited with respect to certain resources, one must consider that the tourist business within the Saameby territory could be reserved exclusively for Saameby members (or for a more inclusive category of Saamis). In this way, herders would be able to direct tourism into the paths that are least problematic for their herding concerns.

Many Saamis resent being made the exotic subjects for tourist photos (see, for example, the protest in *Norrbottens Kuriren*, July 30, 1980), while there are, of course, many others who are amused at the prospect or deal with it good-naturedly. Nonetheless, those who seriously consider the chances of turning the great potential of the tourist industry to the herders' benefit and to the benefit of all Saamis in general realize that to do so demands organized effort and a different legal framework. Tourism was one of the major topics under discussion at the Swedish Saamis' Parliamentary Conference of 1973 in Åre. In a resolution adopted at this conference (see SOU 1973:52, p. 231, or Svensson, 1973, p. 237), it was stated:

If encroachment occurs, it should be compensated. Herd management, however, needs to exercise its right to land and water; it cannot live on encroachment compensation

Properly developed, tourism can be of value for the Saamis. This means not least a local tourist industry of low capital, an industry which is friendly to the environment, near to the people and popular. For this to occur, a certain capital and education are necessary. The Saamis must be given the opportunity for education and qualified positions, whether this means for a combination or a full-time job. (SSR Protokoll 1973, resolution A.)

Tuorpon in particular has not yet suffered severely from heavy tourist encroachment. Admittedly, much of Tuorpon's summer land is contained within Padjelanta National Park and is therefore a tourist goal for thousands of hikers each summer, but these are mainly confined to the large tourist trails, the Padjelanta Trail, and further east, outside of the Park, a section of the King's Trail. These trails are conveniently dotted, at 6-12-mile intervals with cabins, which not only provide the hikers with many conveniences but also are extremely useful as herder cabins in the tourist off-season.

Currently, most of Tuorpon's herders are relatively small herders, and they welcome the extra income available to them from tourists, especially in the summer camp at Staloluokta. Many of the Tuorpon herders are very skilled Saamish craftsmen. Besides handicraft articles, much bread and fish are sold to the constant stream of summer hikers. Of course, attitudes to the tourists are somewhat ambivalent. Some hikers are unable to respect the privacy of the herders. I have met hikers who have believed that the entire village was situated there on the trail as a tourist attraction, a kind of open-air museum. Many of Stalo's inhabitants object to having the tourist seaplanes land and take off so close to the village. They produce a good deal of noise and they have become too numerous. Fortunately, the Park authorities have now restricted the number of flights, but there will still usually be about six tourist flights per day. Some of Stalo's herders, especially those who do not derive much profit from the tourist presence, object to having a large tourist-cabin complex with facilities for over 50 people on one side of the village. On the whole, however, relations are quite friendly.

On the one hand, the National Park offers the Tuorpon herders a certain degree of protection against encroachments (though by no means guaranteed), but, on the other hand, according to the Saamis, nature-conservation interests may sometimes go too far. A recently proposed regulation, for instance, would prohibit the herders at Stalo from taking birch trees for firewood within the Park. The Park administration claims that this traditional practice endangers the limited forest. To compensate, it was proposed that the authorities supervise the freighting of the wood required to the village over long distances by snowmobile or helicopter, free of charge.

The herders point out that they are most selective in their cutting of trees and that under their care the forest has increased greatly over the years in that area. Moreover, the herders, who take pride and find security in self-sufficiency, do not wish to become dependent upon the government for firewood. Maybe, after a while, they would not be given all the wood they wanted free of charge. If one family bakes much bread for sale to tourists and therefore uses far more wood than is otherwise necessary, will the authorities be willing to meet these firewood demands with such high costs for transportation?

A community-planning group in Jokkmokk has designed a program, "Project Jokkmokk", to help to solve the unemployment problem in the area due to the rationalization of the timber industry and the end of the water-power era. In the last 20 years, the population of Jokkmokk parish has decreased from 11,581 to 7,162 inhabitants. According to the expert group responsible for "Project Jokkmokk", tourism will save the situation and bring prosperity back to Jokkmokk (see *Norrländska Socialdemokraten*, March 22, 1980). There are plans to build a mountain center and a mountain museum in Jokkmokk. Further suggestions are to localize rein-

deer research and central administration in Jokkmokk. This group has sought State funds through the Norrbotten County Administration (*länsstyrelsen*) for, amongst other things, the construction of a large tourist facility by Jarre mountain near the eastern end of Lake Karatj (see *Norrländska Socialdemokraten*, August 18, 1980). Should this facility be built, the Nuortvalle herders, especially those already troubled by the missile field, will be given even more problems. However, funds were not granted for this part of the project, although the idea was not therefore ruled out. Undoubtedly, the local authorities will promote the development of tourism, and the Saamebys of the Jokkmokk area will have to accept mounting incompatibility with the tourist industry.

So far, the only attempt to get a combined view of all the various types of land encroachment specifically in the grazing lands has been conducted by the National Board of Physical Planning and Building during a large-scale inventory of land utilization in the Saamebys. This work was carried out in the mid 1970s with the co-operation of the SSR. Hence, the Saamebys were drawn directly into the work and could present their own information. The resulting inventory, *Samebyarnas Redovisning av Renskötelsns Markanvändning 1974*, was accompanied by a series of large maps. One of the maps in the series for each district is devoted solely to the documentation of land encroachments. For Tuorpon, the appropriate map is *BD Södra Fjällbyar, karta 4*.

Part II

The Rationalization of Herd
Management

Chapter 16

The Dilemmas of State Rationalization Policy

This entire part is primarily concerned with the last major phase of Saami-Swede relations, relations which, as we shall see, have been dominated by business ideals. Having passed through a taxation era and a policing era, governmental concern with herd management has now entered a "rationalization" era. I intend to demonstrate that the current rationalization policy of the State has its roots in earlier policy or, rather, that rationalization of herd management is but a new expression of old, profound and unresolved dilemmas. How can one cope with a falling resource/consumer ratio on one level, while doing justice to all the hierarchical systems involved on other levels? Or, similarly, how can one balance the demands of one holon for an even higher resource/consumer ratio against the needs and demands of other holons?

Of course, if we interpret the term "rationalization" to indicate a program designed to maximize the profitability of resource utilization for the State, then we may claim that Saami-Swede relations have been dominated by a rationalization ideology since the initial colonial encounter. Yet the current rationalization of herd management claims also other objectives. For whom is rationalization designed? This is a difficult but vital question, which is often conveniently forgotten. Largely because of this vagueness, rational policy, when applied to actual herding situations, results in numerous, unforeseen consequences which are contradictory to its stated goals.

Swedish intervention in herding affairs, the core of Saami-minority culture, has always been an inflammatory topic. It becomes even more so when this intervention embodies contradictions, so that policies said to aid herders actually injure them. A large burden of blame seems to have developed, and eager fingers are quick to point to certain roots of evil. Reproaches are frequently heaped upon the majority by the troubled minority, regardless of whether the actual problem is inevitable or really unnecessary and correctable. Likewise, majorities often scold recalcitrant minorities for failing to grasp the inevitability of certain difficult changes, which in fact might indeed have followed a different course.

Generally, in any such conflict, what one side claims to be an act of

discriminatory greed, the other side will justify with claims of inevitable need. Usually, the accusations and justifications of either side are partially true. But, as has been noted in Chapter 3 (Epistemology), need and greed are not so easily distinguished or linked to any specific sub-system to the exclusion of others. In fact, justificatory need is likely to arise through nothing more nor less than an increase in consumer population (successful survival). While it is not useful or appropriate to assign guilt *per se*, there would be little point in writing or reading if these tasks were not devoted to increased understanding for a better world.

I do not care, here, about defending the Romans or defending the Palestinians—the upper dogs or the underdogs. I want to consider the dynamics of the whole traditional pathology in which we are caught, and in which we shall remain as long as we continue to struggle within the old conflict. We just go round and round in terms of the old premises. (Bateson, 1972:427.)

The problem here is to identify and trace the course of causal development which gave rise to the Swedish State's rational herd-management policy. It is important to note (1) how the dialectic of need and greed, that is, the need for flexibility and the expansion into it (see p. 21), has steered the course of Swedish colonial development and (2) how, once one is committed to certain premises, others logically follow. The effects of one law go on to justify the necessity of the next. To grasp the evolution of modern rational herding and the premises behind it, therefore, it is necessary to trace the course of legal action and its consequences.

There seem to be two basic approaches to the analysis of herding law in particular and the laws pertaining to native minority rights in general. The one approach focuses upon the attitudes of the lawmakers and the philosophical climate of the times. The other approach seeks to uncover the necessary conflicts and dilemmas which can occur during a colonial encounter or any minority-majority confrontation, regardless of prejudice. Of course, the two cannot be completely distinguished. It generally seems to be the case that people let their prejudices form according to what it is materially profitable for them to believe. It is much easier to avoid a lot of ethical dilemmas by enslaving "smart monkeys" than by enslaving human beings. Similarly, it is easier to deny ownership rights to Saami nomads whose brains are proclaimed to be abnormal (Retzius, 1889:iv) than to deny such rights to fully developed biological and "cultured" humans.

In his pleadings in the Skattefjäll Case, Tomas Cramér has again and again demonstrated the influences of blatant racism in the formation of Swedish law concerning the Saamis. Cramér's account of the effects of racism on Swedish law, an attitude he derives from Ernst Haeckel and other social Darwinists, can be found, along with reprinted reference material, in *Samernas Vita Bok VI*. Cramér's treatment has been thorough, and I do not intend to reiterate his account. Instead, I shall focus more upon the necessary dilemmas in relation to resource allocation born

of the colonial encounter. I wish to emphasize that I am not thereby opposing the two analytical approaches to each other in any way but am viewing them rather as complementary. My entire study, however, is based upon ecological relations and determinant analysis rather than upon the history of human ideas alone.

The reader should bear in mind, however, that, from the period of Haeckel's influence in the late 19th century to the Second World War, the Saamis were regarded by many as an underdeveloped people. In 1922, on the initiative of the Swedish Parliament, the Institute for Race Biology was founded in Uppsala, and its head, Professor H. Lundborg, was prolific in his pleas to the "genuine Swedes" to keep their race pure and not to weaken it with mixtures of Finnish and Saamish blood. Racial hygiene was a respectable topic. Even the most prominent "Lappologist" of the early 20th century in Sweden, Professor K. B. Wiklund, believed that the Saamis were a pygmean people who, like other pygmies in Africa, were dependent upon contact with a superior people. Apparently, he saw this dependence of the inferior upon the superior race as a natural social law (Wiklund, 1932:13).

As in the cases of the earlier social Darwinists, H. A. Widmark and von Düben (see pages 78 and 311), Wiklund's influence on Swedish law concerning the Saamis was considerable. In 1920, Karin Stenberg's *Dat Läh Mijen Situd* (This is Our Will: A Plea to the Swedish People) was published in a very small edition. This remarkable book by a Saami from Arvidsjaur presents the Saami view of Swedish colonization and, furthermore, makes a claim to land ownership for the Saamis. This threat so worried Wiklund that he demanded a government investigation of Saami legal claims. Åke Holmbäck was given the task under the supervision of Wiklund. Holmbäck's book was printed in 1922 and ignores the Saami arguments for land ownership. Later, Cramér (*Samernas Vita Bok*, 1978, V:1, p. 73), Solem (1933) and others called attention to mistakes made by Holmbäck. Nonetheless, an official hearing for Saami claims was effectively denied until the matter was forced into the courts with the Skattefjäll Case in 1966.

While social Darwinism is not so respectable or evident today, its effects still lie embedded in earlier laws and through them it has contributed to the current situation. However, I shall concentrate my efforts to derive the premises and dilemmas of modern, rational, herd management not so much simply from old attitudes, but rather from past resource-consumer conflicts. In fact, I hope to demonstrate that many attitudes, past and present, have been molded by resource conflicts. As noted, conflict at any one level of the hierarchical system will involve adjustments at the other levels.

At any point in history, with its specific resource-consumer problems and its social attitudes, the legal system has established some form of regulation between the demands of the variously interrelated holons

concerned with reindeer management. For an overview of the early systems of allocation and exploitation of the Saami trade and tax resources and the resources of the land in the north, see Ruong (SOU 1975:100) and Arell (1979). Much specific case material was presented in Part I. The pattern which is repeated time after time—men creating legal and ethical dilemmas for the future, as they try to deal with the present—is that the stakes for each holon change as the flexibility taken for granted under the old structure is reduced. For example, a predator law which seems just when there is plenty of room for both wolf and herder, so that the herders are not ruined by the wolf, will not seem just when the herders are clinging to survival near the critical limit. But, should the survival of the wolf species be threatened, the stakes are again altered and a new and very difficult balance must be established between the needs and desires of the various holons. Obviously, any attitudes of prejudice one way or the other can influence this decision in favor of a particular compromise.

In the evolution of predator policy, with its accompanying problems, and in the evolution of the Saami-Swede colonial encounter, this same process can be observed. Policies move from non-involvement or isolationism toward greater and greater interactionism. The failure of the compatibility ideal, or parallel theory, presents a case in point. The dilemmas dealt with are not determined but are rather covered over and passed on. They continue to haunt the modern rationalization program.

As Swedish settlers invaded the north and provided the State with subjects and tax objects other than the Saamis, Saamish produce became increasingly insignificant to the State. The more minerals, timber and water power have been won from the north in modern times, the less significant the welfare of herding management has become to the State. With the advent of full-blown colonization, which made possible increased, on-the-spot control of Saami resource utilization and met the demand for such control to arbitrate the inevitable resource conflicts, the administrative structure superimposed upon Saami organization grew all the more compelling and detailed. As noted, rather than replacing each other, the various administrative divisions were often added to each other. In trying to discern what composed the entity called Tuorpon Saamis, for example, one must take into account tribute jurisdiction, taxland partitioning, parish divisions, State-drawn boundaries between land for farming and land for herding, legal emphasis on the distinction between the forest Saami and the mountain Saami—all of the these, plus the Saamis' own forms of identity management.

Early in the colonial encounter, conflicts over land rights were not so common or severe. The ideas that the settlers' farming and the Saami herding need not interfere with each other and that both together composed the most productive (rational) use of the land were widely held—the so-called “parallel theory” or compatibility assumption. In fact, at first, the two ways of life were often mutually beneficial. Herders even some-

times expressed the desire to have settlers in the vicinity and offered them attractive plots, so as to have a station on the migration route where herders could take in or exchange goods, leave their old people, etc. (Campbell, 1948). Although Governor Graan might be identified as the father of compatibility or parallelism in the Sweden of 1670, I wish to stress the logical necessity and inevitability of this idea rather than its specific, historical cause. It was an idea fostered by, and typical of, encroachment into a system with a (temporarily) high degree of flexibility, i.e. great reserves of unexploited resources. Later, however, as crowding increased and it became plain that herding and farming could not always exist side by side on the best of terms, the premise that nomadism must bow before agriculture as the foundation of a higher civilization became more and more prominent. Nomadism was conveniently considered *the* Saami form of livelihood. All others were looked upon as degenerate forms and, according to the State, a nomadic occupation, equated with Saami occupation in general, became an insufficient ground on which to press a claim to land ownership.

As competition for natural resources increased, the State was placed in a tricky situation. It was committed to the support of higher civilization, which was defined as the prosperity of its colonists, but it also always wished to maximize its benefits from the north, to which Saami labor power and herding at first contributed quite considerably. Later, however, when Saami contributions were small relative to other sources of income and Saami concerns came to stand in the way of greater benefit maximization, the State was faced with the legal dilemma of how to redistribute resources while at the same time honoring its past agreements. For instance, in the days of greater compatibility between settlers and herders, and when Saami interests were still of considerable economic importance to the Crown, the Codicil of 1751 secured for the Saamis considerable rights. It has been referred to as the Saami Magna Carta. How then was the State to satisfy its new desires and needs without violating earlier-established Saami rights?

In the following pages, I shall bring Saami and State arguments together in a logical debate. Most of Part II, therefore, will be concerned with principles, legal texts and hypothetical situations rather than field data. I hope to illustrate here how the same, basic, resource-consumer problem takes different forms as it moves between the different systems and sub-systems of organismic hierarchy. Though different in expression each time, the problem always generates the same kind of solution—rationalization, i.e. the need to increase resources (and/or their profitability), to exploit other resources or to renormalize the resource range and/or the unpopular need to regulate consumer category. But *how* such steps are taken and *how* the conflicting needs and desires of the interlocking systems are balanced, if indeed they are balanced in the concrete situation of herd management in Sweden today, are what will concern us here.

The dilemma of isolationism and interactionism

In analyzing the development of Swedish rational-herding policy, one is able to note the gradual conversion of Saamish modes of relation into Swedish ones. It is important to observe how this process operated before approaching the specific content of the changes involved. These changes were often justified by an appeal to moral principles and to a sense of fair play. And it is certainly undeniable that the old ways often involved extremely capricious and maybe even ruthless behavior. The important point to realize, however, is that the ancient Saamish methods, whatever their flaws, *did function* as an interlocking, organic system, which was self-regulating and adaptive to the diverse needs of the people. When Swedish law disrupted this system, therefore, it was inevitable that the pre-established networks of relationships would cease to function effectively and be in danger of collapse. Seeing this situation, naturally, the State would have to rush in with further regulations and further *ad hoc* solutions to a disintegrating system, in order to restore it to the working condition. And so, by a repeated process of trial and error, a series of new regulations would take hold and in effect establish a new system of networks. Whether the new system was a success or a failure, in either case the old Saamish culture was gradually being eroded.

Note that the Swedish State was in a double-bind. (1) Either lawmakers and officials had to *refrain from demanding* the same basic obedience to certain ethical principles (such as not “stealing”, according to the Swedish definition) from the Saamis as they did from themselves or (2) they had to *disrupt* the interlocking mechanisms of the Saamish cultural tradition (sending shock waves through them, which must be further dealt with, thus creating still more shock waves etc.). Basically, choice (1) is “isolationism” and choice (2) is “interactionism”. The Saamis themselves face the same dilemma (see p. 297).

The choice made was an accelerating program from isolationism to full interactionism, for only interactionism could provide the Swedish State with the Saamish and Lapland resources to satisfy its own expansion. Once embarked upon this course, two new choices logically present themselves. (2a) The more powerful system might choose to interact with brutal injustice or discriminatory laws against the minority, in order to facilitate the quick accession of resources, or (2b) it might advance a program of mutual compatibility, which would *in time* come to absorb the weaker entity into the larger, so that conflict between these categories would be resolved. When the rate of expansion of the majority into the traditional resource niche of the minority is faster than the rate of assimilation of the two groups, however, conflict cannot be avoided. The initial compatibility will be revealed as simply another form of partial or tem-

porary isolationism. Such was the case in Sweden. The early belief in the compatibility between herding and farming gave way in time to open conflict, as the growth of both systems, herding and farming, was at first spurred on by the other to the point at which their compatibility disappeared. Their needs were no longer isolated from each other.

Even choice (2b), with ideals such as fair play, compatibility and assimilation (the choice espoused by the State), cannot be free from eventual and possibly severe conflict over resources. The dilemma then becomes: How can a legal system designed to assimilate a minority under the same fair rules as for the majority really remain fair if it is to facilitate the redistribution of resources from the sub-system to the larger inclusive system, the State? The simple answer is to redistribute according to egalitarian principles, in which one Saami equals one Swede. But, as noted, back in the honeymoon period of compatibility, legal distinctions were made between Saamis and Swedes for the benefit of the Saamis and the State's colonial program. The *class* of Saamis was given rights different from the rights of the class of non-Saamish Swedes. Regardless of whether these rights were granted out of sheer appreciation of the Saamish culture and the wish to preserve it or out of self-interest alone, the problem facing the State was still the same: How can the State honor its past category distinctions with accompanying rights, while adjusting to a new need (and greed) balance? More important than the integrity of the Swedish law, however, is the initial question: How can the herding Saamis' rights, the rights of the non-herding Saamis and the rights of the Saamish minority survive this controversy? Specifically, how does the Swedish herding-rationalization program reflect these difficulties, and how has it sought to deal with them?

In the following pages of this section, I would like to illustrate the manner in which the dilemma between isolationism and interactionism comes to create a chain of *ad hoc* legislation, a series of disturbances and repercussions. Although such legislation seems to solve certain immediate problems, the dilemma arises again and demands new action. The example with which I have chosen to make this point is directly pertinent to the rationalization of herding.

Examples of Saamish v. Swedish herding regulation

Of course, the Saamish herding culture has always had its own system of regulation. The enormously flexible and well-adapted, social structure of the Kōnkämä Saamis, created to fit the shifting nature of work-force requirements, has been well analyzed by R. Pehrson (1957) and I. Whitaker (1955). An excellent treatment of traditional Saamish forms of herd-

ing transaction is given by R. Paine in his work on the Kautokeino pastoralists (in manuscript). A portion of this larger work has been published (Paine, 1978). As Paine demonstrates, rustling, which to the State authorities is simple thievery and appears most immoral and illegal, was frequently a very precise means of communication between herders, using reindeer as the medium of expression. Such communication might convey messages, such as: "Stay out of my grazing area", "This is what you get for stealing my reindeer" or "I'm taking over this spot." It is important to note that not all forms of what the State would term "thieving" were considered so by the herders. But then it depended upon the context.

Such traditional, regulatory systems between herders can generally be described as dyadic and acephalous (most herders being their own bosses). For example, the herder's reindeer earmark has been a focal point for dyadic interaction between herders. Should two herders have fairly similar marks, so that one might be falsified to form the other, the herders might purposely avoid each other when herding or watch each other with more than usual interest, in order to keep their animals from mixing and to avoid chances of re-marking or the possibility of a reindeer's being taken into the other's herd with the excuse that the stray was not noticed because of earmark similarities. Each must guard his interests and consider carefully his personal relations with the other (Nils-Isak Eira, personal com.).

These and many other forms of traditional Saamish transaction have been overruled by Swedish law. Possible reasons for such action have already been suggested, and the truth is probably a combination of them. The State faced a complex, ethical issue in conducting a program based on non-violent assimilation. It would certainly need some amount of control of herding to implement any redistribution of resources for its own benefit. Nor can one overlook the fact that some Saamis would stand to benefit more from the Swedish forms of regulation than from the traditional Saamish forms. These might naturally support the Swedish form in preference to the Saamish, and thus the creation of "divide-and-conquer" policies could not be avoided. While the amount of conscious artifice behind any such "divide-and-conquer" policy is debatable, such policies are inherent in the very nature of systemic interactionism. Conquest, however, is not the necessary end of such division, just as extinction of a species is not the inevitable result of a change in its environmental niche. Moreover, the larger and stronger system, which may conquer the smaller and absorb it, is itself undergoing a process of change in order to survive, though, of course, at a very different rate. The survival capability of any living organism or culture is a function of the relation between the changes demanded of it and its *own* creative adaptability. Real problems occur for the organism when the rate of change demanded of it by its environment is greater than its rate of evolutionary adaptability. Similarly, the Saamish minority culture faces the dilemma of adapting to

massive change while still maintaining a Saamish cultural identity.

Generally speaking, the Swedish law has replaced the Saamish context of relations with its own, step by step. Transactions between herders have been dramatically reduced and the State has instead intervened in what was otherwise a dyadic communication. Acts of rustling are no longer handled solely between the parties involved; the State steps in with its legal code. Grazing apportionment also becomes a State affair and all earmarks are registered by the State, so that problems with earmarks too similar to one another in pattern are gradually eliminated by careful control of the permissible marks. In the past, herders could have a number of different earmarks, which would enable them with much more ease to identify different reindeer in their family herd and regulate matters related to inheritance and intra-family property. Section 75 of the Herding Act of 1971 (adopted from § 4 of the Grazing Act of 1928), however, limits each herder to the possession of no more than one earmark. Such limitations clearly affect traditional Saamish transactions. Many Saamish forms of transaction have been declared illegal.¹

The changes in the traditional Saamish modes of regulation mentioned above were to cause further repercussions. Lars Rensund illustrates the successive cause-and-effect chain of such newly imposed laws excellently in his memories of Jon-Erik (Rensund, 1968). When the reindeer population was considered so large that enforced slaughters were deemed necessary, both to prevent the over-use of grazing land and to spare settlers the damage to crops caused by freely roaming reindeer, the big herders were to be made to reduce their herd numbers first (see, for example, SFS 1925:181). By such measures, the authorities hoped to regain control of the herds, to reestablish a more intensive herding and to diminish conflicts with settlers. As a result, however, the big herders, well aware of the enforced slaughters awaiting them, should they divulge their real herd numbers or bring all of their reindeer to the corral, simply let their reindeer scatter extensively throughout the grazing zone, so that they could be neither collected nor counted. In effect, the authorities contributed even more to the roaming of untended reindeer, the complaints of the farmers and the complaints of the smaller and more intensive herders. The smaller, more intensive herders, who brought their reindeer to the corrals, were made to slaughter many of them.

¹ From this point, it is easy to slip into a form of cultural relativism, which holds that whatever system happens to be in place and working is for that reason perfect in itself. This stance would blame the Swedish State for its interference in Saamish modes of transaction, while at the same time overlooking any such ethical questions within the Saamish system itself. Such an attitude is completely incompatible with a holistic approach. Knowledge and ignorance of systemic interdependence, as well as any action taken with or without this awareness, are "everybody's business". The feeling for and knowledge of systemic interdependence may provide a basis for ethical evaluation, though this may be different from conventional morality.

In the past, such damaging extensivity on the part of the big herders could have been controlled or at least inhibited by the smaller, more intensive herders. As Eidlitz (1974:88) demonstrates from the Komi-Saami encounter in the Soviet Union, one of the effective sanctions of intensive herders against extensive herders is theft or rustling.

The Komi were economically stronger than the Saamis. They guarded their herds throughout the year, whereas the Saami herds went wild during the summer. During the summers the Komis might come across Saami reindeer and simply incorporate them into their own herds. It became necessary, therefore, for the Saamis to begin guarding the reindeer during the summers also. (Eidlitz, 1974:88.)

Where this sanction is prohibited by law, intensivity will generally fall to extensivity.

As soon as some owners choose to extensify their herding, the presence of their unherded or only loosely herded animals will embarrass the stricter herding routines of other owners in the area. There are few effective sanctions by which owners can protect their intensive herding. (Paine, 1972:85.)

Before the many forms of rustling were all declared illegal, the acquisition or absorption of stray reindeer in certain contexts might be socially condoned. Because of Swedish legal regulations, intensive herders lost a good deal of their mechanism for resisting expansionary, extensive pressures. Thus, the problems of over-extensivity, which the authorities sought to solve by legal action, were in many cases created by earlier legal actions. Numerous other examples could be used to illustrate the same basic point.

What is “rational”?

Before we can delve into the concrete details of what is termed “rational” in herd management today (the term has in the past been used to represent a wide spectrum of different practices), we must understand its purported goals, both immediate and remote. The most immediate goal is to maximize the efficiency and profitability of reindeer management. This in turn has led to a maximization of meat production, the methods of which will be discussed later. But it is important to note here that what is “rational” in herd management can refer to any innovation — technological, medical, organizational and legal — aiding the cause of herding profitability.

On the surface of things, it must appear that rational herding is in many ways nothing new or different from what herders have always been striving for. Indeed, as will be shown, many rational methods are of age-old, Saami origin. Rational herd-management itself is neither completely Swedish nor completely Saamish in content. One must analyze it on a deeper level as well, for any ideal which entails a concept such as profitability automatically presupposes a subject for whom profits are

measured. This point is often obscured and rationality treated as an absolute to be measured in the net income of the herding industry. Yet with all these different and often conflicting sub-systems with an interest in herding—the individual herder, the Village, the Saami society, the Swedish nation and the world ecology—it is vital to seek clarity in the question of *to whom* rational-herding policy is rational. This, it turns out, is no simple matter, for the different elements of rational herd-management policy are neither all beneficial nor all detrimental to a certain sub-system. Moreover, as in the case of the determinants discussed earlier, a single, rational, herding element may be beneficial or detrimental to a certain system, depending upon its changing total context.

In confronting the question as to whom rationalization in herd management is designed to benefit, numerous, different answers are given. (1) It is in the community's or the nation's best interests, (2) it is to raise the living standard of the herders or (3) it is to help to preserve Saami culture.

In investigating the first of these assertions, that rationalization is in the national interest, it is important to note from the start that the rationalization of herd management is not an isolated phenomenon, although its implications for the Saami minority necessitate special consideration. Yet herd-management rationalization is but part of a much larger and constantly developing rationalization program fostered by the State to benefit numerous occupations and businesses. After World War II, for example, the State embarked upon a large-scale campaign to rationalize Swedish agriculture, and it is a constantly voiced opinion that the rationalization of herd management should be based upon that of agriculture (SOU 1968:16, p. 82, and Bengtsson in *Samemakt*, ed. Kng, 1970:167).

According to the Crown's suggested reform, since the reindeer-herding committee has demonstrated its value, the same financial support offered the rationalization of agriculture should be applied to the question of support for herding . . . Thus, even for reindeer herding, support should be given for those investments which are desirable from a general perspective and which are motivated by community economics . . . The demands attached to agricultural support, for profitability in a business perspective, should in principle be applied also to the herding business. (JoU 1971:37, p. 56.)

As the goals for the rationalization of herding are so often referred to the goals for the rationalization of agriculture, it is pertinent to note that, according to Prop. 1976/77:100, bilaga 13, p. 1, “. . . the farm land in our country shall be utilized rationally, so that we can secure our living needs and contribute to the support of other parts of the world.”

By the Act of 1971, the old Saami administration was dissolved and the new administrative offices were established under the Department of Agriculture. Thus, herding is linked to the goals of benefitting the general community, the country and the world to a certain extent. Basically, however, these goals are very vague and what is given the greatest priority seems to be business profit, something much more easily measured.

Vagueness on this point, though quite understandable, means that it is still a matter of open negotiation how the advantages and disadvantages of herd-management rationalization are to be distributed amongst the various sub-systems. The general problems involved in rationality with regard to different, encompassing, systemic levels have already been mentioned in the section entitled "Hierarchical Systems" (p. 16). For example, the modern rationalization policies in the Herding Act of 1971 (abbreviated RNL) favor some herders (which herders will be discussed later) and are detrimental to others. Naturally, in a situation which can become quite competitive or in which organizational conflicts are common, a disadvantage to one herder might, for this very reason alone, be favorable to another. Relative benefit, however, is but one of the many pros or cons for herders with regard to rationalization. Throughout the law analysis, it is vital to discern which herders are shielded or whose interests are promoted and why.

Similarly, the rationalization of herd management may bring benefits to certain herders at the expense of Saami culture or may come into conflict with the rationalization of some other industry. Obviously, where such conflicts occur, the State must arbitrate in accordance with the principles of the greatest good or the least evil. The State, governed, as it is, by the majority, has therefore the power to devise legislation for its own best total rationalization of all businesses and industries.

And yet the ruling majority is not by any means always deaf to the voice of systemic interdependence (see p. 291), which asserts that the weak also have rights. On numerous counts, one must recognize that the principle of the greatest good of the greatest number is not strictly adhered to. People are not always compared on a one-to-one basis, and the State recognizes certain groups of individuals who together compose a larger system with an identity and rights of its own. In Sweden, for example, only Saamis are allowed to be reindeer-herders, (a consumer-category regulation). The legal recognition of categories beyond their mere weight of numbers, however, creates a profound, ethical dilemma when these various, hierarchical categories come into conflict over resources.

I turn now to the next purported goal of herd-management rationalization—to raise the living standard of the herders.

According to the committee, the profits from herding are poor in large areas. Many of the herders have strikingly low incomes. Herding is, as it is currently carried on, inadequate as a source of livelihood for many herders. One reason for this is that herding has not been able to make the best of gains from rationalization to the same extent as has, for example, agriculture. (JoU 1971:37, p. 30.)

Statements expressing the desire to improve the herder's lot by rationalization recur constantly in the investigations and reports culminating in the RNL (see, for example, *Renutredningen* 1960, Prop. 1962:68, SOU 1968:16 and Prop. 1971:51). When this goal is related to that already

mentioned, the question immediately arises: to what extent are they complementary and to what extent are the herders' gains at odds with the gains of the entire country? Or, more specifically, to what extent are the industries which conflict with herding allowed to expand at herding's expense?

The preservation of Saami culture is yet a third and often stated motivation for the rationalization of herd management.

It is of social concern, not just from the perspective of industrial politics, that the profitability of herding should improve. Herding is a condition for the preservation of the Saamish culture. (JoU 1971:37, pp. 30–31.)

This motivation has been echoed in most government reports, national or local, which in any way touch upon herding interests. Once again, this motivation must be weighed against the others. With respect to the State physical planning (*fysiska riksplaneringen*), it was stated that herding interests should bow in a specific area "only if a certain land area is needed for purposes of essential importance from a public perspective" (Prop. 1972:111, p. 143). In the County Administration's Overall Plan for the mountains in Norrbotten, one of the four basic goals for the administration of the mountain region is "to secure the conditions for the continuation of the Saamish culture" (*Länsstyrelsen, 1975, meddelande no. 12*). In this plan, it is further stated that, should an employment opportunity come into conflict with herding interests and should an alternative with equally large effects on regional politics present itself, the alternative most compatible with herding should be chosen (*Länsstyrelsen i Norrbotten, Handlingsprogram Rennäring, 1979:18, p. 3*).

The priorities of reindeer-herding interests should normally not mean that other desirable employment is hindered. On the other hand, if the employment within the herding industry is threatened, objectively considered, then the herding industry should not bow unless it is a question of meaningful differences in regional-political effect. (*Ibid.*, p. 3.)

The examples of such statements seem endless. It is noteworthy of them all that they usually contain a revival of the compatibility ideology, in which herding interests are said to be relatively free from conflict, followed by guidelines for the need-greed balance decision, should conflict occur. The protective stance of these statements then tends to evaporate in phrases such as "essential importance" and "meaningful differences", which are open to a wide range of interpretation. As will be demonstrated, it is important to consider not only how Saami cultural interests complement or conflict with the interests of the State, but also how the interests of the Saami reindeer-herders relate to the interests of the Saami culture as a whole.

The occupation–culture split

It is noteworthy that the State speaks of *preserving* culture as if culture were composed of the elements of culture alone, such as language and handicrafts, to the exclusion of those relations between people and between people and environment which create these more tangible things (see p. 299). With this view of culture, one can understand how the State can conceive of altering entirely the relations between herders, the relations between herding Saamis and non-herding Saamis, and the relations between these categories and the Swedish majority society, while at the same time preserving Saamish culture. Actually, in so far as the State exercises control over very important relations and transactions and builds up the modern Saameby organization, to that extent it is also very much involved in legislation concerning culture. It is therefore incumbent on those who advocate rationalization to set forth and defend their definition of what Saamish culture essentially is.

The preservation of a people's ethnic identity and the raising of their living standard are two distinct goals, worthy in themselves but not necessarily compatible in all instances. The problems that can result when these goals conflict, therefore, deserve serious consideration. Numerous statements suggest that the State frequently tends to underestimate the tremendous theoretical and practical difficulties involved in defining the relations between herding and culture:

... it is only to a limited extent possible for the Saamis to keep their language, handicrafts and other cultural expressions alive if herding should cease. Society should therefore contribute, by different methods, to better the conditions for herding's rationalization. In so doing, it is of greatest importance that the reindeer-herders themselves actively take part in the striving for rationalization. (JoU 1971:37, p. 31.)

It appears from the above quote that the State is well aware of the importance of herding to Saamish culture, but it is the importance of one entity to another entity. They are not fully recognized as being logically interdependent, if they can even be separated at all. The logical separation of herding as an occupation, a business, from the encompassing context of Saami culture is one of the most marked premises in modern herding law. On the one hand, herding and culture are regarded as unrelated phenomena that can be treated as independent variables. Yet, on the other hand, it is also tacitly recognized that these "variables" are intimately bound up with one another and cannot for a minute be detached from one another, even in thought. What ensues is a dialectical struggle between these two factors, as each attempts to subordinate the other to itself. Ingvar Åhrén, a prominent Saamish leader, exemplifies one factor in this struggle with the following comment: "In what manner does the reindeer livelihood have importance for the Saamish culture? A simple answer would be: Culture is the same as livelihood. The Saamis are a people with

their *own* form of livelihood and thereby their own culture.” (Åhrén, 1979b, *Älvarnas Bok*, p. 75.)

This dialectic obtains concrete expression in the system of government spending. Money paid to the Saami Fund (Samefonden) in compensation for encroachments upon the herding industry is then to a very great extent doled out to support the numerous, Saamish, cultural organizations. Of course, these organizations are often composed of herders or are intended to help and support herders, and, of course, money from the Saami Fund is also used to further rational-herding methods. Nonetheless, State monetary policy tends to set herding and culture in opposition to each other. In fact, those Saami organizations which flourish today owe much of their existence to money paid to the Saami Fund as compensation for herding encroachment. Thus, the survival of Saamish cultural activity paradoxically hinges upon the strangulation of herding. The Swedish Saamis' Parliamentary Organization (SSR) has repeatedly campaigned to separate herding-compensation payments from any State programs of Saamish cultural aid.

The State's tendency to divorce herding as a business occupation from the direct stuff of culture has taken a crooked path, but a path that is in the main traceable in the reports, motions and defenses culminating in the various laws pertaining to Saami rights and herding. One cannot claim that the State has all along been aware of the direction of its policies, but, as conflict and dissent regarding this increasingly sharpened stance mount, the issue cannot be avoided, although it finds expression in the most obscure and yet penetrating examples, for instance:

The Department of Agriculture's report first maintains that the name *Saameby*, in the committee's opinion, is not a completely appropriate description of the organizational form in question. The appointed expert committee on herding suggested in its report that the new local organization be called *renby* (reindeer Village) and explained that its motivation for this was that it was desirable that from the beginning it should be clear from the name that the primary purpose was to be responsible for the herding within a certain area. (JoU 1971:37, p. 40.)

Where the Saamis stress ethnic, minority or cultural rights, the authorities stress occupational rights only. As we shall see, there are a few exceptions to this rule. On the whole, however, the occupation-culture split is a logical necessity for the State in following a course of interactionism and assimilation. As many Sammis comment bitterly, “The State has given rights to the reindeer, not to us.”

Equal rights and category rights

The dilemma mentioned earlier as between recognition of the rights of single entities—rights which go beyond the simple sum of the rights of its members—is directly pertinent to the dialectic of occupation and culture.

In moving from the particular to the general, from equal entities to a class of those entities, one takes a jump in logical type (Whitehead and Russell, 1910–13). Similarly, when one legally recognizes a special class of reindeer-herders, composed of certain men, one has formed a category of logical type which is different from the logical type of the members composing that category. Again, when one conceives of a culture as an abstract entity encompassing numerous, different, occupational classes, of which reindeer-herding is but one, a step in logical type has been taken. Thus, recognition of Saamish culture as something worth preserving may entail (as it does in Sweden) legal “privileges” which favor certain Saamish *occupations* over other Swedish occupations and thereby favor certain Saamis over other Swedes. Yet this seems to create a conflict with the premises of an egalitarian society. Should certain Saamis not be privileged over other Swedes, should Saamish occupations not be favored over Swedish occupations, then the Saamish minority culture has no chance of being preserved or even developing very far along current Saamish lines.

As will be demonstrated, the Swedish State, in an attempt to cope with this dilemma, has evolved a program of minority privilege with enforced assimilation (minority constraints), so that, in time, the problem will be resolved. The dialectical battle will continue until the greater strength and lure of the wider spectrum of occupations commanded by the majority absorb the minority. This will occur unless Saamish cultural idioms evolve which avoid heavy and direct minority–majority conflict over resources and its accompanying dilemma of justice. The expansion of the flexibility necessary for the survival of a Saamish culture, as opposed to an expansion merely into the new flexibility offered by Swedish culture and industry (assimilation even of a more non-enforced variety, i.e. cultural flooding (see p. 296)), means that participation in these Saamish idioms must be more attractive to the Saamish youth than becoming Swedish.¹

In addition to the value of tradition for its own sake, the possibility that a minority culture has something of intrinsic value for humanity as a whole should not be dogmatically ruled out. Whether this is so or not is not the question here. But, *if* there is any rationale for regarding the class of Saamis as a significant sub-category within the class of Swedes (as Swedish law does in its stipulation that only Saamis can be reindeer-herders), then it can only be justified on the basis that Saamish *culture* has intrinsic value. Yet, at the same time, Swedish law seems intent upon phasing out the Saami–Swede distinction. Herein lies contradiction.

Of course, the Saamis themselves face the same contradiction that is evident in State law, that of preserving culture at the cost of culture. The Saamis, however, are not merely interested in preserving a static culture.

¹ Indeed, one might argue that, as there is only one economically most rational way of doing things in any given possible context of means and knowledge, and as stressful resource–consumer relations force societies increasingly to approach this rational goal in an increasing spectrum of areas, “culture” might in some ways be measured by its irrationality.

What they wish to preserve is the freedom to continue their *own* cultural development as much as possible. Nonetheless, the fight to preserve this freedom necessitates the sacrifice of traditional forms of communication and regulatory systems. The major Swedish Saami organization (SSR), for example, must employ an ombudsman in order to obtain an effective voice. The growth of the Saamish political organizations (see Svensson, 1973) is itself an adaption to the Swedish system. Change is always demanded of living organisms. But survival demands that the rate of change demanded shall not exceed the organism's ability both to integrate itself and to assert its identity.

The dilemma of culture and living standard

The relation of culture to living standard presents another difficult dilemma, in many ways akin to that of isolationism and interactionism, for both the Saamish minority and the Swedish State. A State which dogmatically espoused the ideals of cultural relativism would have to accept mutilation of the sexual organs of children or head-hunting, to take extreme cases. While one might readily outlaw such practices without extended ethical musing, there are other instances in which the case for intervention is more difficult to argue.

As Paine (1964b) has shown, the society surrounding the Saamish herding groups in Sweden¹ is culturally non-Saamish. There is no large, settled, Saamish, farming population and the jobs held by the other northern inhabitants, besides being totally removed from contacts with herding, are otherwise often in contact in a very negative way. In brief, there is no surrounding society which can absorb the spin-off population from herding in such a way that recruits can be fed back into the herding livelihood when necessary or possible. In Kautokeino, Norway, Paine points out that herders might have to give up herding a while and live a settled life, but this life does not cut them off from herding knowledge and contacts, and often these people are able to return to the field as active herders. In Sweden, however, a man who leaves herding is almost always lost to the herding profession for good. He is frequently forced to relocate to a big city in the south in order to find work and, except for possible engagement in Saamish clubs and organizations, he is also lost to the Saamish cultural milieu.

The lack of jobs, the thinning population and the diminishing social services in the north, i.e. the so-called *glesbygdsproblem*, due to the State

¹ His model, which applies particularly to Karesuando, is in many respects representative of all of the Swedish herding areas.

policies of concentration in the south, impose a serious threat to the Saamish culture (*Handlingsprogram Rennäringen* 1979:18, p. 11). For this reason, the Saamis are continually agitating for jobs that will permit them to remain in the "core" area. But, at the same time, it is important that these jobs do not encroach upon or conflict with herding. To date, few viable solutions have been found. As a result, many Saamis, in order to remain in the north, take jobs detrimental to herding, for instance, with the water-power, dam-construction teams. Of course, if they did not take the job, someone else would.

Even if a herder should be forced to leave the herding profession and be able to remain in the same locality in different employment, his chances of ever returning to the herding profession are small. Should he desire to return to the herding life, it is far from certain that the Saameby members, his old comrades, will grant him the right to do so. This situation occurred recently in the case of Ivan Kitok and sharply divided Saamish opinion (see, for example, *Samefolket*, 1980, no. 5, pp. 16-18). Obviously, however, all the Saamis who might desire to do so cannot make a living by herding reindeer. Some must be excluded. The manner in which herding rights are regulated and may be regulated within the current legal framework are subjects for later chapters.

Furthermore, the Saamish political organizations, in an effort to stop the flow of no-return spin-off from herding, must try to protect the small herder against the big herder, while at the same time still trying to uphold the herders' traditional right to strive for and attain bigness. The Saamis are caught in a double-bind. Essentially, this is the same double-bind which the Swedish lawmakers face—either refrain from meddling with the old system (isolationism) or disrupt the system by causing repercussions throughout it (interactionism).

The decision whether to remain in the core area without satisfactory financial support but with the traditional herding form of livelihood or to relocate to the south and break traditional ties comes in the end to a painful contest between living standard and culture for many herders. Now that they are used to the benefits of and dependence on a strongly socialistic welfare State and the new, part-time jobs made available by the colonial encounter, many herders are unwilling to let their living standards suffer overly, should the part-time jobs become scarce in the north. They might move south and sacrifice active cultural membership. Others will cling to their traditional livelihood, but not without a sacrifice of living standard. The former alternative is, of course, more easily adopted by the young, who are not so fully committed to herding as their elders and who wish to commit themselves to an occupation with a firm future. This has always been a problem for each small herder. With rationalization, however, a legal program is devised which can enforce this decision through collective voting and financial sanctions. By forcing small herders from the field, in order to better the resource/consumer ratio for those

remaining, the *problem of illegalized poverty* is thereby created, and here the dilemma of isolationism and interactionism continues to plague the State.

The profitability of herding is, as just mentioned, poor within large areas of the herding territory. The reindeer-herding expert committee has maintained that this to a great extent is due to the fact that the work units are too small and that the work force is thereby not rationally utilized. From both the herders' and society's viewpoint, it is of greatest importance that the labor force, the grazing capacity and the technical gear of herding are utilized as effectively as possible. In this way, the conditions are created to make herding in the entire herding area profitable and give those employed in herding a fully acceptable income. This involves, however, that the number of people fully employed by herding will decrease. (Prop. 1971:51, p. 136.)

Another important point is rationalization. According to the intentions of the report, 30 % of the herding population should be peeled away, so that those remaining will attain a living standard which is comparable to that of the society at large. The salary of a normal industrial worker would demand a herd of 500 head per family. Today there is almost no one who reaches this figure in the area of this investigation. Therefore, such a change would have wide repercussions. The population base would be too small to sustain a culture. (Svensson, 1973:185.)

The raised living standard which the State claims is necessary for the preservation of the Saamish culture, when attained through the proposed rationalization program, means the decimation of the already low, herding population and a deadly blow to Saamish culture. The point of balance between the ideals of a decent living standard and cultural preservation is decided in this case by the income that the State fixes as desirable for herders and the means by which it tries to ensure the herders this minimum income. By a recent decision of the Norrbotten County Administration on August 30, 1979, to adopt a plan for the herding industry which the Administration had formed during the past half-year, a firm stand has been taken on the question of *what* living standard for each herder should be the goal of rationalization policy. This decision necessarily implies a further decision, that of how many herders is too many for the herding economy to bear.

The income goal can be summarized as follows. The aspiration should be to give those employed in herding a living standard comparable with that of other population groups. In this respect, one should proceed with the idea that the work investment within the herding industry should be given equal compensation to the work investments in other territorial forms of livelihood. (*Handlingsprogram Rennäringen*, 1979:18, p. 6.)

A work force based upon one year-worker per 350 reindeer can be considered on the average enough for all the kinds of work during the herding year. One work investment of this size means that the person in question can be considered a full-time employee of the herding profession. His chances of devoting himself to other work are limited with this size of herd. The gross income from a properly composed herd of 350 animals can be calculated at about 50,000 Cr./year. (Ibid., p. 10.)

The State is correct in claiming that the low incomes of many herders force them to leave the field, although, as the Saamis continually point out, a living standard in line with that of a Swedish industrial worker is less important to them than a life in the north within the traditional herding livelihood. Nonetheless, there comes a point at which the empty stomach gains control over the heart. This the Saamis acknowledge, and they see the necessity of engaging in the improvement of the herders' income. They refuse, however, to accept such improvement at the cost of the herding population. Their efforts to maintain the herding population necessitate certain sacrifices with regard to the old, traditional forms of herding transaction or of population and grazing regulation. The times have changed, colonization and the industrialization of the north have made it impossible to keep intact all elements of the old Saamish culture. Certain elements of it conflict with others, and the Saamis today must carefully weigh their priorities.

While some Saamis may mourn the passing of certain, old, regulatory systems or traditional forms of transaction, none would wish to return to the days in the distant past, when the Saamish population was in part regulated by starvation (maybe even infanticide), and high infant mortality, reported as late as the 1960s (Haraldson, 1962). Haraldson compares the Saamis' "vital statistics" with those of the people in the underdeveloped nations. Thus, although the colonial encounter has decreased the survival niche of the Saamish population in some ways, it has increased it in others, so that the net result has been an expansion of survival capacity. According to the Saamis' own official declaration, it appears that the Saamish population today is larger than it has ever been (see *SSR Landsmöte Protokoll*, 1968, bilaga 2, p. 2). The herders' niche has decreased, but the niche of the Saamis as a whole has increased—provided the Saamis become more and more like other Swedes (see *Fig. 4*). The Swedes have provided new, improved ways of surviving over-grazed pasturage, bad winters, reindeer plagues and crowding, viz. by going to work in the cities or down the mines, moving south, etc. They offer material welfare and a higher living standard. They even offer coffee, tobacco and alcoholic drinks. Industrial developers are quick to point out the positive benefits to the Saamis of land encroachments. Thus, we come again to the two possible elements of interactionism: (2a) forcible change against the will of the weaker system and (2b) the opportunities, comforts and increased net flexibility offered by the stronger, which attract the weaker.

Even leaving out "Big Brother" opportunism on the part of the powerful party, the weaker party will *inevitably* be tempted to take advantage of the possibilities offered by the more flexible party's ways of functioning. But once a method, principle or technique is borrowed from this party, a chain reaction of cultural repercussions will follow. Therefore, the *problem of cultural flooding* is an essentially grounded and hence necessary

Fig. 4. Total Saami population in Sweden, 1750-1970.

From *The Biography of a People: Past and Future Population Changes in Sweden, Conditions and Consequences*. A Contribution to the United Nations World Population Conference, p. 25. Royal Ministry of Foreign Affairs, 1974.

Note the assumption contained in this graph that, prior to 1850, all Saamis were reindeer-herders.

problem arising out of interactionism.

If, for some reason, this inevitable, cultural flooding is deemed undesirable, the only way to combat it will be through a system of discrimination or what one might term legalized cultural dichotomy, whereby the schism between the two cultural systems is legally enforced. In many respects, this is the opposite problem discussed earlier. Whereas, before, the dilemma of isolationism and interactionism was applied to the situation in which the majority sought access to resources formerly controlled by the minority, now the problem of cultural flooding concerns the minority's infiltration of the majority's niches. The old dilemma still obtains; it is presented here in grossly simplified form in order to underscore the principles at stake.

In the instance of the Saami-Swede encounter, the Saamis naturally wish to maintain legal, cultural dichotomy in the case of rights to certain resources but eschew any such dichotomy with regard to the benefits of cultural flooding. While Swedish law, on the one hand, ignores or tends to diminish any kind of special cultural or minority rights when it comes to the distribution of resources, it upholds cultural dichotomy with respect to access to Swedish benefits (see the discussion in Chapter 19). Only a few decades ago, discriminatory laws were passed to restrict Saami herders to their present state of development. They were, for example, not allowed

to build comfortable, modern houses, for it was believed that this would make them "soft" and less willing to maintain the herding intensivity required of them. An attitude in favor of what one might call enforced preservation of underdevelopment (poverty) was common.

The alternative to this preservation of underdevelopment is to make poverty illegal below a certain limit, and thereby one faces a double danger of sailing either too close to Scylla or too close to Charybdis. The different courses are hotly debated in the program of rationalization. At first glance, it might appear that a drifting course between the two perils evades the problem, simply by allowing poverty without pressure either to preserve it or to eradicate it. By such a course, one might hope to avoid the trap of discriminatory legislation by applying its policy of poverty allowance or illegalization equally to all Swedes and Saamis.

If the dominant majority makes it illegal or simply impossible for the weaker minority to accept a certain degree of inefficiency (hence poverty) in order to maintain some of its old ways, then the process of cultural assimilation will, in many respects,¹ be almost instantaneous. The higher the cut-off point defining poverty, the more rapid assimilation will be. This alternative, if pressed too hard, so that assimilation is forced,² turns into the first aspect of interactionism, that of forcible change against the will of the weaker minority.

If we inspect the other alternative, however, that of allowing all manner of poverty for both Saamis and Swedes, it becomes evident that even here there is a double-bind. For, if the Swedes allow the Saamish children to grow up in ignorance, disease and poverty (not that this is or necessarily was the case), then they *refuse them the opportunity* to acquire those benefits until they are of age to choose for themselves. This alternative then becomes a more refined form of discrimination and isolationism. Opportunities are still not equal for all, and the dilemma of both fair treatment and painless assimilation remains. We are thrown back on the first alternative, that of the illegality or impossibility of poverty below a certain limit, but with the all-important question: where should the line be

¹ Note that these arguments presuppose an important distinction with regard to aspects of culture. While there are aspects bound directly to material resources, there are also aspects that are more free, such as language and music. The assimilation spoken of here concerns those cultural elements bound to economics and resource allocations. Of course, even language is not fully free from these considerations, for the preservation of a language, the teaching of courses, the publishing of books and the broadcasting of radio programs can be very expensive. In Sweden, even these expressions of Saamish culture are threatened by lack of funds.

² I have spoken here of *forced* assimilation and of the *pain* of assimilation as somehow proportionate to it. Naturally these are vague and highly subjective terms. Were this not the case, it would be a simple matter to calculate the balance of pain and plot the best course in any conflict dilemma. While such concepts are hard to quantify and compare, they cannot be ignored on those counts.

drawn? The line drawn at one extreme means painful assimilation, while the line drawn at the other extreme results in unequal opportunity. It is the problem of need-greed balance and, as noted, the authorities have recommended that the line be drawn at 50,000 Cr./year, a figure which many Saamis consider far too high.

The recommendation of such a limit poses a number of problems, but its realization poses many more. How is one to achieve this ideal, and who is to wield the ax which cuts the "excess" herder population off from the herding livelihood? As will be demonstrated, the Swedish rationalization program has devised a process whereby the Saami herders help to set their own limit within each Saameby, so that small herders under this limit may be pressured to leave the field (see the section entitled "The self-rationalizing Saameby"). Of course, the State cannot help but be involved in the weeding process. State taxation and loan policies can be formulated so as to benefit the big herder over the small herder. Such formulations are no accident and the State freely admits using discriminatory measures between herders with respect to their economic status for the goal of rationalization (see p. 341).

The problem of the rising subsistence minimum

In the previous pages of this section, problems concerning the demands for a higher living standard by the State (illegalized poverty) and by the herders (cultural flooding) were mentioned. Improvement of the herders' living standard necessitates the raising of the resource – consumer ratio. Unfortunately, the desire to improve the resource – consumer ratio may be occasioned not only by the desire for a raised living standard, but also by the need to maintain the same living standard.

Of course, at any one time, there is a given number of reindeer within a Saameby divided amongst its members. There is also a limit to the number of reindeer each Saameby is permitted to maintain. The *subsistence minimum* of reindeer per average family, however, is constantly rising. I use the term "subsistence minimum" here to mean the minimum number of reindeer needed for an average herding family to support itself successfully on herding alone. The many reasons for the rise in the subsistence minimum will be discussed, but it is sufficient to indicate here that its rise, when related to the absolute limit in reindeer, means that a man who was once a rich herder may become a poor herder without any change in the size of his herd. This is a problem of inflation of the reindeer's supportive capacity. And, since herd expansion is limited, the Saameby can support fewer and fewer herders above the subsistence

minimum. As the subsistence minimum rises, in effect, the resource – consumer ratio is decreased. Should this decrease become critical, eventually some herders will try to force other herders from the field. By securing room for their own herd increase, the remaining herders are in a position to maintain their living standard. Thus, one may speak of a “poverty line” or a minimal, herd-size line created within each individual Saameby, below which, in certain conditions, herders are pressured from the field. The line below which economic pressure squeezes herders from the field will shift and rise, as does the subsistence minimum (most especially once a Saameby has attained the maximum reindeer population permitted). Of course, there are many intervening factors which may mitigate or cancel such a squeeze. Where the small, so-called “hobby herders” are all old men with other jobs who are not active in the field, the squeeze will probably be more readily applied than in the case in which the small herders are young, active men who plan a long, herding career. The line at which the Saameby applies a squeeze may or may not be the same as the line at which the authorities apply (or wish to apply) a squeeze.

Yet a culture without people is impossible. The Saamis may favor rationalization of herding to a certain extent, but not to the point at which it entails a “rationalizing away” of the herding population. Escape from this double-bind is possible through the improvement and development of other sources of livelihood which are well suited for co-existence with herding. In this way, the herder’s income would be supplemented and provide the chance for all herders currently herding to remain in the core area and to continue herding. In this way, the Saamis might hope to secure the people necessary to maintain and develop a culture. And, although non-traditional jobs will also be necessary, they might be combined in such a way that herders need not give up their traditional herding occupation.

While such supportive jobs will definitely help a herder to cling to the core area and even to a faltering herding enterprise, he may still be subjected to a squeeze exerted by the Saameby and/or the authorities to force small herders from the field. Income from supportive jobs may help a herder to stay on, despite a squeeze, or even to buy more reindeer and maintain a herd sufficiently large to avoid it. But any supportive work takes time from the active herding job. A herder may find himself embarked upon an extensive spiral, whereby the less time he spends herding, the more extensive his herding becomes and the less the economic return he receives from his herd. The extensive spiral is all the more rapid, the higher the intensive pressures, such as a high rate of predation, which go ignored. As a result, he will have to spend yet more time at other work. When the point is reached at which the time invested in herding does not produce as great an economic yield as the same time invested in another job, then the herder may well face a gradual liquidation of his herding business. This is especially true when herd size is well below the subsist-

ence minimum, for in this case a herder cannot afford to give up a very profitable job for the love of a less profitable, herding enterprise.

To maintain a steady state as a reindeer-herder, one must co-ordinate one's non-herding jobs so that the extensive spiral is avoided. Part-time, seasonal work, especially during those periods when herding duties are minimal, provides the best way for herders to establish a steady herding state. With the subsistence minimum continually rising, however, profits from time invested in herding are diminished. For a herder to maintain a steady living standard based on herding, his herd size must rise. Otherwise, even the maintenance of herd size brings him closer to embarking upon the extensive spiral. As mentioned earlier, however, there are limits to the total herd size permitted for a Saameby. As I shall show, the authorities' rationalization program advocates and tends to create a bias towards the maintenance of constant herd sizes. Moreover, as industrial developments consume reindeer-grazing lands, the supportive capacity of a Saameby is reduced. With the rising of the subsistence minimum and the lowering of the Saameby's supportive capacity for reindeer, the space within which a herder can establish a steady state of herding, his herding flexibility, is narrowed (see. p. 480).

While supportive, non-herding jobs increase the herders' flexibility and help to ease the Saamish dilemma of need for rationalization without loss of herding population, this is an *ad hoc* measure which may provide only a temporary escape from the double-bind. Should the increase in flexibility cause the herding population to rise, while the total Saameby reindeer population and the supportive-job alternatives remain limited, the problem will be created all over again. The number of herders will have to be reduced. The only permanent solution for any holon to the needs for additional resources or exploitive capacity (flexibility) which will avoid the need for a series of new, short-term, *ad hoc* solutions is to obtain or create new resources and then *refrain from consuming them past regenerative capacity*.

However, the resources which one holon refrains from consuming or the niche which it refrains from filling up may not be conserved with such wisdom by another competing holon. If, for example, Saami herders were to control their population growth and limit it so as to achieve a steady-state relationship between the herders needing extra jobs and the jobs available, there is no guarantee that the Swedish population would limit its growth. Instead, they might compete furiously for the jobs and make it that much more difficult for a Saami to get one as well. Or, to take another example, should one herder limit his herd growth so that the grazing might be spared, another herder might ignore this precaution and make an initial profit at all herders' later expense (including his own).

It is for this very reason that the authorities have limited the total reindeer population of each Saameby. There are no laws, however, setting an absolute limit to the extent to which industrial growth is permitted to

encroach upon grazing lands, for this in turn would entail control over other "runaway systems", such as the world's population growth. In short, within the holistic system, it seems that there will always be some disequilibrium. So, although expansion into environmental capacities can be delayed or reserved for one holon's benefit over another, it can never be eliminated. Human ecology cannot hope or wish to avoid change, but in so far as change can be regulated and directed by human morality, consideration must be given to the renormalization capacities of our species and of our diverse cultural heritage.

In the above pages, various reasons for the raising of the resource—consumer ratio for herders have been discussed. As noted, the rationalization of herding can be effected by regulating both the numerator and the denominator of this ratio. The former involves the expansion of income sources (increase of non-herding, supportive jobs) and the improvement of efficiency in resource utilization. The latter aspect of rationalization involves consumer regulation and can be further divided into two related elements: (1) the control of membership of the herding category and (2) the control of consumption by the members of this category.

Although one can justifiably speak of the State's rationalization of herding as a relatively modern event with regard to the authorities' drive to expand and make more efficient the utilization of herder resources, the rationalization of the Swedish State as a whole (which has always been a natural and necessary part of its survival campaign) demanded the dual forms of consumer regulation from early times. While it will be shown that the evolution of reindeer husbandry towards the utilization of the reindeer essentially as a slaughter animal for a cash economy has roots in the herder-settler conflict, the series of dilemmas created by the colonial encounter first called for consumer regulation of a more refined nature with respect to those resources which the encroaching system most desired. It was only upon the demise of the parallel theory that control of herder versus non-herder status and the forms of herder husbandry became of practical interest to the State. Modern consumer regulation for the benefit of herders (living standard), of Saamish culture and of the State has evolved from the earlier legal foundation.

In attempting to trace the development of the principles of modern rationalization policy, therefore, it is necessary to examine category divisions from early times. This subject is extremely broad and complex and, in order to deal with it in a way which will best meet the present need, I have chosen to focus attention upon § 1 of the Herding Act of 1971, its origins in § 1 of the Grazing Act of 1928 and the relevant bill in 1917 (Prop. 1917:169). It is this section which defines who is and who is not eligible for herding rights.

Rights of membership to a special legal category are then followed by restrictions of a more quantitative nature as to the extent to which members may exercise their rights. Limits may be set to the number of reindeer

which one herder may herd or to the number of reindeer which can be owned by one herder (and possibly a different limitation for the number owned by a non-herder). Obviously, the need to expand the herders' non-herding resources, i.e. to find supportive jobs, is intimately bound up with this second aspect of consumer regulation as well as with the first. If non-herding, supportive employment is available in the north through the alternative utilization of the grazing lands, the question then becomes: is or is not the right to this work and the utilization of the natural resources involved reserved for the herding-category members (or the Saami-category members) and, if it is, to what extent or at what rate can these resources be exploited? If non-herding income cannot be readily derived from the grazing lands to the necessary extent, one may question whether the herders' legal mandate may not be widened to grant special privileges in relation to other, even non-traditional resources. As with the question of legal-category divisions, the variable extent of the consumer rights granted to the members of these categories is most complex. I have chosen to focus attention upon § 9 of the Herding Act of 1971, for it is here that much of the flexibility that might otherwise be made available to the herder through his Saameby is cut off. Section 9 regulates the Saameby's non-herding activity. Analysis of §§ 1 and 9 illustrates most clearly the dilemmas mentioned in this chapter. After a discussion of § 1, followed by a presentation of the basic concepts designed to render herding more efficient and a discussion of § 9, I intend to demonstrate how the same principles of discriminatory categorization with different accompanying rights are carried over to the internal structure of the Saameby.

There are many other sections in the Herding Act of 1971 and its program of rationalization which are well worth exploring. The changing role of the Village headman (*ordningsman-ordförande*) from a contact man and information officer to a kind of work leader (ideally, if not in fact) would provide another illustration of the effects of colonization. There are many other examples, such as that already mentioned concerning the regulation of earmarks. Nonetheless, exploration of § 1 and § 9 embraces many of the same premises that are operative in these other aspects of legal development. These sections are addressed most directly to the issue of the commons dilemma and therefore grapple with the most essential problems of holon survival. They have evolved through the balance of interactionism and isolationism, the dialectic of occupation and culture, and they lie at the roots of rationalization.

Chapter 17

Saamis and Saami Herders

Section 1 of the Herding Act of 1971 regulates who is and who is not permitted to be a reindeer-herder. In this section, which first came into effect in 1928, the Saamis are divided into two categories. For the most part, it is only those Saamis actually engaged in herding who are legally distinguished as Saamis. Of those who are eligible for herding rights, only those who utilize their herding rights as Saameby members share in any of the accompanying, so-called “Saami privileges”, such as hunting and fishing rights. These privileges, legally bound up with herding, are almost all that is left of those ancient, traditional rights of the entire Saamish population.

Section 1 is thus a remarkable expression of the occupation–culture split imposed on the Saamish population as a herder and non-herder split. An analysis of the background and justification of this section is therefore called for. It will be shown to be intimately bound up with the later development of § 9 in the Herding Act of 1971. Section 1 of the Herding Act of 1971 includes the following statements:

The right according to this law to utilize land and water for support for oneself and one's reindeer (reindeer-herding right) belongs to him who is of Saamish ancestry, if his father or mother or one of his grandparents had reindeer herding as steady occupation . . .

If there are special reasons for it, the County Administration can grant a person of Saamish ancestry herding rights even in cases not intended according to the above paragraph. (SFS 1971:437.)

Obviously, one of the main effects and chief justifications of § 1 is to prevent the uncontrolled use of Saami privileges by people who are only 1/16, 1/32 or 1/64 Saamish. But it is contrary to contemporary western values to deprive someone of his traditional herding right merely because he is not racially “pure”. Someone who is only 1/64 Saamish may still be eligible for herding rights, but only if herding has been maintained for at least every other generation on one side or the other of his genealogy. But someone who is of 100 % Saamish ancestry can be barred from herding rights if only two generations separate him on either side from his last herding ancestor. As will be shown, the Saami herders strongly resist enlarging their legal category even in a restricted way (see the debate on

Saameby supportive members, p. 418). Even if the grounds for eligibility for herding rights were broadened, it is the actual herders of each Saameby who have the power to permit or deny an eligible herder access to the Saameby and the chance to become an actual herder (unless, of course, the person in question was born into the Saameby and has never given up this membership). As it is, the supportive capacity of herding is narrow and is continually narrowing, so that it is natural that the current herders should be opposed to opening up their remaining resources to a larger group of consumers.

The State, which has recognized a class of people, the Saamis, whose members have rights accorded to them beyond those accorded to the members of the non-Saamish, Swedish group, sees no reason to have this recognition perpetuated for those who are only to a very small extent Saamish. Nor does it wish to extend special privileges designed to help maintain a minority culture to full-blooded Saamis who have entirely given up *the* Saamish culture for many generations. According to § 1, however, a Saami herder could theoretically be one who is only 1/128 Saami, who does not speak the Saamish language and who directs his herding business through a chain of employees from an office in Stockholm. In the past, the degree of racial affiliation and the traditional herding occupation were more firmly linked and were both, it seems, more correlated to *the* Saamish culture.

In an essay concerning the many legal subdivisions of the category of Saami, Prawitz has written:

The question of a legal definition of the concept "Lapp" was presented for the first time in Bill No. 169 to the Parliament of 1917. The aim seems to have been twofold. On the one hand, one wanted to block from grazing rights those Saamis who had more definitely gone over to other forms of livelihood. On the other hand, one wanted also, at least to a certain degree, to prevent the combination of herding with farming. In the formulation of the suggested law, one emphasized ancestry as well as occupation. (Prawitz & Cramér, 1970:42.)

How does the State justify this proposed division, based on occupation and ancestry over simple ancestry? As one would expect, the answer is to be found in Saami-Swede relations and the conviction that members of the same occupation should share the same legal privileges regardless of ancestry, that is, a Saami farmer of long, Saamish, farming ancestry should not have more privileges than a Swedish farmer.

If, as this implies, the right of reindeer ownership is to be seriously limited for the farmers in Norrbotten's lappmark who are not to be considered Saamis, while the settled Saamis' right to own contract reindeer [see p. 110], though, is to remain unchanged, then with consideration of the widespread contract-reindeer system in the named area and the extent to which racial mixture frequently occurs, it is obviously necessary that the law clearly distinguishes who it is that in his capacity of Saami has the right to own reindeer in unlimited numbers and without the control which otherwise applies to such ownership. Along with the stipulation of

this definition which is thereby called for, one has also obviously to consider the question not only of right to own contract reindeer but also other questions contained in the grazing law concerning the Saamis' special privileges. (Prop. 1917:169, p. 55.)

As one has the opinion that one should grant the Saamis these rights, the basis of this has been, on the one hand, consideration of the herding, so important for the national economy and from the social perspective, and, on the other hand, the praiseworthy desire not to ruin unnecessarily the Saamis' special culture, which is for them well adapted, and force them to dissolve into the main population. To the extent, however, that Saamis by the power of circumstance come far away from the livelihood of their forefathers and seek their support in the same manner as the settled population, as farmers, lumberjacks, hired hands of the settlers, etc., to the same extent disappear the reasons for the State to reserve for these Saamis any type of special judicial position. (Prop. 1917:169, p. 56.)

It is noteworthy that the State recognizes herding as the only traditionally Saamish way of life. This has always been one of the most persistent false assumptions in the history of Swedish colonialism (Ruong, 1978:1). The conviction that equal occupation justifies equal rights under the law was widely held in the past and is at the present. In itself, removed from the historical context which gave birth to it and which can be criticized, this conviction that all farmers, Saamis or Swedes, have equal opportunities has much in its favor. It is all the more remarkable, then, that the modern, reindeer-herding Saameby, supposedly a business organization like so many others in Sweden, is stunted in its opportunities for development by § 9 of the Herding Act of 1971, unlike any other Swedish business organization. One may well wonder what the conditions were which caused the State to seek better control of resources by definition of the term "Lapp". The cause-and-effect path leads back to the early contacts between the Saamis and the Crown.

The rights for which all Saamis were eligible in the Act of 1886 are merely *rights of use* of land rather than rights of ownership. Note that there is an important distinction between proclaiming that only herding Saamis have certain privileges as opposed to fishing Saamis, for example, on the one hand, and proclaiming that only certain Saamis have the right to be eligible for these herding rights, on the other hand—a development which came later. When one speaks in terms of right of use, one automatically brings into the discussion concepts of occupation and form of livelihood, as primary to the rights of a people, because of their membership in a specific category as bearers of a specific culture. Once this step is taken, the next in logical order is to limit the right of use according to the *kind of use* (the type of occupation). In 1886, any Saami was eligible for herding rights, but only those actually engaged in herding were granted full Saami privileges. Fishing Saamis were given no special privileges over land or water. It is easy to see how the misconception that real Saamis are only herders and that herding is the only true occupation of Saamis was not simply a mistake born of ignorance, but rather a necessity for the colonial

exploitation of resources and the introduction of the rights of Swedish settlers on the same land.¹

Perhaps the fairest policy would have been to create a number of Saamish reservations or independent nations, thus using land ownership as the criterion of Saami rights (isolationism). But this alternative would preclude Swedish exploitation of Saamish territories. So, as we have seen, the Swedes relied upon a premise of compatibility (the parallel theory) to open up the north (interactionism). As one would expect, the form of justice dealt out to herding at each point of colonial relations reflects the degree to which herding interests are beneficial to the Crown in relation to the Crown's conflicting needs. As herding interests become less and less important to the Crown, they must obtain their support more and more on the grounds of protecting Saamish culture. But, as Saamish herding becomes more and more like any Swedish business enterprise, devoid of radical cultural distinctions in the eyes of the State, the State comes to consider policies for cultural protection less and less warranted. Today, for instance, although the State pays continued homage to the goal of supporting Saamish culture through herding (cf., for example, *Rennäringsnytt*, 1980, no. 3), it seems to be an unwelcome responsibility, so that, when conflict develops between herding and encroaching industry, the problem of cultural protection is usually dismissed with the payment of some compensation money to the Saami Fund. Many Swedes are infuriated at such payments, for they see many Saamis as no different from themselves and as enjoying the same decent living standard, thanks to the Swedish State. Now, according to them, the Saamis are given extra money simply because they are of the Saamish race. While most Swedes agree with compensation payments made to injured parties, many would disagree with the idea of cultural compensation being paid to all members of a cultural category. Should the theoretically possible herder who is only 1/128 Saamish, who cannot speak Saamish, who bosses his herding business from an office in Stockholm and who knows nothing of Saamish culture—should he be given the benefits of compensation for encroachment in a district thousands of miles from his own? To many Swedes, Saamish cultural protection means reverse discrimination. The State has deemed it necessary to face such charges by carefully controlling the way in which money in the Sammi Fund is used. But this, of course, places the State in the rather untenable position of paying money to the Saamis and then controlling how it is spent and for what cultural purposes, thereby deciding what is Saamish culture and what is a good purpose. The Saamis, of course, object.

¹ Mörner advances an historical and diffusionistic explanation for the application in Sweden of the doctrine of dual dominion, whereby "The Crown exercised *dominium directum*, while the present proprietor (*skattebonde*) or, for instance, the holder of a *lappskatteländ* merely exercised *dominium utile*" (1979:92). While I do not argue with such diffusionistic explanations, I believe that dual dominion had to evolve, regardless of precedent.

Far more sympathy is shown the individual herders or the specific Saamebys that are directly encroached upon, though here too compensation payments are the rule, as would be the case with any Swedish business crippled in its development in the greater public interest. The injured parties, herders as well as Saamish cultural leaders, not only contest the decision to permit encroachment, but also claim that a single, lump-sum, compensation payment is inadequate for injuries whose effects will be suffered for all time. The State, however, pays lump-sum compensation rather than a constant, yearly, compensatory sum for the very reason that, with its policy of enforced assimilation (ideally painless), the Saamis will in time be culturally Swedish and will therefore have no rights to compensation for a culture which is "theirs" only in a historical sense.

Prawitz and Cramér (1970) provide valuable commentary on the historical process of herding-law evolution which, along with the massive Swedish Parliamentary records, helps to establish the context out of which § 1 grew.

These suggested changes concern the regulation of the settlers' rights in Norrbotten to own reindeer and turn them over to Saamis for care. The constraints which are proposed in the suggested law for the settlers' rights to own reindeer has, as we know, been occasioned in part by a motion of Mr. Lindhagen and Mr. Hage. The motion originated mainly on the grounds that some settlers, well-to-do, big farmers, for purposes of speculation gained ownership of herds of up to thousands of head which freely grazed on Crown land. (M 1917:405, II K, p. 7.)

Developments of this nature in the *internal* herding situation were at the same time complicated by developments in the *external* or international situation. The early 1900s, when the union between Norway and Sweden was dissolved, were a time of furious herding investigations and laws. At a meeting in Trondhjem, the Norwegian Saamis presented their desires for new legislation. On the basis of these desires and demands, a new herding law in Norway was initiated which was to concern both Norwegian internal and external affairs. Thus, Sweden was pulled into negotiations over international matters, negotiations which later led to the massive relocation of Saamis from northern Sweden.

Although many issues were under discussion, the issue of settlers' rights to own reindeer was the most pressing. Some Saamis complained and some farmers complained. The Saamis' own reindeer had a hard enough time finding grazing, without competing with enormous herds of contract reindeer owned by Swedish settlers. Some farmers complained of the poor management of the crowded reindeer which encroached upon their crops. They held that Saamis who herded other men's reindeer were not so conscientious in maintaining good order, as these herders did not carry the full responsibility of compensation payment for damage done by the contract reindeer. Of course, other Saamis and farmers benefitted greatly from the contract-reindeer system and did not want to see it limited. While

a limitation or total cancellation of the Swedish settlers' contract-reindeer-ownership rights would not infringe upon any long-standing rights, such a limitation for Saami settlers would constitute a basic reduction of traditional Saamish rights over the reindeer resource.

Of course, as later events proved, the contract-reindeer problem was not purely an internal affair, for the restrictions on the grazing rights of Swedish Saamis in Norway resulted in further overcrowding on Swedish grazing territory and thereby stimulated further questions as to the rights of the settlers' reindeer to compete with the Saami herders' reindeer for grazing. In the northernmost districts of Sweden, those herders migrating across the border into the Troms region of Norway were not allowed to bring with them contract reindeer to consume Norwegian grazing. As a result, it was usually impossible for them to have contract reindeer at all.

In the early laws, one finds the attitude that, if infringement did occur between agriculture and herding, it was either caused by poor herding (in those days, poor herding was equated with non-intensive herding) or by careless farming, i.e. by a farmer's trying to be what he should not be, a herder, or by a Saami herder's trying to be what he should not be, a farmer as well. Of course, with colonial contacts, these distinctions were blurred in every conceivable way. Saamis became settlers. Settlers (for example, the remarkable Granström family in Jokkmokk) became full herders. Settlers farmed and herded, and Saamis herded and farmed in combination. Two of the State's basic premises were challenged: that herding and agriculture cannot successfully be combined without neglect of one or the other and trouble for other herders or farmers and that to be a Saami means to be a herder.

At this point, the State, for economic and political reasons, wanted Saamis to remain herders or, if they were to settle, to give up herding. Most importantly, the State wanted settlement to expand. The State was not at all pleased with settlers who began to be nomadic like Saamis. The Agriculture Line, drawn up in the late 1800s, was a reaction to this situation. Above and to the west of this line, land was to be reserved for herding, while below it or to the east, the land was open to agriculture. This line was not drawn simply to protect Saamis from settler encroachment; it was also designed to prohibit settlers from "going Saami". From the State's point of view, of course, farming and herding could not well be combined by the same individual, but, for those who did combine the two, the combination worked excellently. It was not that the two forms of livelihood *could not* be combined successfully; it was simply that the State's interests were not served by such combinations and so, by the State's definition of proper herding or proper farming, combination was undesirable. Motion no. 163 in 1908, a famous document to the Saamis, questions this premise:

Through the basic tenet of our law, that a Saami cannot at the same time be both herder and farmer, a natural transitional form is removed from the Saamis, the

transition from the free, nomadic life to the settler's with his own interests bound to his plot. Such a transitional form could have made it possible for the less well situated but not completely destitute Saami to have appended to his herding (which could not alone support him) a little farming plot, adapted to his condition and ability to supplement what he lacked from herding. In this way, agriculture bit by bit could have absorbed those who tired of the nomadic life or through lack of adequate reindeer were forced to give up this form of life. Now, instead, one has created a poor, propertyless and homeless proletariat. (M 1908:163, II K, pp. 8-9.)

Elsa Laula, a Saami herself, contributed to motion 1908:163, calling for legislation which treated all Saamis as a unit, whether they were herders or farmers or both. She had the support of Dr. Hellström, who argued that one cannot reason "that a certain people should be preserved for the sake of a certain form of livelihood, but rather the opposite, that forms of livelihood should be maintained for the people's sake" (M 1908:163, II K, bilaga 10, and cf. Ruong, SOU 1975:100, p. 424). Bishop Olof Bergqvist, however, invoking the notion of a divine plan, held that "the Saamish people as far as possible should be preserved for the nomadic life and herding, which is their greatest wish, for the reindeer is created for the Saami and the Saami for the reindeer". (Ibid.)

The State had a choice: either to comply with the argument of rights for *Saamish people*,¹ as presented by Elsa Laula, or to continue with Saami rights based on *occupational rights* and in consequence create a growing "poor proletariat". The State chose the latter alternative. On June 19, 1917, amendments were introduced into the current Grazing Act of 1898 to set the maximum number of contract reindeer owned by *any* individual, Saami or Swede, at 20 head. This move soon entailed the establishment of a poverty program to help poor Saamis. Even today, the State subsidizes the community with 75 % of the expenses incurred in providing many of the standard social benefits for poor Saamis.

Of course, the State could not afford to pay the price of the other alternative. This would have ruined the progress of settlement, especially *Swedish* settlement. Allowing Saami farmers and farmer-herders to have special usage rights of the land which Swedish settlers could not have and allowing Saamis both to herd *and* to farm in combination without restraint, while hindering Swedes from doing so, would have put the Swedish settlers in a severely handicapped position. It would have ruined the State's ideal of Saami herder and Swedish settler (with assimilated Saami settlers). The State, faced with decreasing herder-settler compatibility, might be increasingly willing to undermine the value of herding rights and the position of contract-reindeer ownership, but, if so, it was to be done on occupational grounds, through the assimilation of Saamis and for the benefit of the settled life and higher civilization, and not for the benefit of

¹ Elsa Laula, however, does not consider the problem of how to define "Saami". How can one in fact define it without recourse either to (1) blood or (2) occupation and culture? As already indicated, this problem of definition is both pragmatically and philosophically very difficult to resolve.

the Saamish people *per se*. The transition from Saamish herding was not simply to be one to privileged Saamish farming with Saamish legal and political dominance in the north.

That there would be such a transition to farming and an assimilation of Saamis via the farming profession was, of course, predetermined.

One of the constant conditions for the progress of higher civilization amongst each people is that these own *permanent* houses. Those folk groups which do not wish to leave the nomadic life must necessarily remain on a lower level of culture, step aside for the more civilized settled groups and finally, after a gradually ebbing life, die out. . . . The State, whose interest it must be to support a *higher* civilization, can do nothing other than with right aid agriculture. For the sake of this interest of the State, the Swedish Crown more than 300 years ago awarded itself sole ownership of property in the erstwhile wilderness areas of the north. (Protokoll 1884, p. 7.)

This statement, by Mr. Olivecrona, was made in the Swedish Supreme Court and was later incorporated into the grounds for a government bill. Mr. Olivecrona, here and elsewhere, was one of the main architects of herding law in the late 19th century. Along with H. A. Widmark and von Düben, Olivecrona was a firm advocate of the doctrine of social Darwinism which flourished at this time.

In effect, the State was saying both that nomadic peoples would die out and that the State should do all in its power to preserve the herding Saamis as nomads. One gets the distinct impression, therefore, that the nomadic herding rights granted these Saamis were accorded them on the understanding that in due time they would die out with the herders and leave the field clear for the advance of higher civilization. While one may indeed view the transition to farming, industry or some other form of expansion into the flexibility of the north as ultimately predetermined by either the Swedes or the Saamis themselves, this does not necessarily mean that such expansion heralds any ideologically higher form of culture—especially if undertaken with inadequate systemic awareness.

The State's ideology was thus more complex than the common phrase "A Saami should be a Saami" (see Ruong, SOU 1975:100, p. 424) would lead one to believe on the surface. What this phrase really meant was, "The herding Saami should be a true, intensive herder", this being practically considered to be the definition of a "real Saami". Yet the idea was not to keep all Saamis herding by any means. The State, at least, did not mean that Saami settlers should not be settlers. In fact, this was considered the course of higher evolution. The law actually forced Saamis in this direction by the very process of demanding total herding commitment from even the small, less well-to-do herders. In many ways, the same situation is being repeated today under the State's herd-management-rationalization program.

In effect, Saami herders were approved of and tolerated, with the conviction that they would not last, and Saami settlers were also approved of as long as they shared no special rights along with the herders to give

them an edge over Swedish settlers. What was not approved of was any type of transitional form between herding and farming (the combination). Motion 1908:163, quoted above, puts a finger on this disastrous legislation. The many poor Saami herders who could not derive adequate support from herding alone were not in a position to make the near-total change-over to farming at once; they needed considerable contract-reindeer-ownership rights. Moreover, as small herders, much of their support had surely come from their rights to hunt and fish on their grazing lands. A change to settled farming would sacrifice also these rights to a great extent. For a nomad, and a poor one at that, to make this transition immediately, as the State demanded, was quite impossible. Those who were caught in the middle by this legal system had no alternative but to join the "burdensome proletariat", as subjects of the State's poverty program. While the development of such a burdensome proletariat must be considered unfortunate, the question still remains whether the old possibilities of dealing with the spin-off, herding population were any better or maybe worse from the viewpoint of bare human survival. From the viewpoint of Saamish rights and Saamish cultural survival, however, the State's policies could only be viewed negatively by the Saamis. With policies such as these, the anticipated demise of Saami culture may well be a self-fulfilling prophecy. Without such premises and the laws based upon them, the future would look very different.

It is significant that § 1, dividing the Saamish category into herders and non-herders, was first proposed in 1917, while at the same time contract-reindeer-ownership rights were limited to 20 head per owner, whether Saami or Swede. Both of these elements of Prop. 1917:169 were designed to regulate consumers, their rate of consumption and their membership eligibility. In 1917, however, only the first part of this dual regulation was passed. It was thought that the limitation of contract-reindeer-ownership rights to 20 head per owner would achieve the desired goal of aiding the herders and thereby supporting Saamish culture (while promoting assimilation and equality between Saamish and Swedish settlers). Many settlers would have to cut down their herds, and the vacated grazing room could be filled with reindeer belonging to the active herders, for their benefit. Still, reindeer ownership in itself, though quantitatively limited, was allowed on occupational grounds alone, i.e. settlers were limited, while herders were not. There was, as yet, no legislation regulating *which* Saamis *could* be herders. The category distinction at this time remained simply that between all Saamis and all Swedes in the stipulation that only Saamis (any Saami) could become herders.

Naturally, this measure of reindeer-ownership limitation caused vociferous discontent among many interest groups. All settlers were united in their anger, for, despite the fact that Saamish and Swedish settlers were treated equally, all settlers with an economy based largely on contract-reindeer holdings were shattered. Those who, like Elsa Laula, demanded

Saamish rights rather than occupational rights, were infuriated. Moreover, the point was raised whether aiding the active herders for the sake of preserving a narrow concept of Saamish culture was not, even in this aspect, totally meaningless.

As noted, with a continually rising, subsistence minimum in reindeer and a narrowing of herding flexibility, herders had found it very difficult to remain only herders. Not only had herding alone always been just one of many traditional Saamish livelihoods, but, with the new opportunities provided by the colonial encounter, herding combined with farming had long been common. Thus, in some districts, the culture which the law claimed to be helping to preserve was not only just one part of a larger Saamish culture, but was a thing of the past even before the law was made. A critique of Prop. 1917:169 claims that:

The Swedish and Norwegian authorities have completely opposed opinions as to the principles which should be followed for legislation. While the Norwegian authorities try in every way to help the Saamis to accommodate to the new cultural situation as fast as possible, the Swedish authorities would with force fit the Saamis with a law which would compel a return to a cultural situation which (with regard to Västerbotten and Jämtland) goes close to one hundred years back in time. (M 1917:404, II K, p. 2.)

Later, when the State became involved in the formulation of a new Grazing Act, due to negotiations with Norway, it was decided to review the entire question again, the internal affairs as well as the external. In June 1919, a new Saami Committee was formed with instructions to suggest revisions of Saami-farmer relations. The Saami Committee's report, SOU 1923:51, however, was heavily criticized and a new commission was ordered, which eventually led to the introduction of Prop. 1928:43, formulated mainly by the District Governor (*landshövding*) Johan Widén. This bill re-introduced the definition of a Saami eligible for Saami (herding) rights suggested before in Prop. 1917:169. Proposition 1928:43 was accepted and resulted in the new Reindeer Grazing Act of 1928, which included intact in its first paragraph the definition of Saamis eligible for herding rights. Since then, it has remained a basic part of herding legislation.

Interestingly enough, the question as to whether settlers should keep to the 1917 contract-reindeer limit of 20 head per owner or be permitted to increase to 50 head per owner received far more attention than the issue of the definition of an eligible herding Saami. The only real opponent of the proposed definition seems to have been Mr. Asplund, who denounced the proposed § 1 in his motion, M 1928:279, I K. The points of his argument are various, ranging from injustices in the status of Saami women to considerations of compensation for encroachments. For the study of the growth of rational herding, however, a footnote in his motion is immediately riveting:

These (the contents of § 1) . . . are of extremely questionable type, devoted as they are to hastening greatly the concentration of reindeer property to a small minority

of owners. [The process of concentration thus to be accelerated, indeed,] is already occurring and has been ever since herding was oriented almost entirely toward meat production. [Such concentration, however,] only succeeds in excluding more and more of the less prosperous Saami families from their age-old right to equal shares in the collective herding areas, [and at the same time it creates] an increasingly burdensome, welfare-supported proletariat. (M 1928:279, I K.)

Elsewhere, in defense of his motion, Asplund is even more outspoken in his opposition to § 1. His speech in the Upper House of the Parliament is, I believe, one of the most important of herding documents. Here are some excerpts:

I wish to say further that I find it completely unmotivated to pass such regulations (§ 1) which bar any person of Saamish ancestry at all from the right to herd if he has the ability to obtain for himself a big enough reindeer herd. There is no other ownership right to the grazing land than an age-old tradition by which every Saami family has an equal right to support itself within its Lappby. There is no possibility here to engage in a division such as in the case of agriculture, where one can juggle so that each farmer gets his own for himself. Rather, the possibility to utilize the collective right to grazing lands depends on every man's ability to obtain for himself enough reindeer. (Asplund, 1928, I K Protokoll no. 32, p. 111.)

Asplund goes on to demonstrate that restrictions on Saami rights are not necessary in order to protect grazing, when it is possible simply to impose restrictions on the number of reindeer allowed in a grazing district—what today is known as a rational reindeer population. Such restrictions were already in existence, so that § 1, he claimed, was not only unjust, but also unnecessary. Asplund's opponent in the debate, Mr. Klefbeck, claimed that the restrictions in § 1 were accepted and desired by the Saamis themselves. To this, Asplund replied:

I would like to comment upon Mr. Klefbeck's statement that the Saamis' representatives have been heard. I am totally convinced that those heard have only been herders and maybe also, in the main, big herders. I do not think that anyone who stands to be injured by the law in this case has been heard. (Asplund, 1928, I K Protokoll no. 32, p. 112.)

Here is a major part of the explanation as to why relatively little fuss was made by the Saamis over the adoption of § 1 at the time. They were already divided by previous law, and the restrictions of § 1 were to have no effect until three generations after a herder and his descendants had given up the herding livelihood. Those currently herding did not feel threatened, and the bigger herders they were, the less threatened they felt and, in fact, the more they might have liked the idea which gave such obvious competitive advantage to big herders. Saami was set against Saami. Klefbeck (echoing *Lagutskottet* 1928:29, pp. 5–6) states:

It is a basic tenet of this proposed legislation that one wishes to limit to a certain extent the right of use of Saami privileges. This has been principally caused by the lack of grazing capacity and further by the convention with Norway . . . (Protokoll 1928, I K no. 32, p. 112.)

Asplund's reply to Klefbeck is classic, and in it one can note the origins of what developed into the modern rational-herding method.

Saamis do not eat reindeer moss, it is rather reindeer which do that. There are Saami families which have thousands of reindeer but can live on less. They may have 1000 reindeer when 200 is enough for a family to live on. So one must bear in mind that in this case one family has what five families could live on ... (Protokoll 1928, I K no. 32, p. 112.)

Thus, Asplund faces up to the Saamish double-bind of protecting the small herder while trying to uphold the traditional right to strive for and attain bigness (see p. 44). But, contrary to the modern rationalization program, which sacrifices the small herders and imposes no restrictions on the herd size of the big herder (as long as the total Saameby reindeer population remains within the rational limit), Asplund seems to advocate the other tack, that is, to have a reindeer distribution which allows herders to have as many head as they might need, but no more under crowded conditions. In this way, more small herders can remain in the field. Although Asplund was a champion of Saamish rights against unjust divisions, there were limits to his stance. Beyond a certain point, he too saw the need for dividing the Saamis into different legal categories. This point, which to him at that time was hypothetical, has now been reached, and the program of rationalization today conjures forth the long-forgotten words of Asplund:

I find therefore that, so long as the grazing lands allow and can support a total herd such that, when equally divided amongst the herders in a Lappby, each part is big enough to supply the subsistence minimum — then there is no reason to make restrictions on rights.

... if the number of herders grows so large that the supportable number of reindeer in the Lappby, when divided equally, does not allow each herder a subsistence minimum, then the time has come to make restrictions, but not before. (Protokoll 1928, I K no. 32, pp. 111–12.)

Asplund sees restrictions as necessary when the proportion of reindeer to herders drops below the subsistence minimum or the number of reindeer needed per family for a decent living. Interestingly enough, he forecasts trouble from a growth in the number of herders, whereas in fact today's problems result from a rise in the subsistence minimum instead. There has actually been a great *decrease* in the number of herders and still there are too many for all to have a herd size above the subsistence minimum.

The subsistence minimum is a relation subject to innumerable factors, for example, inflation, meat prices, international politics, national politics, taxes, etc. What this means is that the system of law and the divisions of Saamis into different categories with different kinds of rights is still today not simply a framework to stabilize the current situation, but also a monolithic force compelling Saamis in ever-increasing numbers to

abandon their traditional life-style. The law in this case is more than a code, it is an instrument. In many cases, we would regard it as *good* that a system of laws had a progressive effect (rather than simply maintaining the *status quo*). The question is whether the goal of development is a desirable or an undesirable one. But more on this subject later after the discussion of rationalization and § 9 of the Herding Act of 1971. Asp-lund's motion was defeated.

Chapter 18

Methods of Herd-Management Rationalization

As previously noted, rationality in resource management for the Swedish State may conflict in many respects with rationality for its various sub-systems. Moreover, during the long course of colonization and exploitation of the north, industries with a variety of technologies have come and gone, so that rationality for the Swedish State has undergone a very changeable development with regard to specific content. In early times, the compatibility policy between herding and agriculture was most rational. Later, promotion of the interests of agriculture over the interests of herding became rational. Still later, it became State policy to “rationalize away” (an idiomatic expression used by all northern Scandinavians) most of the agriculture in the north. Rationality became largely a matter of developing the timber industry and the hydro-electric-power industry. The term “rational herding” has been used with a wide variety of meanings, ranging from a strict reduction of extensive “big groups” to form smaller, more intensive, herding entities, on the one hand, to a formation of bigger herding co-operatives from such smaller groups, on the other. Despite these apparent, radically shifting usages, the term “rational” in each case is constant in its reference to whatever is most economically profitable for the State (or whatever sub-system is given temporary priority). In this chapter, I shall be concerned with establishing the basic tenets of modern, rational-herd-management policy, as these tenets relate to the maximization of profitability *for the herding industry*.

The change in attitude

At the risk of some reiteration, I shall outline briefly here the major steps on the way to the development of rational goals specifically for the herding industry. In Part I, the expanding, extensive development in herding has been illustrated. Due to many changing determinants, not least Swedish laws which paved the way for Village grazing collectivity, extensivity became for many herders the most rational form of manage-

ment. This herding rationality (in many respects, the best solution in an overcrowded situation rather than a herding form favored by the herders) came into direct conflict with State herding ideals.

This extensive development, hastened by northern-Saami relocation and rapid herd-size increase, soon led to increased conflict with the farming population. Conflicts were already inflamed by the latter part of the 1800s, due to the incessant expansion of agriculture. In Härjedalen, angry settlers took to shooting the Saamis' reindeer. The Agriculture Line was drawn to separate primary herding domains from lands with strong agricultural priorities, but this line proved ineffectual against the spread of agriculture. The Saami administration changed from an organization occupied with tax collection to one engaged in mediation between herders and farmers.

As a general rule, extensivity allows for, creates or is caused by a larger collectivity of work force than intensive herding. The change-over from the *sita* herding unit to the collective Village unit is one of the major developments of modern herding. Especially during the bare-ground period, *sita* divisions have given way to the so-called "big group" divisions. A "big group" is simply a large, collective-herding organization which can encompass a number of *sitas* and which has been granted collective rights to certain Village grazing areas. A Village may have one or a number of big groups.

These changes of herding-work-force organization, reflecting the extensive trend, began as a natural result of the constellation of herding determinants—grazing/herd size, external market, cash economy, etc. It was only later that collectivization and modernization of herding was (consciously) favored by law. In fact, the law resisted these developments for a long time (see p. 177). According to the legal attitude in the first half of the present century, rational herding (proper herding) could only mean rather intensive herding (small herds under tight control).

Indeed, there was justification for this view. What one might call "over-extensive" herding, where the reindeer often go unmarked, suffer great losses from predation through lack of guarding, and stray to distant districts beyond the herder's profitable control—such herding can certainly be less rational than the old, intensive method. As Tomasson (1918) so painstakingly points out, however, this extensivity is by no means necessarily in accord with the herders' own ideals. It is largely beyond their control.

In order to restore proper control, laws were made stipulating the number of hands required for herds of different sizes. In 1944, limitations were imposed on the maximum size of a herd owned by a herder. It is interesting to note that this limitation was made without regard to the subsistence minimum, as Asplund had suggested earlier, but rather with regard to the facilitation of proper guarding and thereby the diminution of conflicts with farmers. Rules were made concerning guarding and

migration practices that were remarkable for their intensive spirit, even in the mid 1900s, when the extensive revolution was already a well-established fact (see, for example, *Byordningar för Lappbyarna i Norrbottens Södra Distrikt*, 1946). As noted, in some cases, regulations designed to inhibit over-extensivity (such as enforced slaughters) only aggravated the problem. Herders might rather let their reindeer scatter than bring them together for enforced slaughter.

All that might lure the herder from his hard life was considered unhealthy for him. "A Saami should be a Saami" was a common dictum of the times (for a most pointed critique of this attitude, see Karin Stenberg's *Dat Läh Mijen Situd, En vädjan till Svenska Nationen från Samefolket*, 1920). Long debates were held on such questions as whether Saamis should be allowed to live in houses with wood stoves or whether herders should be permitted to engage in other sources of livelihood, such as farming. These things were held to make the herder "soft" and his herding sloppy.

Due to settled housing, the already low proportion of herders to reindeer numbers has become even less, and the guarding of the herds has therefore become all the more dissatisfying The lack of adequate guarding has in some cases resulted in the individual herds' constant mixing into giant herds, which cannot be objects of any real guarding. (SOU 1942:41, p. 19.)

From the perspective of herding's *rational* exploitation and future maintenance, there is a certain ground for the opinion that Saamis should be forbidden to have cabins. One can say that it is of greatest importance that the Saamis avoid all things in their lives which tend to decrease their mobility and interest in following the herd in its movements. (SOU 1942:41, p. 28; my italics.)

After the catastrophic decline in herd numbers by the mid 1930s, followed by the decline of the farming industry after World War II, agitation for such intensive measures in herding and the preservation of under-development for the herders was relaxed on the State's part. The remaining farmers no longer formed such a powerful lobby. However, with the spiraling decrease of herding flexibility due to increasing land encroachments, desires for higher living standards (and requirements) and the understandable wish of the would-be, spin-off, herding population to find any means of clinging to their livelihood, it was only a matter of time before the rationalization of herding, as we know it today, with its emphasis on the maximization of meat production and collective work organization, *had* to be developed in the attempt to satisfy the intensified and competing demands on the reindeer resource.

In time, the Saamis' own growing political organizations could bring pressure to bear for the necessary re-organization of the Village, for reindeer research and for financial aid for the construction of modern slaughter facilities. Moreover, as more and more herders became welfare cases in an increasingly socialistic State, it became increasingly to the State's own advantage to support such rationalization motives.

It took more than half a century of turmoil and conflict between natural pressures and legal pressures before the law came to acknowledge that collectivization of work units, big herds and the use of modern conveniences do not necessarily imply poor, non-rational herding. A balanced extensivity could be more rational than the old intensivity. Along with these changes, the mediating and policing roles of the Saami administration could be relaxed. Herding law and administration entered a new phase, devoted to the stimulation of the most economically profitable form of herding, the new, rational, herd management.

In 1956, the head of the Department of Agriculture instigated an investigation concerning the utilization and marketing of reindeer products, to be conducted by six appointed experts, including two herders. In 1960, this group presented its report (*Renutredningen*). This report represents a milestone in the development of herding management in Sweden. Almost all the rational methods in both herding and husbandry which have evolved or been legislated since then are discussed in *Renutredningen*. In many respects, it is still ahead of its time. In only about a decade, the Swedish State and its herding administration made a complete about-face. With agricultural-protection concerns no longer so actual, the administration could turn its attention more fully to the condition of the herders themselves. What they found was far from pleasing. Large numbers of herding families lived in shocking conditions and were forced by the poor profitability of their herding into dependence on State welfare. As previously noted, Haraldson (1962) compares Saami mortality statistics in the northernmost districts with those of the people in under-developed nations. The modernization of herding was sorely needed, and *Renutredningen* reported that considerable gains could be made by the re-organization of the work force, the application of proper business principles and the modernization of technical establishments (cabins, slaughterhouses, etc.).

A flurry of investigations followed. A new herding epoch, demanding a new law, was about to begin. In 1958, a report concerning reindeer research was initiated and was completed in 1960. The Norrbotten County Administration presented an official study of economic development for the Torne valley area (SOU 1960:37) which dealt with problems concerning reindeer-herding. In 1962, a bill was brought before the Parliament (Prop. 1962:68) which took up many of the suggestions raised in these previous reports, especially *Renutredningen*. The change in attitude is quite clear, as is demonstrated in the following quote from this bill:

Concerning direct dealings with reindeer-management questions, the Saami administration should be placed under the National Board of Agriculture (*lantbruksstyrelsen*). Otherwise it should maintain its position within the provincial organization. The most essential means in the work to improve profitability within reindeer management is to give advice and instruction concerning, amongst other things, the problems of operational and economic organization and production

technology. An intensification of activity in these respects will demand somewhat changed directives for the work of the Saami administration's personnel. The job titles of Saami sheriff, Saami sheriff assistant and Saami inspector should therefore be changed to the titles of consultant, assistant and instructor respectively. It should be a pleasing duty for the Board to organize courses as soon as possible in business economics and production technique for the consultants first of all and thereafter for the assistants and instructors. (Prop. 1962:68, p. 60.)

Although this change of attitude was naturally welcomed by the herders, it could, and still does, become somewhat negative if taken to extremes. There is often a tendency to value the education obtained from a school course higher than that obtained from cultural tradition and by actual experience. Good reindeer-herding cannot be taught in the classroom, although there is admittedly much of benefit to learn there too. Many herders resent the idea of finding their culture in a classroom, from which students can come with the most ridiculous suggestions. It is the attempt of one culture to codify the knowledge of another in its own idioms. While both might learn from each other, there is often marked insensitivity to proper balance in the matter of who is speaking and who is listening. The following passage from the same bill strikes a humorous chord in herders.

As *Renutredningen* points out, the costs of guarding can be lowered even more through better access to well-trained, reindeer-herding dogs. Currently, through the efforts of the Swedish Kennel Club, the previously decimated breed of dog most suited for herding is increasing. The Kennel Club has declared itself prepared to organize courses in dog-training for reindeer-herders. (Prop. 1962:68, p. 61.)

In 1963, the SSR petitioned the government for further action toward a new Herding Act. In 1964, the head of the Department of Agriculture called for a new report by a group of appointed experts. This report, *The Reindeer Industry in Sweden* (SOU 1968:16), was to be completed in 1968. Meanwhile, in 1966, another government investigation, *The Reindeer Grazing Lands* (SOU 1966:12), was completed.¹

Further motivations for a new Herding Act, however, had been forced upon the attention of the State. The demand for rationalization, to improve living standards for herders, was joined by another major demand for legal revision, for the clarification and codification of Saamish (herding) rights in the face of massive modern encroachment. It is significant that these two issues were to be combined in the genesis of the Herding Act of 1971, for they are inextricably linked. Both concern matters of rationalization, the one with supposedly the herders' interests at its center and the other resulting from "outside" (usually State) interests at its center,

¹ Yet another report will soon be added to the list of government investigations of the reindeer-herding economy in order to further rationalization goals. After prompting by the SSR, Mr. Jan-Erik Wikström, the Minister of Education, announced in 1979 that a new investigation was to be made concerning the attainment of decent incomes for herders (*Utdredning om inkomst mål*). See *Rennäringsnytt*, 1979, no. 10, p. 4.

generating the desire for measures to protect herding (according to the isolationist-interactionist dilemma). Obviously, the success or failure of herding law to protect herders against encroachments in their grazing territory must come to have a profoundly dominant and determinative effect on the ability to provide any given number of herders with an adequate living standard (the more so, the more grazing flexibility is restricted).

On 24 January 1966, the Parliamentary Commissioner for the Judiciary and the Civil Administration (*justitieombudsman*) in a special declaration to the Crown discussed certain anachronistic and faulty aspects of the current Reindeer Grazing Act of 1928. His declaration concerned the inability of this Act to afford the herders the adequate protection against encroachments that was intended. No one had foreseen the massive onslaught and the extent of the damage caused by new and conflicting industries in the grazing lands. In the past, the greatest protection for the grazing lands in the high mountains had been the fact of their unfitness for agriculture. Tourism, military installations, and hydro-electric-power projects, however, are less inhibited. The rapid development of modern, timber-harvesting technology has occasioned the depletion of lowland winter grazing, which in most Saamebys is the grazing "bottleneck" in the yearly cycle. (For a broader discussion of the effects of different kinds of encroachment, I refer the reader to Chapter 15.) The ombudsman's declaration specifies certain injustices with regard to encroachments upon Kaalasvouma and Rautasvouma Lappbys but comes to the following general conclusions:

Since the law's implementation (Act of 1928), the conditions of the community have changed radically. The rapid social, economic and technological development which has characterized the community, especially after the Second World War, has naturally not been able to avoid consequences also with regard to the Saamis' conditions. As has been said and illustrated with some examples in the complaints before the court, an exploitation of the mountain districts has begun which no one had any idea could occur when the law was passed. Industries expand or are started, new lines of communication are broken through previously untouched land, houses and summer cabins expand, tourism moves more and more toward the mountains, etc. From this development—which must be considered to be increasing in tempo—the questions concerning the Saamis' right, as far as is possible, to maintain their traditional livelihood, which was regulated in the Act of 1928, become actual in a completely new way than earlier. The question is therefore raised whether this Act can nowadays satisfy in a suitable manner the interests and rights of the Saamis. (*Justitieombudsmannens ämbetsberättelser* 1967, 2 saml., p. 415.)

For a more complete discussion of the debate on the Saamis' legal position with regard to expanding encroachment, see Svensson (1973). This issue of Saamish rights combined with the issue of the economic revitalization of herding to generate the official report entitled *The Reindeer Industry in Sweden* (SOU 1968:16). Later that same year, this report was reviewed and criticized by the SSR at its annual meeting. The govern-

ment bill for a new Herding Act (Prop. 1971:51) was presented in February 1971. All official statements and motions made to the government concerning this bill were dealt with in the Agricultural Committee's Report (JoU 1971:37). The Herding Act of 1971 (SFS 1971:437), based on Prop. 1971:51, became law in June 1971.

In the following pages, which are devoted to the explanation of certain basic policies suggested, stimulated or enforced for the improvement of herd-management productivity, I have followed the standard practice by organizing the material under two headings, "Structural rationalization" and "Production rationalization". The first heading refers to herd size and work force, viz. to redesigning the general structure of the entire enterprise. Not only are considerations of quantity important here, to arrange the optimally sized herd and the labor force for it, but structural rationalization is also concerned with the quality or type of organization. What, for example, is the most efficient and fair *form* of work organization? The second heading, "Production rationalization", refers to the actual working methods and husbandry decisions to be made within this operational form to win the maximal return from the resources. The section concerned with production rationalization will be focused upon matters of slaughter policy, herd composition and selective breeding.

Structural rationalization

Reindeer and herder proportions

Obviously, any deliberations upon optimal herd sizes or work groups will be contingent upon the overall resource capacities in any area designated as a herding entity. The quantity and quality of the grazing and its seasonal distribution within a given Village will determine what is called the rational reindeer population—the largest reindeer population in excess of which the maximum, annual, grazing regeneration will be forfeited. All manner of herd-size considerations, from the aspects of proper intensive-extensive balance in herding to husbandry duties and work-force requirements, must be suited to a Village's rational reindeer population. Hence, the estimation of this population for any Village is vitally important, and the herding authorities have carried out painstaking, grazing-land inspections in the effort to set a proper limit applicable over a long period of time. Of course, re-evaluations are required as a consequence of any major encroachment on grazing land and, while one may posit a naturally determined, "true", rational, reindeer-population figure for a Village, it is important to realize that the approximations calculated by the authorities may contain a large degree of "error". Nonetheless, it is the figure derived from human judgment which must be obeyed, so that Nature will not have to correct "errors" in its own harsh way.

As long as the figure given by the authorities is below the "true" value,

all is well, but, of course, as this rational reindeer-population figure determines the supportive capacity for herders in a Village—the number of herders or the living standard of any given number of herders—it is only natural, only *rational*, to approximate to the “true” value as closely as possible. Besides, thorough grazing inventories, interviews with herders and past experience are essential to the rational, reindeer-population calculation (SOU 1966:12, pp. 14 ff.).

Such calculations were made in the early years of the present century in conjunction with the grazing-land investigations undertaken to determine Norwegian-Swedish grazing controls. Each Village came to have its rational reindeer population specified in its Village Regulations (*Byordning*). Today, infra-red, aerial photography is employed to map grazing characteristics. Research has provided data on reindeer calorie requirements per day, as well as on the calorie contents of different kinds of grazing. As a result, rational reindeer populations can be calculated, taking into consideration seasonal grazing bottlenecks and regenerative requirements. Nonetheless, figures obtained in this way alone, while helpful in determining grazing-land damage or relative seasonal availability, are, despite modern science, as yet only crude approximations and should never be allowed to override results based on long herding experience in a given zone.

As demonstrated in the historical material, the land areas designated as herding entities, the Villages, have had their borders formed by a wide range of different policies, and in recent times these borders have remained remarkably stable. Rational, reindeer-population figures were fixed later for the already determined Village lands; the Village territories themselves were not drawn with an eye to meeting the prerequisites of optimal herd sizes. Note that in this discussion what I refer to as the rational reindeer population is not to be confused with the optimal herd size. The former is based upon the total Village grazing capacity (and its distribution), while the latter refers to that generally smaller number of reindeer that is best suited for practical herding work and optimal profitability. The optimal herd size may be the same for many Villages with widely varying, rational, reindeer populations. Of course, since optimal herd size reflects strongly the authorities' considerations for profitability, this figure is also referred to in some reports as “rational herd size” and thus causes confusion if one is not careful to observe the context. “Rational herd size” can be used to mean “rational reindeer population”. Again, the context is important and, in the present discussion, in which the two concepts are related, I shall take care to maintain clear distinctions.

If X represents the optimal herd size for most efficient control and profitability, then some Villages may have a total, rational, reindeer population of X , $2X$ or $3X$. Others, however, may have a rational reindeer population of $2\frac{1}{2}X$ or, even worse, according to the aims of the author-

ities, only $\frac{1}{2}X$. In these situations, optimal herd-size divisions cannot be fully realized within the confines of the given Village and efficiency will suffer. On the basis of arguments such as these, the State asserts its right to split, amalgamate or otherwise partition the lands of the Villages into new herding entities (see RNL, §7). Such measures would disrupt a great many other relations and lead to serious herding difficulties, but in principle they are attractive to herding authorities (see, for example, *Handlingsprogram Rennäring*, p. 9) and may yet be actualized, should conditions ever prove propitious.

Although there are approximately 8,000–10,000 Saamis who are eligible to herd reindeer in Sweden, according to §1 of the Herding Act of 1971, there are today only about 2,300 people involved in and directly dependent upon herding. Their numbers are decreasing steadily:

Year	No. of people
1900	3,900
1930	2,800
1945	2,700
1965	2,500
1972	2,300

(*Lantbruksstyrelsen, Meddelanden* 1976:3, p. 11)

By the year 2000, it is estimated that the number will be 1,500. The number of active herders, that is, the number of men who actively do the job of herding, as opposed to dependent family members, is even lower. The number of active herders has decreased from 1,300 in 1930 to only about 900 in 1976. The decline in the numbers of people bound to the herding livelihood has led to a great discrepancy between the number of herding men and women. Men between the ages of 35 and 50 are twice as numerous as women of the same age. There are far more than twice as many unmarried men involved in herding as there are unmarried women of the same age. These and other statistics concerning the demographic changes among the Saami herders can be found in the most recent and thorough work on the subject by H. Johansson (1974) (cf. SOU 1975:99, pp. 77–89).

The reindeer population, although always highly variable, shows no permanent declining trend. It is generally agreed that the actual reindeer-population figures are considerably higher than the official count shows, but the official table can still be useful in making proportionate comparisons between years:

Year	Reindeer	Year	Reindeer
1931	281,000	1961	210,000
1940	156,000	1965	188,000
1951	218,000	1970	166,000
1955	250,000	1975	170,000

(*Lant. Med.* 1976:3, p. 12)

In devising a program relating the optimal herd size to the minimum work force required, the herding authorities rely upon a relatively stable reindeer population. A stable reindeer population is also vital if the authorities are to make meaningful calculations as to the possible number of active herders who can be supported at a certain living standard. To keep a rational herd-management program functioning smoothly, it is necessary to even out the positive "mountains" of reindeer population with their negative "valleys" in order to establish the rational steady state. Advances in reindeer-disease research and the creation of artificial fodder aid this effort.

A government report (Länsstyrelsen i Norrbottens län 1974, *Meddelande no. 10, Översiktsplanering*, p. 29) claims that the percentage of active herders more or less fully employed in herding is only 63%. This reflects a large degree of under-employment and, when taken together with the overall decrease in the number of active herders, indicates an extremely reduced figure for man-hours spent herding reindeer. Obviously, any rational policy for the herding industry would be aimed at cutting out all superfluous work and reducing the man-hours required for herding to a minimum. The important consideration then becomes, how do the demands of work investment relate to the demands for a decent living standard? If a re-structuring of the herding-work methods saves money and time, does it save enough to support the current herding population? Ideally, to what extent should the optimal number of herders for the optimal-size herd be employed? Can the optimal-size herd support more than the optimal number of herders, considered in a work-efficiency perspective? These are difficult questions, which are far from being resolved.

Modern rational herding (as opposed to husbandry) involves mainly a re-organization of the herding unit, so that labor is not wasted, i.e. costs are reduced. If every reindeer owner must be present for a co-operative herding task, more herders than necessary will be on the job. To stop this waste, a wage system has been proposed, so that reindeer owners can rotate on the job with only the minimal number of herders present at any one time. With the aid of new machines and communication facilities, the number of herders necessary for a herding task could be greatly reduced.

The problems of over-extensivity for rationality in herding are obvious and have been indicated. Certain intensive aspects are equally faulty in the perspective of maximal herding gains. The private or familial, social identity of land, which, as was shown, has very long historical roots, often stands in the way of the most profitable, collective-land utilization. Similarly, the size of the herding unit, with respect to both herd size and work force, if structured only on family bonds or small-scale partnerships, might not be rational at all with respect to the man-hours spent herding per amount of reindeer meat produced. Man-hours could be greatly reduced and costs cut if herding were organized into larger collective enterprises.

Data from southern Norway and from the Soviet Union, where the question of best work-size entity has been considered, show that the optimal herd-size entity is about 3000 animals. For the guarding of the herd, 6–8 men are needed all the year round . . .

Swedish herding in this perspective could be divided into about 80 herds, for whose care 480–640 men would be required. Currently there are about 200 herds in the winter and 60 in the summer, cared for by about 1000 men. (*Renutredningen*, 1960, p. 61.)¹

Since the herding-entity size with the current herding methods is to a high degree dependent upon the division of reindeer according to different owners, there are in principle two different ways to increase herding-entity size: either one changes the structure of ownership, so that the work entities will regularly compose suitable units or else one through a change in herding method breaks or at least weakens the connection between reindeer-owner possession and herding entity. (SOU 1968:16, p. 55.)

The Swedish State has chosen the second of these two alternatives. The most recent and now effective Herding Act of 1971 re-organizes the Lappby into the Saameby and retains the old membership and territorial bounds but imposes a (hybrid) economic-co-operative structure, in which the Village (now the Saameby) as a *collective* is given legal power within certain limits to control herd size and work organization for the common good. According to the Herding Act of 1971 (§ 9), the goal of the Saameby is to conduct herding in the best way for its *collective* membership. In this way, the greatest total profitability can be achieved.

Herders have always based their herding form to a great extent on considerations of economic rationality. But, whereas, before, such considerations were the domain of each individual herder or husbandman to ponder for his own best advantage, the new rational herding adumbrated in the 1960s and made explicit in the 1970s tries to place a growing number of such considerations on the collective level. *The new Herding Act of 1971 decrees the collectivization of herding-work method and organization, while retaining the old form of private ownership of reindeer.* Many of the obstacles to increased rationalization of herding methods stem directly from the frequent conflict of interests which may occur in a clash between private ownership and co-operative organization.

The Saamebys of today are called economic collectives (though, as we shall see, they differ from the ordinary economic collective in important aspects); its members elect a headman, deputy headman, treasurer and other minor officials to direct the affairs of the Saameby and to co-ordinate herding in the Saameby territory. All herders must belong to a Saameby, according to §11 of the Herding Act of 1971 (abbreviated RNL).

¹ Note that 3000 head divided amongst 6–8 herders will allow, on the average, each herder a herd of 500–375 head—figures which *happen* to suit the *current* demands of the subsistence minimum. But, should the subsistence minimum continue to rise (run away), the number of herders needed to look after a herd of a certain size will exceed the number that can subsist on it. The current compatibility is far from guaranteed.

Any income which accrues to the collective, such as that obtained from the auctioning of "whole-ears" (unmarked calves) or compensation for damage done by predators or industrial encroachment is to be placed in the Saameby's treasury and used for the common good.

The old Saami administration was totally overhauled. The office of Saami sheriff (*Lappfogde*) was abolished and the Saameby in turn gained far more autonomy, largely thanks to the efforts of the SSR. Under the RNL, reindeer management is placed under the Department of Agriculture and on the central level delegated to the National Board of Agriculture (*Lantbruksstyrelsen*). The National Board of Agriculture has a special reindeer-herding committee, which includes Saamish representation. On the regional level, herding concerns are handled by the County Agricultural Boards (*Lantbruksnämnderna*), one for each of the three provinces of Norrbotten, Västerbotten and Jämtland (see Svonni, 1974).

Wage system and herding fee

While the Saameby has been granted a certain autonomy, the tremendous shake-up occasioned by the RNL, as regards the re-direction of goals and the re-distribution of power, has caused new discrepancies between what the Saameby *can* do and what it actually does do. The underlying social network regulating herder interactions, though influenced by law, changes at its own pace. According to law, if the majority of Saameby members so wish, no special consideration need be given to a family's identity with a specific grazing zone. As the herders themselves have been given the power to make such decisions, however, in many cases they are far more inclined to abide by their own traditions than to push for alterations in keeping with "the economically best way" for the Saameby as a whole. Similarly, the Village headmen, who before had the task of mediating in conflicts between herders or between herders and farmers and answering to the authorities, are now advised also to act as work leaders or foremen, assigning and co-ordinating the herders' tasks. In many Saamebys, a headman who took this assignment seriously would be ridiculed and ignored.

Those who conclude, therefore, that it is a conservative adherence to old traditions which inhibits the progress of rationality are partially correct. This is what culture is all about. Cultural maintenance may indeed be "traded" for economic efficiency when flexibility allows. What they often fail to realize, however, is that a change for the Saameby's "common good" may often be directly opposed to the best interests of most of its individual members. This appears to be a contradiction in terms, that is, even if there is some opposition by some herders to a certain policy, the Saameby's collective vote will advance the interests of the majority, and thus the common good will prevail. But the Saameby's voting power is distributed *in proportion to herd size* on many vital issues, and hence the

majority vote may not necessarily represent the majority of herders. Here again, a very difficult ethical dilemma is to be found.

Obviously, a herder with 500 head should have more to say about herding policy than a herder with only 10 head. But should the herder with twice the subsistence minimum in reindeer be allowed to squeeze out active and responsible herders with half that number? If forced from the field, the small herder may stand to lose not only his herding, hunting and fishing livelihood, but also his cultural milieu. As before, some sort of balance must be sought between two poles—in this case, the rights a herder is entitled to, according to his responsibility for and ownership of numbers of reindeer, as opposed to the rights each herder has as a herder and as a Saami, regardless of herd size. As will be discussed below (p. 386), the RNL has applied counter-checks to big-herder predominance. Thus far, the degree of flexibility has been enough to allow for compatibility between big herders and small herders in most Saamebys, so that, for the time being, the dilemma shows only the tips of its horns.

An effort to deal with part of this dilemma will be considered below in the RNL design for a Saameby wage system. The wage system was designed in an effort to bring work investment (and/or monetary investment)¹ in collective herding tasks into line with herd size. If big herders have more to say in herding affairs, they should also have more work to do (or to pay for). Yet, ironically, this wage system, which was designed to streamline the work force and to help reimburse small herders for their disproportionately large, work investment for the common good, can become a tool in the hands of the big herders to squeeze out the small.

In order to grasp the Saameby's degree of rationalization and the reasons behind those aspects of rationalization it has sought to favor, as opposed to those it has ignored, one must investigate each issue from the vantage point of each specific Saameby. Certain generalizations, however, become apparent.

The number of herders needed for the job has decreased steadily with new, extensive-herding possibilities, communications and mechanization. In many Saamebys today, cash conversions, predation and the catastrophic winters since the 1930s have caused a decrease in reindeer population, so that individual herders on the whole own fewer reindeer. Therefore, the building of a herd of 3000 head will demand the co-operation of more herders than before. The common result of such a situation, as has been noted, is a considerable superfluity of labor and numerous problems revolving around the fair distribution of work. The suggestion that herds should be re-organized compulsorily into units of

¹ Just recently, in 1980, this dilemma has revealed itself more fully in what might be termed "the Kitok Affair", which has spotlighted the voting rights of Saameby members. A point of vital controversy concerns whether big-herder voting dominance is due to the fact that the big herder has more reindeer or because he pays more money to the Saameby in herding fees (see p. 387).

3000 head each was not adopted and would have presented difficult legal problems under the system of private reindeer ownership. The trend toward big-group formation, however, was independent of legal coercion and previously operated in spite of it. Extensive herding with big groups was already a reality, although far from resulting in the rational ideal of only 80 herds in all of Sweden. These big groups were often plagued by problems of work distribution. Solving this problem would not only contribute to the rationalization of the existing big groups but might induce the formation of yet more and larger entities.

Rather than simply ignore old ownership rights and re-distribute reindeer according to rational principles, an alternative introduced with success amongst the herding peoples of the Soviet Union, the Swedish government has chosen the alternative (its only possible choice without a total restructuring of society on a par with the Russian Revolution) of *weakening the relation between work unit and ownership unit* in an attempt to merge many small owners in a larger collective or, where such a collective already existed to some extent, to unite its work force around common, rational-herding ideals. The same effort has been made with regard to husbandry. As noted, utilization of Village grazing territory was placed under collective, Village regulation (although the collective decision may be to abide by a less rational, traditional, land-utilization policy, despite the admonition in § 9 of the RNL). Similarly, regulations were made to try to bring the actual methods of both herding and husbandry under rational ideals, so that private ownership would not hamper the realization of collective possibilities.

If, for example, herds were divided in the winter separations according to numbers alone, without regard to reindeer ownership, the work would be much simpler. Only a few men would be required for the job. In many Saamebys, however, this suggestion is shunned, for each herder argues, with much justification, that he cannot trust *his* reindeer to the care of another all the winter. It is a difficult problem. The wage system with work rotation constitutes a major innovation in herding development on the Saameby level. As in the decision on land utilization, the Saameby by its collective vote is free to choose whether it will adopt the wage system or not. But, if it does, the RNL dictates certain rules for its implementation. These rules form a major element of the RNL's profitability campaign.

While profitability has been increased through other efforts, especially through mechanization and market developments, it has gained little from the wage system. Largely due to great government confusion as to its mode of taxation, the wage system for reindeer-herding has, on the whole, proven an enormous failure. Most Saamebys have chosen to avoid it so far. The taxation confusion has recently been resolved (see p. 376), and it appears now that the wage system may yet prove successful. I believe that its adoption by the Saamebys will *have* to increase in the future, with the diminishing flexibility of herding. It will, one hopes, emerge as a method

of cutting costs for all herders rather than as a weapon wielded by the big herder against the small. This dual nature of the wage system plants it firmly in the living standard–culture dilemma discussed earlier (see p. 293) and, with the subsistence minimum in reindeer steadily moving upwards, any ethical stance as to whom the wage system should bring most benefit to must also face this dilemma. In any case, the implementation of the wage system will surely spread and, although Tuorpon has stubbornly resisted it, I think it essential to discuss it, precisely because of this resistance.

Regulations giving the Saameby power to institute a wage system were devised for two main purposes: (1) to cut costs by eliminating unnecessary labor and (2) to even out the inequalities in the investment of work required of the small herder as a member of a collective, in comparison to that invested by the bigger herder.

The specifics of how the wage system can work under various circumstances and how it is linked to the larger economic structure of the Saameby will be discussed in Chapter 19. Suffice it to say here that Swedish society presented many types of economic organization (*ekonomisk förening, samhällighet, samarbetslag*) as models upon which to structure the Saameby. Within reindeer-herding itself, various models were already functioning. Finland, for example, had the *paliskunta* organization for its herders and, even before the new RNL, certain Villages in Sweden, notably in Arvidsjaur, had successfully instituted a wage system in collectivized herding.

The inequalities of work division have always constituted one of extensivity's main stumbling blocks, both before and after government acceptance and stimulation of larger herding collectives. The wage system was itself to give birth to many problems, but, as with the whole revision of rationalization policy, one must recognize that it was to a large degree a response to existing problems, as well as a stimulus towards new goals.

It could happen that, under the extensive herding form, with large collective herds extending beyond simple family or *sita* bounds, certain herders took advantage of the situation and refrained from participating in the work, knowing that their reindeer would be brought to the corral along with all the others. A small herder might under certain circumstances be forced to work far more than was justifiable by his proportion of the collective herd. Because of the greater security of the big herder against predators or because of the relative ease with which he could obtain the necessary slaughter animals at different corral occasions in the winter, he may be less inclined to work on the establishment of winter intensivity, guarding and gathering. The small herder, however, *must* try to round up his herd and, in so doing, he is forced to work for the big herder's benefit as well. Other small herders who rely almost entirely on outside income sources may be prone to disregard collective-herding chores altogether. After all, with modern extensive methods, only a small

fraction of the herders will be required on the job at any one time. The literature abounds with accounts of the inequalities of work distribution (Hedbäck, 1928, SOU 1968:16, *Renutredningen* 1960, Ruong, 1964, etc.).

With the transition to collective herding, relations between the rich and the poor have become a difficult problem. The work burden does not fall in proportion to ownership of reindeer for the different herders . . . one solves the problem in some cases by creating herding cooperatives on the Finnish model (the *paliskunta* organization), by which the cooperative's herders pay a herding fee per reindeer which the cooperative then pays out as a daily wage to the active herders. (Ruong, 1964:61.)

Ideally, the plan is that a herding fee per reindeer will be demanded of the herders, which will then be used to pay the active herders' wages. According to this plan, big herders will be made to pay for the work done for them by the small herders. For the Saameby, however, this is an over-simplification which can lead to much confusion.

As will be more fully discussed elsewhere, the daily wage and the herding fee are far from being *necessarily* linked (see p. 365). According to the RNL, a herding fee must be and can be instituted only when the Saameby's annual accounts show a deficit. In that case, a fee per reindeer must be taken from each herder to balance the books, but no more. If, somehow, the Saameby can manage to pay its herders a wage without creating a deficit in the budget, then a herding fee is unnecessary. A herding fee may be demanded if there is a budgetary deficit without any wage system. Moreover, there is nothing to stop a Saameby from voting unnecessarily large expenditures, in order to create a budget deficit and to force the institution of a herding fee. As we shall see, such manipulations constitute powerful political weapons.

It is worth noting that the RNL's attempt to protect the small herder with a wage system will not succeed if a herding fee *per reindeer* is not required to finance it. Even if such a herding fee is required, it may constitute a small sum, compared to the sum paid in wages, and in this case the big herders will still benefit disproportionately from the collective Saameby profits which have made up the difference. Regardless of the herding fee, however, a wage system can still be of great benefit to the small herder if it is large enough to justify the *time* he spends herding. That is to say, if the herding daily wage were equivalent to an industrial worker's daily wage, then the small herder would be able to herd without so much loss, even if his herd size was so small that it would not otherwise be worth the effort. A wage system of this type would help to counteract the extensive spiral.

However, a wage system cannot be forced upon a Saameby. It must be implemented only if the majority vote demands it, and it is this same vote which determines its size. It is highly significant that, of the approximately 52 Saamebys in Sweden, only a few employ the wage system or a part thereof (seasonally or otherwise limited to specific tasks). Those herding

collectives in Arvidsjaur which served as models for the RNL fell apart under this new law. Tuorpon Saameby has never had either a wage system or a herding fee. In this, one of its most fundamental aspects and *raison d'être*, the RNL has been basically bypassed to date. It is important to seek an explanation.

The RNL cannot possibly meet the needs or solve the problems of all Saamebys to the same extent. Where the process of de-nomadification and departure of herders from the herding occupation has reduced the herder population to near the rational size, the wage system might function admirably. Where the herder population continues to be far higher than the optimal for a Saameby's actual reindeer population or even its maximal, rational, reindeer population, the wage system, though contributing to a weakening of the connection between reindeer-owner possession and herding entity, in another respect also counteracts the realization of structure rationalization by enabling some herders who might otherwise leave herding to remain.

Under the wage system, an old herder who can no longer be active in the field is given means to continue his herding business against payment. Small herders, who might otherwise be forced out of herding through inability to invest time in so profitless an enterprise, can also remain by paying for herding labor (assuming there is a herding fee which covers wage expenses), instead of doing it themselves. If a wage system is able to exist without necessitating a herding fee, the small herders who are not active are in an even more advantageous position. In this way, all the other benefits of Saameby membership, such as hunting and fishing rights, can also be retained. In many respects, this new form of collective security for herders in the work force can only be viewed positively. But from the viewpoint of rational policy, which implies a great reduction of herders, such security in many Saamebys may hinder the realization of Swedish rational policies.

Currently, herding flexibility in many Saamebys is so reduced that most herders cannot support themselves by herding alone. They must seek cash incomes from other sources. As we shall see, § 9 of the RNL inhibits the exploitation of other income sources for the Saameby and puts a brake on the herders' ability to cope with the extensive spiral without ending their need to cope. Moreover, much of the financial aid provided for rationalization efforts, to build corrals and cabins or to carry out reindeer research, for example, comes from compensation payments for encroachments on grazing territory. In effect, the Saameby eats its own flesh, and the financial aid that helps to maintain herding flexibility is a misleading phantom. These compensation payments are hardly regenerative for herding to the same extent that grazing lands are and, furthermore, such payments lead to even greater cash dependence and inflationary problems.

The rational methods designed to enhance the efficiency and profits of

meat production, though of considerable effect, can do little to counteract the decreasing living standard in the long run *if the runaway systems which cause the rising subsistence minimum in reindeer-herding are left uncontrolled*. Moreover, if the State, on the one hand, wishes to raise the herders' living standard but, on the other, would like to see 30% of them leave the field (indicating that herding certainly does not provide an adequate standard for the current herders), then the State is to a certain extent back in the old double-bind. If the promotion of herding efficiency benefits all herders equally, then this will inhibit the desired herder spin-off. As indicated, a carefully balanced policy is necessary. Manipulation of this balance comes to involve the formation of new legal and/or economic categories of herders for the practice of discriminatory policies between them. The graduated vote is but one example.

While the resolution of the above cross-purpose, the implementation of some form of variable or selective benefit, may seem antithetical to a program of rational reindeer management whose major purpose is the *collectivization* of herds and work force, it is, in fact, a relatively simple matter. The same legal pattern which divided herding Saamis from non-herding Saamis and which later divided eligible herders from non-eligible herders or herders from herders-and-farmers is repeated. With the RNL, Saameby members are divided into different membership categories. Only class-1 members have voting rights on many issues. And, as already noted, further discriminatory capacities are built into the votes of these class-1 members (within bounds) by graduating voting power according to herd size. Hence, big, class-1 herders have the power to apply detrimental pressures to herders of other membership classes and even to smaller, class-1 members.

Even other forms of discrimination can be implemented. For instance, certain herders with a herd big enough to ensure the possibility of a secure herding future may be granted financial aid for the purchase of more stock, while smaller herders may not be granted such help.

The structure of the reindeer livelihood with respect to the herd size of each business entity is quite unfavorable. A considerable improvement in profitability could be achieved if the more hobby-oriented, smaller herds could be liquidated to a greater extent and transferred to the active, development-oriented enterprises. From this suggested viewpoint, it would be best that the buying and selling of breeding stock be stimulated.

With a sizable decrease in herd size of a business entity which has an acceptable size, it is of great importance for profitability that the herd size be quickly restored. (*Handlingsprogram Rennäring*, 1979:18, p. 15.)

It is, of course, argued with some justification that it is more important to help to rehabilitate the herd of a herder who bases most of his economy on reindeer management than it is to help to restore the herd of the hobby herder, who draws most of his support elsewhere.

Another method of discriminatory treatment to further the interests of

the development-oriented, herding entities over the hobby-oriented entities is to devise a tax system which tends to favor the big herders over the small. Many small herders claim that, since the new tax system was introduced in 1978 (see p. 378), they have had to struggle along with an even lower living standard than before any of the new, rational-herding methods were brought in. Not only are there government policies which further the cause of the larger herder over the smaller, there are also a number of aid forms from which herders can benefit only in so far as they practice rational-herding methods. In short, the State chooses to stimulate its rational program in its aid policy with respect to husbandry decisions and labor practices as well as structure, naturally enough. The smaller herders, however, are less often in a position to comply with the prerequisite conditions for such aid.

One might argue that ideally the number of reindeer-owners in the collective need not endanger the rational care of their collective herd, if rational principles are espoused by all. Yet, in fact, this is not so. Not only are some Saamebys split by bitter financial disputes, but some herders accuse others of preferring to earn their daily wages while playing cards in the Saameby's herding cabins rather than by working to gather the herd. In this way, more money can be earned, as the job takes longer. Moreover, some herders, it is said, expend little energy on gathering a flock in which none of their own reindeer are present.¹ The collective spirit is hard to stimulate with the retention of private ownership, especially under a system in which flexibility is so reduced that competition to remain in the field is very hard. One's chances of remaining improve as the fortunes of one's neighbors decline (up to a threshold level).

Production rationalization

As the term implies, production rationalization is concerned with work methods, technological improvements and the policies of maximum production. Its distinction from structure rationalization is not completely clear-cut; meat production, for instance, might well be raised through the optimal structuring of herd size and labor force. But, given any structure, production rationalization goes on to concern itself with operations. As used, the phrase "structure rationalization" tends to involve herder relations, reindeer/herder proportions and the basic set-up of the Village unit from the organization viewpoint. Production rationalization is in modern times basically focused upon the reindeer/grazing relation from

¹ A partial solution might be to offer payment to herders hired to gather according to how many head they bring to the corral, a system already in use in Finland.

the production viewpoint, i.e. which policy will yield most meat for a given grazing expenditure.

The new, major contribution of production rationalization calls for a radical re-direction of reindeer husbandry—slaughter policy, herd composition and selective breeding. While herding methods also fall within the domain of production rationalization and there is indeed much money to be saved by using modern equipment, for instance, keeping pace with the times in this respect has generally been the norm for herders. To date, the desired radical changes in herding form which should naturally follow upon the suggested restructuring of the Village and which were discussed in the previous section have been but minimally apparent. We must turn our attention now to the above-mentioned, new, husbandry program promoted by the Swedish production rationalizers, in order to see if it has fared any better. I shall discuss the origins and premises of this new husbandry program and present its interrelated elements briefly. In Part III, I shall account for their success or failure. It should become plain that their fate can hardly be separated from that of the changes advocated by the structure rationalizers. The problems of production rationalization are also intimately bound up with the impracticalities of establishing a fully collective, herd-management unit, while maintaining private ownership of individual reindeer in a situation of extreme competition.

Premises and origins

While it is relatively easy to understand that the transition to a cash economy may have been very attractive to the practitioners of the old, natural economy, it is more difficult to see how this transition could be demanded of them from the start, before becoming entrapped by an ever-rising, subsistence minimum in reindeer numbers and the spiralling need for more cash to afford the technical equipment necessary for efficient, modern, herd management and modern, “Swedish-style” living.

As I have argued here, the entire spectrum of legislation—from the first division into Saami and Swede, followed by the herder–non-herder distinction, to the 1971 differential classification of Saameby members (see p. 380)—stems from the same root problem of need for more flexibility, as regards competition for resources and crowding. These are all attempts to raise the resource–consumer ratio by regulating the consumer category. The ideal of maximizing the production of meat for sale in a cash economy can be traced to this same root, although here the ratio is raised by increasing resource productivity. It is not surprising, therefore, to find that, long before any well-developed plans for calf-slaughter and meat-production maximization, these issues were raised as a result of the crowding between the herding Saamis’ reindeer and the settlers’ contract reindeer.

Obviously, if herding profits could be raised, the subsistence minimum

in the number of reindeer required per family would be lowered, thus enabling more herders to remain in the field at a decent living standard. In this manner, the elements of meat-production maximization are directly related to the debate over §1 and the limitation of contract-reindeer ownership discussed in the previous chapter. This period in the early years of the present century was one of extreme crowding in the grazing lands and much conflict between herders and settlers. In the history of this period, one can find, as early as the 1920s and perhaps even earlier, the basic features of the modern, meat-maximization policy clearly stated.

In the 1920s, however, the motives behind the talk of meat production and conversions of reindeer wealth into monetary wealth were somewhat different from what they are today. As noted previously, Mr. Asplund raised the point that it was not the crowding of too many herders, but rather a problem of reindeer distribution which was responsible for the antagonisms between herders and between herders and settlers. Mr. Nilsson, arguing for an increase in the number of contract reindeer permitted to settlers, made the following statement:

That herding which currently is practiced by the settlers, *that*, one can say, is rational. It takes out what is possible of Nature's potential. But this is not so with herding in general . . . Aren't there rich Saamis who pride themselves on their herds? In these herds there are bull reindeer which have been ready for slaughter one, two, three, four or five years back in time. They are allowed to live because the rich Saami does not have to sell them and convert them into money. Instead, these reindeer are permitted to go and wear down grazing lands year after year without any growth. (Nilsson, 1928, II K, Protokoll no. 35.)

This statement is highly significant, for in it one sees how the transition from a natural, self-sufficient economy to a cash economy is *not* simply made gradually through convenience and gain on the part of the Saamis themselves (cultural flooding and assertiveness). The conversion of Saami-owned reindeer into money was something very much to the advantage of the settlers and to the advantage of the colonial process. In fact, one can say that in many ways the law (for example, by regulating herd size, by enforcing slaughters over this limit, and by determining the minimum number of herders per herd of a certain size—all the restrictions born of *crowding*) favored such capital conversions and pushed the Saamis into making them. This was rational and good for the settlers and small herders, who were thereby given more room to expand their reindeer holdings. It took wealth off the hoof and put it in the pocket. Money does not consume grazing.

Mr. Nilsson, like Mr. Asplund, considers such capital conversions from the standpoint of making more room—for Swedish settlers' contract reindeer, according to Mr. Nilsson, and for small herders' reindeer or *Saamish* settlers' reindeer, according to Mr. Asplund. The idea is developed to the point of helping as many people as possible to meet the

reindeer subsistence minimum (settlers have a much lower such minimum but nonetheless an important one, according to their champions). How this minimum might be lowered or rather how its rapid growth might be restrained was not then a recognized problem. The reason is obvious; it was still assumed that all herding Saamis and settlers could find adequate room for their subsistence minimum in reindeer in the grazing lands *if distribution were rationally controlled*. Thus, a situation arises in which the rationalization of the distribution of reindeer, necessitating transition to a cash economy to provide more room for herders (settlers) to meet their subsistence minimum, subjects herders, through inflation and a growing need for cash, to an ever-rising subsistence minimum in reindeer numbers. A vicious circle is formed, which results in the gradual escalation of the subsistence minimum and increasingly stringent demands for rationalization, until, finally, the point is reached at which grazing capacity simply cannot support all the herders adequately even *with* equal distribution of reindeer. It is here that rational policy comes to embrace not only *reindeer* rationalization but also *herder* rationalization.

As mentioned earlier (see p. 315), Mr. Asplund saw this situation occurring only through a rise in herder numbers. The possibility of a circular series of events—distribution—capital conversions of reindeer into cash economy—cash dependence, inflation and the resulting rise in subsistence minimum—further distribution needs—was not grasped. It was not immediately evident. In less than half a century, the subsistence minimum has risen to a point at which, despite a great decrease in the number of herders, the modern rationalization program calls for a further herder decrease by 30% (of the 1968 figure). Rationalization can no longer be simply a program to make room in the grazing lands; it must make room for the herders, by raising the efficiency of meat production. The formation of the modern Saameby into a hybridized type of economic co-operative can be seen as a direct result of the vicious circle noted above. Similarly, as herders are pushed further and further in the search for increased profits from herding, it is inevitable that collectivity will win over individuality as an organizational principle in the effort to cut costs.

Swedish rational husbandry: Slaughter, herd composition and selective breeding

In the State's rationalization program, the husbandry method is in many ways modelled on what the Saamis disparagingly refer to as "the pig farm" ideal: "... strong measures should be taken to aid herding's rationalization even in other ways. As presented in the directives of the report, in so doing, the goal should be as far as is possible to make reindeer herding equal to other domestic animal management." (SOU 1968:16, p. 57.) The pig or cow, however, is domesticated to an entirely different degree than is the reindeer. Whereas the managers of a pig farm are very

much in control of the pig's linkages with his environment and his fellow pigs, the herder in even the most intensive days adapted himself largely to the reindeer, whose linkages with land formations, climate, insects, predators, etc. were in many respects beyond the herder's control. To impose the pig-farm pattern on reindeer management is, of course, possible only to a very limited extent. Calculations of the best rational method for reindeer husbandry, in which it is assumed that all linkages are understood and perfectly controlled, can, however, lead to a system which, if forcibly and insensitively applied, results in unforeseen and damaging consequences. Important points to consider are, where or when the Swedish form of rational management conflicts with what the herders deem rational, which herders deem a production method rational and which do not, and what are the consequences of and prerequisite conditions for Swedish production rationalization. These points will be discussed later, especially with reference to the Tuorpon case. First, it is necessary to grasp some of the fundamentals of the Swedish rational-husbandry method.

It is a commonly accepted biological law that an animal grows faster when it is younger than when it becomes older. It is exactly this fundamental law which one must utilize within reindeer herding in order to raise meat production and thereby improve herding economy. (*Ekonomisk Rensköttsel*, 1966, p. 142.)

On the whole, within the bounds of practicality, herders have usually tried to arrange the slaughter of animals for meat production after the animals have reached their peak weight. The more the animal weighs, the more money will be obtained from its sale. Rational principles, however, extend the sphere of economic gain to consideration of grazing as well. The same principles as are applied by the timber industry to calculate the optimum time of forest regrowth before harvesting are being applied to herding. Accordingly, per unit consumption of grazing, the maximal meat production will be attained by a system of *calf-slaughter*. It is also hoped that reindeer-calf meat will be of a higher quality than other reindeer meat and therefore fetch a better price.

The mortality of reindeer is extremely variable with age class. Yearlings are hit very hard, especially during the first spring after their birth. As so many of these calves would be lost without any profit to the herder, it would be most rational to slaughter them for sale during the first year. The best time for slaughter would be in the autumn, just when they have reached the lowlands, where the transportation facilities are good, and before they have been able to consume much winter grazing.

Besides the gains to be made from calf-slaughter, great gains have been made in the last couple of decades through the improvement of the slaughtering industry itself. These gains stem mainly from increasing the capacity and transportation facilities of the slaughterhouses, which in turn has increased the number of meat transactions by centralized entrepreneurs. These slaughterhouse entrepreneurs have been successful in raising

the price of reindeer meat by improving hygienic standards (veterinary inspection of all marketed reindeer meat is now required by law) and by reaching a larger market through their ability to deal in bulk deliveries and with reliability of supply. Their effect has been to decrease the occurrence of what is called "bush slaughter" and instead to co-ordinate slaughters with respect to time and place. Such co-ordination cuts costs for the slaughtering industry and thereby enables the slaughterhouse entrepreneurs to give the herders a better price for their meat.

These gains, however, are obtained through improved technology and not, as with calf-slaughter, through a fundamental change in policy. The change of policy evidenced in calf-slaughter stems directly from the efforts to make planned grazing consumption a collective Saameby concern and to maximize meat production for the *collective* good. In a system of meat-production maximization by individual herders, Saameby rationalization will fall to internal competition. The grazing saved by one herder through calf-slaughter may go to increase the weights of another's full-grown bulls.

Of course, one way of getting round the problem which internal competition poses for the implementation of calf-slaughter is to introduce factors which favor calf-slaughter for *each* individual herder, i.e. stimulation which avoids any kind of re-distribution of *common* resources. One such method designed by the State involves the policy of giving government subsidies for reindeer meat. The subsidy policy for reindeer meat will prove of interest in a number of contexts and demands some explanation.

Reindeer-meat prices vary constantly, both the price offered to herders by the slaughterhouses and consequently the price at which the meat is sold to the general public. The figures used here are from 1978 and are already outdated. It is the system of meat sale and subsidy rather than specific prices which is of real interest in my current purpose. Reindeer meat bought by Sameprodukter AB from the herders was purchased for 16 Swedish crowns/kg.¹ After various types of processing and packaging at the slaughterhouse, it is sold as one of the most highly priced meats on the Swedish market.

Beef and pork are subsidized by the State by as much as 7–8 cr./kg. The marketers of pork, for example, can conceivably sell their meat at 9 cr./kg and, with the government aid, still obtain a total of 16–17 cr./kg. Reindeer meat is not subsidized in the same way. The slaughtering company must

¹ In the slaughtering season of 1979–80, the issue of meat prices was further confused by the incorporation by Sameprodukter AB of variable reindeer-horn prices in the basic meat price. Hence, 19:00 cr./kg was paid to the herder for reindeer with big horns, while only 17:50 cr./kg was paid for reindeer with small horns. While some of the price increase above the 1978 price can be attributed to the regular, annual, price rise for meat, most of the increase was due to the tremendous development of the reindeer-horn market (see p.457). In 1979, July quality horn was purchased at 150 cr./kg (wet weight).

get all its profit from the actual sale price demanded of its customers. The slaughterhouses must, therefore, sell their meat for at least 16 cr./kg—actually far more to cover operational expenses—just to break even. When faced with this price difference, it is understandable that the average Swedish consumer turns to beef or pork meat for a regular meal. The reindeer-meat marketers cannot compete with other meats in terms of *price*; reindeer meat is forced to compete in terms of *quality*. For this reason, reindeer meat is often smoked, specially cut or otherwise processed to sell as a delicacy. In the south of Sweden, it is considered exotic.

The reindeer industry is subsidized to some extent, however. For each reindeer that he sells to the slaughterhouse, the herder is paid a sum (earlier this sum was 37 crowns per reindeer) directly from the State. As this sum goes directly to the herder, it does not benefit the slaughterhouse marketers. Thirty-seven crowns per reindeer was a rather insignificant sum, compared with the State subsidy of the farmers' meat products, a subsidy which benefits the meat dealers and the consumers directly. Criticism of the State's policy on reindeer meat calls for a subsidizing of reindeer meat equal to that of other kinds of meat in the form of payment as well as in degree. Instead, the State subsidy paid directly to the herder was raised from 37 crowns per reindeer to 55 crowns per reindeer and after July 1, 1977, to 100 crowns per reindeer.

This change will probably not be very significant as regards the price of reindeer meat per kilogram to the public, but it could cause, and indeed *was designed to cause* in part, a considerable change in the reindeer herders' system of sale to the slaughterhouses. The sum of 100 crowns per reindeer is paid regardless of the size of the reindeer sold to the slaughtering company. With this added stimulus and the increased pressure on grazing lands from encroachments, the system of calf-slaughter becomes more attractive to the herder.

Recently, the herding administration has even suggested that this form of subsidy should be linked to the State's goals of structure rationalization, as well as to production rationalization. In both aspects of rationalization, it was further suggested that this government subsidy should be discriminatory in its application:

... the size of the subsidy should even be adapted to the income goal ... From this perspective, the subsidy should be constructed so as to aid only those herders who are dependent upon herding income to secure their livelihood and subsistence. In this view there is hardly reason to splinter the economic resources so that a part of the subsidy aids other herders.

As before, the subsidy should be formed to further the interests of rational reindeer management. Especially important is that the subsidy stimulate increased calf-slaughter ... The current construction, which is considerate of this, so that the subsidy is paid per reindeer and not per weight, is from this view positive. Calf-slaughter should, however, be further prioritized by giving a higher subsidy for a slaughtered calf than for a full-grown reindeer. (*Handlingsprogram Rennärning*, Länsstyrelsen i Norrbotten 1979:18, pp. 17–18.)

Note that in the above statement the subsidy has been referred to as “the economic resources”, a conception which immediately tends to class it as a *limited, common resource* for herders. As such, its discriminatory application necessitates the division of herders into those who are “dependent upon herding income to secure their livelihood and subsistence” and those who are not. What was once simply a split between occupation and culture has been combined with the living standard-culture dilemma to produce a split between occupation-and-acceptable-herding-income and culture. If one cannot discriminate against poor, small herders with regard to their right to utilize collective, Saameby, grazing lands, one can do so with respect to a common, limited, subsidy resource, for which the State has no obligation to the Saamish people or culture as a whole.

As a natural consequence of calf-slaughter and the relatively low financial gains from the production of full-grown animals for slaughter (per grazing unit), another principle of rational management is to seek the most rational *herd composition*: “As the value of a bull’s production per year is lower than is the case with the reindeer cow and her calf, bulls, from the economic viewpoint, are only desirable to the extent that they are necessary to impregnate the reindeer cows” (*Ekonomisk renskötsel*, 1966, p. 145). The herd’s economically optimal composition is both a sex and an age matter. According to the ideals of Swedish rational management, a suitable composition for a winter herd of 1000 animals is as follows:

	Females	Males	Total
First-year calves	160	50	210
1.5-year-old calves	125	25	150
2.5-year-old calves and older	600	40	640
Total	885	115	1000

(*Ekonomisk Renskötsel*, 1966, p. 145.)

The large-scale slaughter of first-year male calves in the autumn or early winter means that the winter herd can be cut down to only the most productive unit for next year, an advantage in view of the more limited winter grazing. Handbooks of rational herding speak of “net herds” or “stock herds” in the winter. The object is to have the largest stock herd possible within the limits of winter-grazing capacity (the rational reindeer-population figure), while at the same time retaining a sex/age composition which will produce most calves without endangering constant regrowth or replacement of the same winter-stock herd. The table above shows that, of a herd of 1000 head, few bulls (40) are considered necessary to impregnate the reindeer cows (600) and the bull calves and young bulls are only retained to the extent necessary to ensure the supply of healthy breeding bulls.

Realization of a proper slaughter system with regard to the sparing of

an optimally composed, winter-stock herd requires very complete knowledge of the herd. Along with such intimate herd knowledge, rational principles can be taken even further with the application of *selective breeding*. Not only is it most advantageous to have a stock herd of proper age and sex composition, but productivity will be further enhanced if these animals are purposely selected for their favorable qualities. Reindeer cows with the best motherhood qualities and with the largest young or bulls of the quickest growth,¹ for example, can be selected before others in hopes of raising the herd's meat production.

The size of the stock herd is regulated by winter-grazing capacity, and for the best utilization of winter-grazing lands it is considered advisable to permit different areas to recover for two years after heavy grazing. Without such a system of grazing rotation, the best areas may be so over-used that regeneration will be severely crippled. Such ideas are by no means new to herders, but increasing extensivity has meant reduced control over grazing utilization. Rational principles suggest a division of winter grazing into three areas with rotation around these zones from year to year, unless, of course, poor climatic conditions demand a looser policy. Even if the total grazing capacity of a Village is not altered by this system of rotation, it is hoped that, after a two-year recovery period in each zone, grazing will at least be more concentrated and thus aid a more controlled herding form.

There is usually a relative abundance of bare-ground grazing and obviously it would be of enormous economic value if winter capacity were somehow brought more into line with bare-ground capacity. Unfortunately, it is precisely in the winter lands that land encroachments have struck hardest. Artificial fodder has frequently been used as emergency food during bad winters, but, according to the principles of rationalization, meat production can be substantially increased with the considerable and regular introduction of fodder to raise the size of the winter-stock herd.

Note that grazing rotation and the use of artificial fodder become determinative of the reindeer/grazing relation as it approaches its limits of flexibility. In other words, it is only when the threat of over-grazing is an actual problem that rotation of pastures may prove helpful, and it is

¹ Selection of reindeer for the fastest growth alone, however, may lead to serious problems. Many herders have confirmed for me that the largest calves (of the same age) are usually the first to die during a catastrophic winter. Although the male calves will have been slaughtered earlier in the autumn if rational procedures are followed, the traits for which they have been selected will also characterize the female calves, which have not been slaughtered. There is a danger in breeding a stock of animals for the maximization of traits attractive to human beings if this leads to the weakening of these animals' survival capacity. Should the balance of adaption to human desires and adaption to environment (inclusive of its occasional "bad" spells) be altered too drastically, either great losses will result or else human beings will have to exercise increasing control over reindeer-environment linkages, which will also be an expense.

only when winter grazing is in short supply for the existing stock (that is, when the rational population is already achieved, except in bad winter emergencies) that the use of artificial fodder becomes advantageous.

Obviously, the aspects of calf-slaughter, age/sex composition, selective breeding, pasture rotation and net herd are all closely interrelated. Failure in one aspect can negate the gains obtained in the others. Moreover, a high degree of collective co-operation is required, usually all at once to give success. That is, should one herder ignore the collective slaughter policy, he may negate all the efforts to maintain the rational, winter-stock herd. He may easily make all attempts at selective breeding futile and his herd may trample and deplete winter-grazing zones spared for later use. Rational husbandry demands unified policies and actions, whereas before husbandry acts and decisions were fiercely guarded individual rights. A transition to a more collective form of husbandry is one of the reasons for the suggested change in the role and status of the Saameby headman.

Just as rational, collective herding encounters difficulties due to the private ownership of individual reindeer, so does husbandry, but even more so. Circumstances in which a single herder, for his own individual benefit, may begin a partial transition to rational husbandry will be considered later with regard to Tuorpon specifically. For various reasons, all herders may not think it advisable to follow rational-husbandry ideals, and then the whole system may crumble. There are cases in which such problems can be overcome under the present system of individual ownership of individual reindeer (to be discussed later), but, on the whole, it appears as if complete and successful rational husbandry, with many herders co-operating, can best be attained through a share-holding, ownership system. If, for example, all the reindeer in the Saameby had the same Saameby earmark and herders owned a share of the herd rather than specific reindeer and earned a share of the total profit (the equality of share distribution or lack of equality is another question), then collective, rational husbandry would automatically become a reality. This idea is being toyed with by both the herders and the authorities. Many herders, of course, have strong and justifiable aversions to such a system. Herding, to them, is more than a job, it is a way of living. They oppose any such attempts to curtail their individual freedom of choice and action. The State, as noted, maintains the old structure of ownership, but, even within this structure, one can clearly discern small steps towards the shareholding model and other means of stimulating husbandry co-operation.

The authorities suggest, for example, that the Saameby as a whole should be responsible for the ownership and provision of the selected bull reindeer needed for breeding with all the Saameby reindeer cows. This would aid the transition to rational calf-slaughter. If all herders began to practice calf-slaughter but counted on the full-grown bulls in another's herd to impregnate their cows, a situation would arise, and has actually occurred in some areas following pre-rut, bull slaughter, in which no one

would bother to keep an adequate supply of breeding bulls. Then, again, if every herder kept a self-sufficient supply of bulls, the Saameby as a whole would have far more than were necessary, which would be a non-rational situation. Such problems would be resolved by establishing a collective, Saameby, breeding stock of bulls. The Saameby itself must then obtain an earmark, and thus in a small way the ownership structure would indeed be altered in accordance with the shareholding pattern.

In the Herding Act of 1971 the regulations of the Reindeer Mark Act of 1969 were encompassed. There the important addition was made that a reindeer mark can be registered for a Saameby. This addition was made mainly with the thought that the Saameby should be able to own, for example, the breeding bulls within the Saameby. On the other hand, the intention of this addition was not in this way to make possible a completely realized, collective, reindeer management within the Saameby. In any case, this is not expressed in the Act's preliminary work, where, on the contrary, the thought of a completely realized, collective, reindeer management is repudiated. Of course, this addition nonetheless does make it possible for the main part of a Saameby's total reindeer population to be gradually transferred to the Saameby's own mark. In such a case, the Saameby becomes a reindeer enterprise which conducts its own reindeer-management business. Many of the regulations in the Herding Act of 1971 would become more or less meaningless. Such a development, however, is hardly probable. (Gustavsson, 1978, Rennäringsgruppen, bilaga 17, p. 14.)

While the shareholding system would solve many problems in the implementation of the State's rational, reindeer-management program, even if shares were not equally distributed but distributed in relation to herd size, for example, one share per reindeer, many new problems and moral dilemmas would be created. If the shareholding system maintained the old distribution of wealth, so that shares and profits were divided in proportion to the herders' individual herd sizes at the time of inception of the shareholding system, this *same* unequal distribution would be preserved constantly and would not change in response to variations in individual prowess or luck. Instead, it would be only collective prowess and luck that mattered from that point on. The small herder would never be able to increase his profits relative to the profits of the Saameby as a whole. The mismanagement of one herder would affect the economy of the other Saameby members to a far greater extent than now.

Another plan to promote collective husbandry is the suggested use of colored ear tags to supplement the owner's individual earmark. The different colored tags would be used in a codified, color-communications system. A yellow tag on the ear of a reindeer might mean, for instance, "Save me for breeding stock". Another color might indicate: "I am prone to wander, so slaughter me in the winter, although I am a cow", etc. By reading the color message, herders other than the rightful owner would be aware of his wishes and could carry out the husbandry act in his absence. As with herding tasks, the presence of all owners would not be necessary for husbandry tasks involving their own reindeer. In effect, although the

husbandry *decision* remains individual (with the collective good also at heart, it is to be hoped), the husbandry *act* could become more collective through this new mode of communication.

Maybe this type of tag communication could be expanded, so that herders other than the owner of the reindeer could attach information to it. For example, other herders might at times be in a better position to evaluate a certain reindeer than its owner, for example, they might have information about its motherhood qualities or proneness to stray. Such forms of communication could be of considerable advantage and, with the plan outlined above for a Saameby earmark, might demonstrate the desired shift towards collective husbandry as part of the overall move toward increasingly collective management.

Now, at the close of the 1970s, it appears that the further increase of the resource—consumer ratio to be gained from production rationalization will be slight, compared with that to be had by decreasing the herder population. As time goes on, I believe that the proportion of possible flexibility gains will shift steadily away from a response to production rationalization to a response to structure rationalization (the collective organization of the labor force and the decrease of the number of herders). Efficient utilization of resources can only be pressed so far (asymptotically decreasing gains), unless radically new products and markets are found,¹ while a decrease in the number of resource consumers will always benefit those remaining—until a threshold is reached at which the number of consumers drops below the level necessary for continued, profitable, resource exploitation. A single herder will not be able to herd 3000 head alone, should the subsistence minimum ever go so high.

The rationalization of terminology

Rationality principles are fundamental to all communication. Efficiency is a top priority for the information-processing of computers, and words are constantly coined to circumvent long explanations and to put “the message” across succinctly. Unhappily and all too frequently, the message transmitted with an “excessive” economy of words is inadequately formulated and vaguely grasped. In fact, this is a problem inherent in any process of digital codification of continuous reality. Nonetheless, while the rationalization of our conceptual tool-kit, the search for synthesis, is a basic goal of understanding, so must be the destruction of false equations and the refinement of crude terminologies.

¹ One of the new and astoundingly lucrative markets for reindeer products is the sale of horns to the Orient (see p. 457). For a time, this development may yield the greatest success in raising living standards to production rather than to structure rationalization. However, any such comparison is difficult, for, as I have mentioned, success in raising the living standard may counteract the decline in the number of herders.

As noted in a previous chapter, the realization of the hierarchical structure of nature-and-mind causes one to pose the question: for whom (or for what holon) is something rational? Elsewhere in this study, I have spoken of Swedish rationalization in opposition to what might be termed Saamish rationalization. Even this distinction is insufficient, for rationalization, when unmasked, proves to be nothing more than the "survivalization" of any particular holon. Thus, one may come to speak of Saamish herder rationalization, which in some ways is and in others is not compatible with Saamish minority rationalization, etc. Perhaps, in closing, it would be helpful to deal with some of the major misuses and misconceptions of the term "rationalization" which stem from its divorce as an abstract principle from the object or cause behind it.

It is a common error, for instance, to assume that new innovations and forms of communication come from the modern industrial societies, and, as they are new, cannot be a part of traditional cultures. Yet, if something is *new*, it is as new for the one culture as for the other. The color-tag system may not have been in use by Saamis, but there is nothing about it *per se* that establishes it as Swedish or Saamish. Most of the points composing the Swedish State's rationalization program for reindeer management have been practiced under various forms by Saamis for centuries. By what criteria can one therefore speak of Swedish rationalization, as opposed to Saamish rationalization? In this case, the important issue of such a distinction lies in relation to the occupational-cultural split. The matter concerns whose interests rationalization serves, to what extent it is freely evolved by herders and to what extent it is imposed by the dominant society. Of course, this is not an either-or situation. While opposed on many points, there is also a good deal of compatibility and complementarity between these holons—relations which change in accordance with the economics of flexibility.

We have seen that the balance between opposition and compatibility, between assertiveness and integrativeness, is extremely delicate and faces numerous dilemmas. Saamish minority leaders can with some justification claim that Swedish rationalization has tried to disguise itself as Saamish rationalization. At the same time, however, according to the concepts evolved in this study, it is a gross mistake to conceive of all opposition to Saamish interests as having been masterminded by a "consciously" malevolent State. My point is precisely that, while the State may be purposive in its policies, it is nonetheless not "conscious" of all it is doing. Instead, the State is part of a much larger mind or system which *lacks* the ability to control many of its runaway sub-systems in a way compatible with State interests and, therefore, the State is in many ways forced to act on account of the needs imposed upon it. In short, many of the same problems facing reindeer management today which are laid at the door of the State might still have come into being on account of the Saamis' own expansion into flexibility.

In so far as rationalization policies favor the economic efficiency of the herding occupation over the fate of the current herding population in its balance with the maintenance and development of the Saamish minority culture, to that extent it is Swedish rationalization. Swedish rationalization gives first priority to Swedish interests. Saamish rationalization serves Saamish interests according to what the Saamis themselves consider these interests to be—a question not without grave internal tensions of its own. In Chapters 20 and 21, a number of issues will be presented to demonstrate the ways in which the Saamish minority can be splintered. Wherever there is a splintering of identity and creation of partially antagonistic survival units (groups of big and small herders, for example), different rationalization objects are born.

Rationalization has sometimes been referred to as a re-intensification of herd management after the problems born of over-extensivity. Others declare that “the change to extensive herding can also be called the rationalization of reindeer-breeding” (Asp, 1966:87). Many point out the extensive character of rational management. Others point out its intensive character. The question cannot even be approached, however, until one takes into account the two basic components of reindeer management, herding and husbandry. When rational methods are examined in this way, it becomes clear that rational management is largely a reaction to and a cause of extensive herding, while also at the same time being composed of numerous, highly controlled, husbandry elements. Moreover, even when highly controlled, husbandry activities, such as herd age, sex composition and selective breeding are pursued, a large, collective, work organization with co-operative policies and structured labor rotation is favored, which from an organizational viewpoint is very much akin to that of certain trends in the development of extensive herding.

Much of the controversy over rational reindeer management’s intensivity or extensivity I believe to be misplaced, and much of the debate is actually caused by conflicting and inconsistent usage of the terms “intensive” and “extensive”. It is far too simplistic an approach to claim that rational management grew out of extensive herding or that extensive herding is a *thing* possessed by Karesuando Saamis, who upon relocation broke up the Jokkmokk Saamis’ intensive herding. While these interpretations are partially true, I believe that it is far more helpful to view all the transitions from reindeer-hunting to reindeer-herding, from intensive herding to extensive herding and on to rational herding, as expressions of the search for new flexibility and the consumption of flexibility generated by the assertive and integrative tendencies of all interrelated holons.

Chapter 19

The Dilemma of Protection and Over-Protection

For the Saami herder, much of the flexibility that might be available to him through part-time, supportive jobs or financial investment is cut off by § 9 of the Herding Act of 1971:

§ 9. The Saameby has as goal to attend to the reindeer-herding within the Saameby's grazing area according to this law for the members' collective welfare.

The Saameby is especially responsible for seeing to it that herding is conducted in the economically best way and to build, maintain and operate constructions needed for herding.

The Saameby may engage in no other economic activity than herding. (SFS 1971:437.)

For evidence regarding State premises in the construction of its rationalization program, few points are as revealing and vital as § 9. The concrete effects of § 9, its background and its justification by the State are therefore important issues for analysis here.¹

Any system exists within certain limits of flexibility. As long as this realm of flexibility is not exhausted, the system may continue more or less as before, despite the encroachments of other runaway systems. Once flexibility becomes exhausted, however, the system is severely threatened and must adapt. Maintenance of the former structure can only bring death. It seems inevitable, then, that, with the accelerated rate of change brought about by its encounter with Swedish society, there will come a time when Saamish culture will be injured more than aided by legal measures to preserve it in any *specific* form.

As has been noted, the desire to preserve *the* Saamish culture (regardless of other considerations) motivated the Swedish State to reserve herding rights for Saamis. And, similarly, the protection of the livelihoods of herders was one reason for subsequent divisions with respective reductions of rights within the Saamish category. The modern Swedish rationalization program for herding is designed to aid herding Saamis by increasing their profits from herding *alone*. Its connection with Saamish culture is a function of the way herding profitability relates to Saamish

¹ Most of Chapter 19 has been published previously (Beach, 1979).

culture. Many new technological innovations increase herding profits and thus contribute to the maintenance of the Saamish population in the "core area". But, by confining the chances of increasing their living standard (through Saameby resource privileges) to herding, the State causes many herders, especially the small herders, to lose much more than they gain. As a result, the stimulation and protection of one specific occupation, herding, albeit the Saamish occupation *par excellence* according to the law, is detrimental to the maintenance of the current herder population and the total Saamish population in the "core area". Ironically, the same legal clause, § 9 of the Herding Act of 1971 (RNL), which the Saamis claim stifles the development necessary to preserve a living Saamish culture, is justified by the State as a safeguard to preserve precisely this culture. Thus, the modern rationalization program repeats the historical process of protecting the viability of a certain entity (herding Saamis) by reducing the numbers of competing members of that class. Whereas § 1 effects this reduction by the legal definition of herder eligibility, § 9 effects the same thing by economic constraints.

Section 9 of the RNL not only defines the purpose of the new Saameby—to conduct herding in the manner most profitable for its members as a collective—but also sets limits beyond which the Saameby cannot go in its quest to benefit its members. It is this constraint in particular which will be considered here—that the Saameby may engage in no economic activity other than reindeer-herding.

Now I must clarify the State's role in creating this dilemma. Section 9 can indeed be regarded in its larger historical context as one of many restrictions of rights which concentrate Saameby herding rights in a gradually decreasing population. Yet is it not better to absorb the weaker entity slowly and as painlessly as possible, until the conflict is resolved, rather than to intervene with swift brutality? Today there are only about 700 herding families in all of Sweden. Stockholm has the second highest concentration of Saamis of any district in Sweden. Still, those Saamis who lose their herding rights and who must relocate to southern Sweden usually lead very comfortable lives as full citizens of the Swedish welfare state. The problem of the unfortunate creation of a large, Saamish, "poor proletariat", which occurred in the past, has now been overcome. Of course, material comfort does not make a change of occupation and cultural milieu painless, but what if the economic constraints are not so much designed to expel herders involuntarily as to inhibit new recruits from joining the Saameby and filling the gaps left by the elderly? Moreover, Saamish privileges were granted by the State for the purpose of allowing a small minority to continue its distinctive, traditional way of life. Should the State feel obliged to maintain these special privileges for the furtherance of new, non-traditional businesses, indistinct from those of modern Swedish society? This would be considered reverse discrimination, growing by degrees commensurate to the degree to which Saamish

children obtaining these privileges by birth become estranged from Saamish culture.

In this light, the State's restrictions in § 9 cannot be considered completely groundless. It must be remembered, however, that, while totally painless assimilation may be impossible, the degree of pain is proportional to the amount of force used. The Saamis too have a strong case, for the restrictions of § 9 may be too severe and lead to a herder's involuntary departure from the Saameby. There seems to be no solution which can be free from ethical dilemma. If an acceptable living standard is set too high, it may force a very painful assimilation; and if too low, it becomes a form of isolationism. Similarly, if the Saameby's economic activities are restricted too much, a painful decrease of the herder population may result; and if restrictions are too few, that is, Saameby privileges are too great, one may argue that this is a case of reverse discrimination and isolationism, a form of legalized, cultural (or in time even just racial) dichotomy.

Many of the concrete gains to the Saamis in the Act of 1971 were the result of Saamish political agitation, notably that by Tomas Cramér as ombudsman for the Swedish Saamis' National Organization (SSR) (see Svensson for an account of the development of Saamish political organizations). The SSR was fortunate in gaining the support of certain Parliamentary delegates, notably Mr. Takman, who, along with others, presented motions to the Parliament concerning the new rationalization program embodied in RNL 1971. These motions attacked the State's use of the Saamis' own Saami Fund to finance Swedish rationalization (likewise an ethically convoluted subject); they raised the questions of credit loans on reindeer, tariff protection for reindeer meat (Sweden imports much reindeer meat from the Soviet Union) and much else. Later in the 1970s, the relation of taxation to rationalization became a prominent issue. Monetary income as a type of measure of the living standard, inadequate though it may be, must be re-calibrated for comparisons between herders and Swedish industrial workers, as soon as new taxation laws for herders are introduced (as happened in the late 1970s). In so far as the money income affects the living standard, so, of course, does taxation policy. The new taxation policy for herders (see Rennäringsgruppen LBS, 1978, *bilagor*, p. 125, and RSV, 1978, *Den Nya Beskattningen av Rennäringen*), put into effect in time for the tax declaration of 1978, had a definite bearing upon the rationalization program. While all of these points have a bearing upon rationalization, none so clearly demonstrates the premises and basic dilemmas inherent in the State's rationalization program as the Parliamentary motions and debates on § 9 of RNL 1971. Motions to delete the restriction of the Saameby's economic activity were rejected after consideration in a report, JoU 1971:37, by the Department of Agriculture on the proposed RNL 1971. In view of the points raised above, it is important to review the attack on and defense of § 9.

In Motion 1971:1370, presented by Takman, Marklund and Hermans-

son and composed with the backing of the SSR, the following reasons were given for the deletion of Saameby economic restrictions from the Act:¹

We support the statement made by the State advisor, Mr. Hjern, as formulated in his special report:

"Besides the fact that the restriction breathes a certain underestimation of the Saamis' ability to care for their own affairs which matches poorly the faith one has in the Saamis' possibility to adopt the new complex rules about the Saameby's administration, it is, to start with, difficult to understand why the restriction should encompass even those activities which are closely related to herding. Conditions are so, moreover, that not all members in the Saameby are herders. And even for the herding Saami the situation can become so precarious that it can be an advantage that there are other activities to fall back upon. It seems to me desirable that the Saameby be able to devote itself to all sorts of economic activity which are directed toward strengthening the Saameby's position, even if this should conflict with herding. Of course, it must appear particularly desirable to protect this form of livelihood, but attention should, it seems, nonetheless be directed toward the Saamis themselves and their possibilities to provide themselves with a decent income like all other citizens." (M 1971:1370, pp. 13-14.)

The motion is most precise in its priorities, placing the good of the Saameby members (the current members) above the economic efficiency of a constrained livelihood. This priority extends even to the point at which other economic activity necessitates less rational herding. Herders are, in short, concerned with the rationality of their total activities, drawing benefit from many sources, whereas the law restricts them to *herding* rationality.

In JoU 1971:37, the State justified its rejection of the above motion:

The report wishes to emphasize in this context that, in § 11 of the proposed law, the demand is made that membership in a Saameby be a prerequisite for the use of herding rights and the other accompanying rights. The Saameby constitutes, therefore, an obligatory union of herders, which, in the way presented in the rules concerning advance responsibility (*förskottsskyldighet*) (§ 43), shall have an unlimited responsibility for its debts. To allow a business form built in this way to engage in economic activity other than that for which it is designed must be considered not very acceptable, according to this report. (JoU 1971:37, p. 41.)

The reason given is that the herders must be protected from risk. While it may be true that, under the legal design of the Saameby, herders are indeed more subject to risk than, for example, an ordinary factory worker or business shareholder, that is, should the Saameby become bankrupt, its herders would share full responsibility and each herder could lose far more than his initial investment—while this is so, the State's justification of § 9 is circular, in that it does not explain why the herders are so vulnerable. (For further light on the origins of this full responsibility, see

¹ This deletion in § 9 would have demanded certain other adjustments in the proposed RNL 1971—adjustments in § 16, § 38, point 10, and § 59.

pp. 364 ff.) And, even if the herders are vulnerable, the State does not answer the motion's point that the Saamis' risk should be their *own* affair. The only explanation that the State could give to such questions, consistent with its premises, is that, after all, Saamish herding privileges were granted to maintain the distinctly different Saamish culture. These privileges were not granted to enable Saamish herders to use their advantages to become owners of electrical-goods factories or stock-market tycoons. This is the argument voiced in Bill No. 1917:169, p. 56, and quoted on page 306 of this dissertation. One hears this argument constantly today, and surely it must to some degree be respected. Again, it is a matter of *balance*.

It should also be noted in this context that the State reserves the right to appoint a chief administrator (*syssloman*) to guide Saameby affairs, if the herders themselves prove inept and their herding is deficient, according to the State. Herders counter this by saying that the reason why a Saameby's herding may be "faulty" is likely to be a result of State policies which undermine Saamish regulatory systems and sacrifice grazing lands to encroaching industries. M 1971:1370 opposes this reversion to direct authoritarian rule by the State, but this aspect of the motion is rejected on much the same grounds as were given for the rejection of the criticism of § 9. That is to say, the State must step in to salvage a poor herding situation in order to protect the herders, whose membership of the Saameby is obligatory. On both counts, *protection* is given as justification for restrictions of freedom. While innumerable systems and species are dependent upon protective legislation for survival, there are indeed cases in which it becomes difficult to determine whether such protective measures are positive or negative for survival. In fact, the same protective measure which was once positive may become outdated and prove negative from the viewpoint of survival.

Although it may not have been designed as such, nonetheless § 9 must be recognized as constituting part of a mechanism which tends to "rationalize away" 30 % of the current herders. The State would rather claim that herders leaving the field would do so anyway. According to the State, the restriction in § 9 is purely a safety measure and no hindrance to the herder seeking to supplement his herding economy. He may do so as an individual but without the benefit of special Saameby privileges of resource utilization.

The report wishes to emphasize in the meantime that, through this position, it is obviously not intended that the Saamis shall be hindered from devoting themselves to other jobs at the side of herding. As said before, the report considers it positive that alternative sources of livelihood should to the necessary extent be prepared for those for whom herding is not enough as a basis of support. Should Saameby members wish to engage in such extra activity together, as the department chief has said, they are naturally free to build a company, economic co-operative or other business form for the activity in question. (JoU 1971:37, p. 41.)

The herders are thus free to form a voluntary business organization over and above that of the Saameby, in order to pursue other economic activities. The Saameby's money, however, cannot be used in such a new business enterprise. Moreover, the State is under no obligation to allow such a new Saamish business to make use of any special rights on Saameby land, over and above those already granted for herding. Should such a new business be shown to conflict with or detract from the diligence demanded for herding, the State can bar any such activity on State lands. If conflicts with herding occurred and not all Saameby members joined in the new, hypothetical, business venture, the State would have even better grounds for barring the venture on the basis of the Saameby's own protection clauses, and good reason for introducing an administrative chief.

Freedom for the individual herder to engage in non-herding enterprises, however, may not provide him with the opportunities he needs. He needs work which will not plunge him into an "extensive spiral" in herding, where lack of herding-work investment leads to decline in herding profits, resulting in even less work investment, etc. Therefore extra work must be complementary to herding and the herding life on Saameby land. Many Saamis today believe that this form of work needs to be reserved, like herding, for Saameby members, so that these select and scarce job opportunities will not be open to competition from the general public. A few opportunities for supplementary income available in the field already present themselves to the active herder and are reserved for herders. The special hunting and fishing rights which seem to have been preserved for herders on occupational grounds (that is, herders have need of these rights *in order to herd* and, according to State law, have therefore been given priority in the granting of hunting and fishing privileges) provide large-scale, commercial opportunities on a seasonal basis, especially since the development of easy transportation facilities by seaplane and helicopter. Hunting and fishing have, for some herders, come to be economically more important than herding itself. The fruits of hunting and fishing are not merely for direct personal consumption, but objects for sale on a highly developed market, bringing considerable profits.

Many Swedes consider that this result runs counter to the intention of the law. Yet, whether eaten by the herder himself or not, the fish that he catches certainly help him to maintain his herding livelihood. In many cases, however, even expansion into this mode of economic opportunity is not enough. More flexibility is demanded, but few other income sources are available to him in the field which are also reserved for him by law. While tourism might provide income opportunities pragmatically combinable with herding, it can become, when not controlled by people with herding interests at heart, dangerously detrimental to the herding enterprise. Now, should the tourist business or any other such new business

opportunity prove enormously successful, it might come to overshadow the economic importance of herding and thereby cause a degeneration of herding, even if the originally only supplementary business were operated exclusively by herders. While some might argue that it is unfair to reserve such profits for herders alone, especially for reasons of *cultural* protection, others could equally well argue that it would be highly inequitable to bar herders from any share in this success simply on the grounds of cultural and occupational dichotomy. This would seem even more unfair if the business from which one group was barred grew to threaten the livelihood of that group.

The herders' money is largely tied up in the Saameby and, what is more, encroachment compensation payments, often large sums, are tied to the Saameby treasury and cannot be invested for non-herding purposes. As a result, there are cases in which funds are carelessly spent. Although it is a poor justification for irresponsible spending, I have often heard the remark that otherwise the money might just rot away unused. Small herders especially, who do not have much hope of a long, herding future, are not prone to be frugal with Saameby funds. Blatant contradictions arise between the great effort to rationalize and promote profitability, on the one hand, and often wasteful spending of the Saameby's shackled money, on the other.

The State seems inclined to protect the Saameby's herding to death, but, in revealing places, this protection crumbles and the Saameby becomes the victim of a vicious circle.

... the report wishes to stress that it is important that the protection for herding is not developed so that the other settled population's opportunities to improve its economy decline ... an all-too-one-sided commitment to the interests of herding Saamis could work against the development of populated areas (JoU 1971:37, p. 30).

Wherever the population centers that exist become depopulated and both commercial and social-service functions as a result cease, then herding might well be seriously jeopardized (JoU 1971:37, p. 37).

Upon numerous occasions, the State voices the right and the need to sacrifice herding interests in favor of greater social and economic interests. The State exercises expropriation rights over Saameby territory and can regulate hunting and fishing to the herders' disadvantage, for example. At the same time as the State sacrifices herding interests to a larger social interest, it inhibits Saamebys from the very development which would put them in a position to be *in themselves* of great social and economic importance. The Saameby is stunted and then stunted even more because it is of minor significance.

The fight to delete the restriction in § 9 is therefore of much greater significance than may at first be apparent. It is not only a matter of affording herders better means of obtaining a higher living standard. Released from restrictions, the Saameby might develop into an organism

of considerable economic vitality and occupy such a prominent place in general social interest that further encroachments could be stopped and erosion of the Saameby's capital reserves protected, not only on the grounds of Saamish herding rights, but also on the grounds of the State's own desires to protect the economy and employment opportunities of the populated centers. The State deplores the depopulation of the north and the decline of service functions, while not allowing the herders a chance to counteract this process.

In effect, the State feels that, if it were to allow the herders the additional special privileges necessary for them all to remain in the north and to enjoy a good living standard, this would impose unfair constraints on the rest of the northern Swedish population, so that, in the final analysis, an even greater number of people would be forced to move south. By favoring the expansion of industries conflicting with herding, State policies have the effect of forcing herders from their traditional rights and livelihood to the south in an effort to retain a larger population in the north.

Yet, by its own expressed ideals, the State not only desires to help to maintain the northern population, but also desires this population to enjoy a decent living standard. Thus, the problem of maintaining the northern population depends in part on the problem of illegalized or unacceptable poverty. Which is the more desirable, a large population with a low average income or a smaller population with a higher living standard (the same choice as applies to the Saameby itself)? The job scarcity in the north is regretted by the State, on the one hand, because of its inability to provide herders with extra income, so that all herders in the north may remain with a good income as herders and, on the other hand, it is regretted by the State because, up to a point, the lack of extra jobs *does* cause many herders to remain in the north with *inadequate* incomes. As one state-subsidized study has found:

... alternative employment is not available to the extent which would be necessary to absorb that release of labor force in the local areas which occurs with a rationalizing or change of ownership structure . . . This entails that . . . bondage to form of livelihood is even greater in the herding population than in the farming population. This means that the yearly income for the individual herder must often drop to a very low level before he leaves his livelihood, a situation which in places causes great social problems. (SOU 1968:16, pp. 51-52.)

It seems that the herders, more than other citizens, can and will endure a lower living standard in order to remain in the north. But, if this fact is then taken into account in the distribution of resources and jobs, so that the largest total population is maintained by favoring the more demanding Swedish industrial workers, then this would constitute legislation which biased living-standard possibilities on the basis of a cultural and occupational dichotomy. Such bias is, for example, implicit in the following paragraph from the preliminary study and bill for the RNL.

The experts have suggested that departure compensation should be given to herders with an all-too-small herd, who give up their herding in order to aid the structure rationalization in the Saameby. To those who choose to remain in the area, it is suggested that a lump sum be given. To those who, because of the employment situation, are referred to other locations and leave the Saameby, it is suggested that an extra sum be given, besides financial aid for moving. In order to obtain the necessary herder-size rationalization, as far as possible synchronized with the formation of the new Saamebys, it is suggested that this compensation should be largest the first year and thereafter gradually diminished by 20 % per year after the first three-year period. (Prop. 1971:51, p. 140.)

The above-mentioned compensation is highly reminiscent of, and logically analogous to, the earlier poverty aid for Saamis. Note that it is not only offered as compensation for those who leave the field, but is also to a certain extent designed as an incentive to do so.¹ This brings one step nearer the question of voluntary or involuntary departure from the Saameby. The law is interested in achieving rational, work-size entities, that is, in reducing the herder population more speedily than might occur if herder numbers were left to diminish without stimulation. Rather than force them out, the State seeks instead to bargain them out, thus making voluntary a departure which otherwise might have been involuntary at that time.

There are herders today who question whether it would not be better in the long run to throw out all special Saamish herding privileges, all that gives the State grounds for espousing a cultural-protection ideology, in exchange for economic freedom. It is necessary to weigh the pros and cons of this position. Suppose, for example, that the Saamebys had the right to decide who would or would not be permitted to herd, without any restrictions as to eligibility. As the Saamebys have, to date, been constituted by members who are of Saamish ancestry, according to § 1, they would have the possibility of maintaining cultural eligibility criteria. It would admittedly be as difficult for the Saamish herders to decide just what such criteria should be as it is for the State. But at least this difficult matter of Saamish definition and cultural protection would be decided by the Saamebys rather than by the Swedish State. Of course, many non-herding Saamis would, in this eventuality, question, as they always have, why only herders should be given the right to decide which Saamis (or, in this hypothetical case, even non-Saamis) could utilize the original Saamish resources.

Moreover, even if Saameby-membership eligibility were non-restrictive, this would not obviate the need for State protection laws; it would only cause them to be based on occupation alone, without any commitment to preserving Saamish culture. There would still have to be some law to protect *herding* and to impose privileges and economic constraints to do so. To throw off these constraints, not only Saamish privileges with

¹ This form of aid was discontinued on 1 July 1979.

regard to Saameby eligibility, but also *Saameby privileges* would have to be forfeited. While the Saameby could then engage freely in any economic activity, only one of which might be herding, it could neither prohibit other competing industries from exploiting the other resources of the grazing lands nor demand (as much) compensation for such encroachment. Nor could it keep other herding organizations and private herding enterprises from competing for *grazing itself*. In effect, Saameby membership could no longer be obligatory for herders. Indeed, herding might not remain the basic *raison d'être* of a Saameby, and there would not necessarily be any particular advantage for a herder (or a Saamish entrepreneur in the tourist business, for example) in seeking Saameby membership. The Saameby would become a vacuous concept and, if it survived, it would be forced into furious competition for northern resources. Ironically, the new basis of its survival would be exploitation of its own original life-blood—the natural environment—in precisely the same way as the current timber and hydro-electric-power industries threaten the herding and the Saamebys of today.

To revoke the Saameby's special rights and maybe even to revoke the Saamis' special rights with regard to Saameby eligibility might therefore sound the death knell for Saamish culture and Saamish herding (perhaps *any* herding). Protective legislation is certainly necessary for the preservation of Saamish herding, no matter how unfortunate the protective divisions of the Saamish category and the respective legal constraints seem to be.

This is not to say, however, that § 9 is justified as it stands. Overly protective legislation is detrimental to the survival of Saamish herding and culture. While some such constraints as those imposed by § 9 seem valid, the activities to which a Saameby is limited appear too narrow. The risks involved in economic speculation for the Saameby outside herding must be compared with the harsh certainties, if such risks are not allowed. If, for example, the herding organizations were permitted to control and reap the profits from the growing tourism in the grazing lands, then the advance of tourism would not constitute such a threat to herding and would instead contribute to its permanence. As Saamish minority leaders so often point out, unless the Saamish youth is provided with a Saamish alternative and with a chance to remain in the north, in the Saamish cultural milieu, so that their Saamish identity can develop, Saamish rights will be retained by only a handful and the rest of the Saamis will be absorbed by the Swedish population in the industrial centers to the south. Herding alone does not provide an economic base broad enough to sustain indefinitely a living Saamish culture.

An ethical position on cultural interaction cannot condemn the demand for resource redistribution amongst the growing needy of the world, but only the manner in which it is effected in relation to human life and consideration for the maintenance of cultural identity and the total envi-

ronment. Those committed to the cultural survival of ethnic minorities must meet this dilemma with the assertion that certain groups of people constitute entities which are entitled to rights beyond the share due them on account of their numerical strength alone. Moreover, the rights granted to a particular culture to preserve it as it is may in time not be sufficient to guarantee its survival. Of course, the group given special rights shares in the responsibility of gaining control over its own runaway expansion of needs, but the world will not maintain a perfect *status quo*. Within bounds, a culture must have the right to adapt. Somewhere between the extremes of returning the entire north of Sweden to Saamish rule, on the one hand, and allowing the Saamis no special rights, on the other, a viable solution for Saamish cultural survival must be found. In today's world, it is apparent that the restrictions of § 9, the reindeer herders' new form of taxation, increased environmental exploitation and the slow decimation of Saamish herding recruitment possibilities caused by § 1 are too stifling.

As the subsistence minimum continues to rise and as competing industries continue to cripple herding efforts, an even greater reduction of herders will be deemed necessary than the 30 % mentioned already. As noted previously, the data from the Soviet Union and Norway upon which the Swedish ideal for labor-force size in relation to herd size is based (6–8 men for 3000 head) would yield an average herd size of 500 to 375 head per herder, a figure quite comparable to the current subsistence minimum in reindeer per family. If, however, the subsistence minimum grew in time to be about 800 reindeer per family, there would be no reason to think that herding methods would necessarily have altered accordingly to require a labor force of only about 4 men per 3000 reindeer. Besides, even if methods had improved, the flexibility gained might still be consumed and certainly, from the viewpoint of Saamish cultural survival, a decrease in the herder population is still negative. In short, there is no divine rule which ensures that the ability to increase flexibility through various forms of technology and rationalization will be able to keep pace with the increasing needs for flexibility. The former may exceed the latter or it may fall behind. If the subsistence minimum is allowed to continue its runaway increase and the principles of Swedish rational herding continue to encourage the reduction of herders to allow each a comfortable living standard from herding alone, then eventually herding will be placed in an untenable position.

Until steps are taken to control the rising subsistence minimum in reindeer, and until the Saameby is given enlarged privileges to tap other sources of livelihood as grazing resources are reduced, the Swedish herd-management-rationalization program will, despite its positive contributions, steer a course towards the inevitable demise of Saamish reindeer management and the enfeeblement of Saamish culture.

The Saameby: What is It?

This chapter deals with some of the major changes in herder organization with the creation of the new Saameby of RNL 1971, as they relate to the program of rationalization. After a brief, historical orientation, the legal status of the Saameby will be discussed, focusing attention on its relations to profit and taxation. The last section will concern Saameby membership and voting rights. These sections are not separate, for a herder's membership class is directly related to his economic status. The purpose of this chapter is to illustrate that the structure of the modern Saameby does far more than just indicate rational guidelines which herders may choose to follow. Its internal structure forces acceptance of these policies, as flexibility decreases.

Whereas in the past the Saami sheriffs sought to control herding policies, this task is now to a much greater extent left to the Saameby. At the same time, however, the Saameby is constructed so that it necessarily leads to the "rationalizing away" of herders. The State prescribes certain bounds within which the Saameby has freedom. Yet, should the Saameby budget show a deficit, for example, then certain new paragraphs of the RNL are automatically actualized, whether the Saameby likes it or not. Of course, such regulations for the balancing of the budget for the Saameby may not be any different from those of any other corporation. Debts must be paid and, if the State did not impose a system, the Saamis themselves would. Moreover, the herding-fee-per-head system designed by the State cannot be more fair in principle. It was this very system which the herders had themselves developed before its imposition, when required, became law in 1971.

The herding fee can be used as a tool by some herders to force others from the field. How much of this weeding-out process is caused by need on the part of the big herders and how much by greed is another question. The fact remains that, as the ratio of resources to consumers changes (in this case diminishes), homeostasis demands either an increase in resources (or an increase in profits from the same resources) or a decrease in consumers. As the ceiling is reached for increase in resource profits, consumer spin-off becomes more and more necessary. Whether the mode of spin-off be controlled by Saamish or Swedish systems, it will occur. When critical limits are reached, the weeding-out process will begin.

Sorrowful as it may be, one cannot simply blame those aspects of the law which regulate this process. Instead, one must question whether the critical limits have not been set too narrowly (see the debate on § 9) and whether the runaway systems which push the herding resource-consumer relation toward these critical limits have not been allowed to run too fast, without taking a balanced view of other, interdependent systems.

State-taxation policies, land-encroachment policies and predator policies, for example, push the Saameby toward its critical limits. Until such pressures force the Saameby to engage in a cut-throat process of weeding out small herders in the name of rationalization, however, there is room for some resistance. It is the forms of resistance to this aspect of rationalization and the inception of the weeding-out process which concern us here.

Lappby and Saameby

In the foregoing chapters, I showed how the modern Saameby is largely a reformation of the Lappby for the furtherance of rational herding goals. While the membership of the old Lappby and the geographic area of the Lappby remained intact, the change of name from Lappby to Saameby reflects a new direction in the program of herding law. The old Lappby legal organization, begun in 1886 and altered in certain points by the Acts of 1898 and 1928, was basically designed to maintain decent relations between herders and farmers, to police their activities and to settle their conflicts.

The collectivity of grazing-land use which was introduced (in principle at least) with the end of the taxland system and the beginning of the Lappby organization in the Act of 1886 was not simply a relaxation of colonial law. As with the collective work and ownership policies of the modern Saameby, one cannot view the collectivization of Lappby grazing land as merely a "return" to traditional Saamish organization. In fact, it appears that in 1886 the herders (some at least) were far from pleased with the idea.

The suggested law contains also regulations concerning a sort of administration for and over the Saamis (as, for example, division into Lappbys, appointment of a headman and government overseer, etc.) which, however, does not appear to be of special benefit to the Saamis and will probably not come to be regarded as such by them, for these regulations constrain their unusual national situation. These legal decisions will probably be regarded by the Saamis with suspicion and met with serious misgivings. (*Särskild Utskottets Utlåtande*, 1886, no. I, p. 126.)

The fact that Lappby land was to be collective for the Lappby members might at first not appear to be so threatening (except maybe to some herders who stood to lose an advantageous position). As mentioned earlier, however (see p. 78), according to Cramér (*Samefolket*, 1979b, no. 6,

bilaga), this legislation helped to divest the Saamis of their claims to land ownership through their taxlands. Furthermore, a threatening aspect of the new law for the herders as a whole was the accompanying control placed on them. The major reason for this collectivization of land and the accompanying controls was the State's desire to protect farming and to devise a system to ensure proper compensation for damage caused by reindeer to crops. It had always been a great problem for the government to know from whom to demand compensation for damage done by reindeer. One of the main reasons for the creation of the Lappby seems to have been not only to give herders collective rights, but, in so doing, to make them collectively responsible for any damage done by reindeer (of unknown earmark) within that area.

This interpretation is supported by the fact that, through the Act of 1898 and the Lappby Regulations which it ordained, group grazing areas established by traditional usage were to be respected within the Lappby. The integrity of group grazing became the compromise between the total collectivity of land use prescribed by the Act of 1886 and the individual land use of the taxland era. The Lappby as a whole had shown itself too big to serve as a zone within which herders could fairly be expected to share the responsibility for reindeer damage. Thus, this "return" to more restricted grazing-land integrity does not mark a return in ideology to the strict privacy of grazing which obtained during the taxland era. Moreover, respect for group grazing zones did not include respect for the hunting and fishing rights of any particular group of Lappby members within that zone (though, again, the Saamis could disregard such regulations to a great extent).

Further support for the view that the Lappby was created largely to mitigate conflicts with farmers can be found in § 5 of the Act of 1886. According to this section, the new Lappbys were to maintain their integrity against herders from other Lappbys specifically during the summer. Similarly, in § 6 of the Act of 1898, Lappbys were off limits to herds from other Lappbys during the months from May to September only. Thus, it appears that Lappby formation became increasingly restricted in step with the development of extensivity. Both began as essentially summer events and radiated outward from there. Hence, Lappby regulation followed the spread of extensivity and the increasing conflicts this caused with the westward-advancing farmers.

At first, the areas designated as compensation-responsibility collectives and grazing-land collectives (Lappbys) were not necessarily the same. The old Village identities and boundaries from the taxation epoch and earlier administrative divisions were to a great extent retained (just as the Saameby retained the territory and membership of the Lappby), but these divisions were not always the most convenient from the viewpoint of imposing collective responsibility for damage done by reindeer to crops. It could happen that groups in different Villages might more often have

mixed herds than groups within one Village. From the taxation standpoint, this is insignificant; the goal had been merely to divide the tax received from herders according to the district or trading center at which each herder was registered. Not all tax was thrown into the same Crown pot. As long as the tax came into the proper pot and contributed to the assigned quota, herd mixtures were uninteresting (and less frequent in more intensive days). When it comes to determining responsibility for damage to crops, however, the mixture of herds between Villages, as opposed to mixtures between groups within a single Village, becomes highly significant. One Village alone should not be called upon to pay the fine when reindeer from another Village are also involved. According to the Acts of 1886 and 1898 (see the 1886 Act, § 13, and the 1898 Act, § 18), the "damage-compensation areas" could encompass many Lappbys and the lands outside of Lappby territory in the lowlands traditionally used by herders for winter grazing.

By 1971, it seems that the Saamebys and the "damage-compensation areas" had merged to form a one-to-one relationship (RNL 1971, § 90). The Saameby and only the Saameby is now held responsible for damage within its grazing area, unless it can be proven that foreign reindeer have contributed to the damage. With the formation of Saamebys in 1971, however, yet another step was taken in compensation collectivization. Whereas, before, collective compensation would be demanded of all herders in a damage-compensation area in cases in which blame could not be attached to any specific individual or group, under the RNL there is no longer any concept of individual blame. That is, should one herder's reindeer cause damage and it can be shown that only his reindeer were involved, the Saameby, as the collective, still pays the fine. In this way, the Saameby shows itself responsible for the herding of its individual members. Legal responsibility is a measure of legal control. The Saameby majority has the legal right to control the herding of its individual members "for the collective good", and it is not good for the collective to have to pay compensation for the sloppy herding of one of its members.

The evolving, collectivized-compensation policy constituted one of the reasons for antagonism between the more extensive, relocated, Karesuando herders and the more intensive, native, Jokkmokk Saamis. With collective Lappby responsibility for damage, Jokkmokk herders, who had tighter control of their herds, could be drawn into sharing fines for the transgressions of Karesuando Saami reindeer. With the demise of widespread farming in the north, however, these compensation sections have become largely obsolete. The coverage given them in the Act of 1971 is far less than that in the Act of 1928. Yet, with the creation of the Saameby, a "new type of judicial person" has been formed which poses new types of legal problems with regard to the relations this "person" has with the State (tax laws in particular) and with the relations this "person" has with its members, the herders.

Before proceeding, it is important to note that, while this new Saameby organization was fashioned to serve the new, rational, herding objectives, the term "Saameby" is sometimes used to indicate the Saamis' early traditional form(s) of social structure. Ruong, for instance, speaks of Saamebys with reference to the 17th century: "Conditions for the Saamis developed so that some Saamebys, for example, Enare, paid taxes to tax collectors from three countries, Denmark-Norway, Sweden and Russia" (SOU 1975:100, p. 384). Unfortunately, without adequate historical materials dating from before the colonial encounter, one cannot know for sure the form(s) of the early Saamish social structure.

The varying usage of the term in this way lies at the heart of Saami-Swedish differences, as regards premises. The Saamis emphasize the age-old, traditional origins of the Saamish social system, and they regard the modern Saameby as a further development or perversion of it—a perversion by law of an originally Saamish system of regulation. The State, however, when using the term "Saameby", refers specifically to the new "judicial person" which it formed by the RNL in 1971. The State considers Saami herding rights and goals from the viewpoint of its newly created Saameby, whereas the Saamis, by refusing to acknowledge the Saameby as something created by the State alone, press for their traditional rights to land and water and their rights to maintain and develop their own social structure and culture for their own benefit.

While not denying the justification of the Saamis' use of the term in the pre-1971 context, it is certain nonetheless that the post-1971 Saameby is very different from the herding organizations that preceded it. As noted earlier, in this study the word "Saameby" is employed in its more specific meaning, as the purpose of this analysis is to uncover the causes and consequences of herd-management organization in relation to rationalization. The term "Lappby" is used to refer to the geographic area and herding social organism first prescribed by the Act of 1886. The long evolution of Tuorpon Saameby has been dealt with in Part I.

Economic corporation or just property with common responsibility?

In Sweden, property with common responsibility is termed *samfällighet*. This term has a very specific legal meaning in, for example, SFS 1973:1150 and earlier laws for the just distribution of *responsibility for the maintenance of common property*, not for the making and distribution of profits from it.

"As the committee has already stated, the suggested Herding Act has created a new type of judicial person, the Saameby . . ." (JoU 1971:37, p. 40). There are a number of instances in which the legal character of the

new Saameby is not at all clear and in which, because of this, conflicts with rational ideals arise. These conflicts stem from the imprecision in the creation of the new Saameby and unforeseen entanglements with other laws. The major points discussed here concern the Saameby's relation to profit and taxation. An excellent account of these issues has been presented by Knut Gustavsson, advisor to the National Board of Agriculture, in his contribution to the Board's survey entitled *Översyn av vissa frågor inom rennäringen* and dated 19 June 1978. I owe an understanding of much of the material in the following section to personal communication with him. Although I take sole responsibility for any misinterpretations included here, I am afraid that it would be wrong to claim much originality even for my own mistakes. I hope that these have been minimized, but, as Gustavsson pointed out to me, my errors and uncertainties have been largely shared by the lawmakers themselves. The legislation abounds in contradictions and misunderstandings which confuse the herder and thereby the ethnographer.

In order to understand Saameby economics, it is necessary to go into more detail concerning the herding fee and the wage system designed to streamline the labor force and to help to even out the inequalities of the herders' work investments. According to SOU 1968:16, JoU 1971:37 and Prop. 1971:51, the herding-fee and daily-wage system turns the Saameby into an *economic corporation*, and it should thereby be regulated according to the law for economic corporations (SFS 1951:308), which came into force on 1 June 1951. Under the RNL, herders can receive payment from the Saameby for work done for the collective good, and if, and only if, it is needed to balance the Saameby's budget,¹ herders may pay the Saameby a certain sum per head for herding costs.

The amount of the herding fee is calculated by subtracting the Saameby's yearly receipts from its yearly costs and dividing this deficit in the budget by the number of reindeer belonging to all the Saameby members as a whole. For example, if the Saameby's yearly receipts from the auction of "whole-ears", from predator compensation, from bank interest, etc. amount to 480,000 Swedish crowns, if the Saameby's yearly costs for the same year amount to 600,000 Swedish crowns (fencing costs, helicopter transport for gatherers, maintenance of herding cabins, annual depreciation of property, etc.) and if the total herd size of the Saameby is 4,000 head, then the price paid to the Saameby by the reindeer-owners for herding costs that year will be

$$\frac{600,000 - 480,000 \text{ cr.}}{4,000 \text{ reindeer}} = 30 \text{ cr./reindeer.}$$

In this way, the Saameby balances its budget.

¹ Note that, according to Prop. 1971:51, p. 179, the budget accounting of the Saameby (not its members) is to be completely governed by § 53 of the RNL and not by the law which governs the accounting of normal businesses (*bokföringslagen*).

Actually, payment of this herding fee takes place in two stages. In order to provide the Saameby with the funds it will need for the year's activity and purchases ahead, an initial, estimated price per head is required of the herders before the final budget is balanced. This estimated fee is based on the calculations from the previous year, along with estimates of possible new costs. The Saameby may vote to raise the daily wage or construct a new corral, for instance. This first stage in the herding-fee payment is the "advance responsibility" spoken of in the RNL, §§ 42 and 43. When the budget is finally checked, the herders must pay whatever is lacking or receive a partial refund if their initial payment was more than enough to balance the Saameby accounts.

On the other hand, should the receipts meet or exceed the costs for a particular year, then there is no need or legal requirement for a Saameby to impose a herding fee for that year. Should a Saameby have the good fortune to avoid massive industrial encroachment, so that it receives no monetary compensation for lost grazing, and should its herding be sufficiently intensive, so that few reindeer are lost to predators¹ and few calves become objects for auction as "whole-ears" (that is, they are marked by their owners and have notched ears), then there is little, if any, way in which such a Saameby can obtain any income with which to balance its budget, except by means of a herding fee. In short, should a Saameby function in the ideal way, then the main method of financing its costs (which might include the costs of a wage system) is by a herding fee. Moreover, if a wage system is to have the desired effect of evening out work inequalities, then it should ideally be wholly financed by a herding fee paid by owners *per head* of reindeer owned. Otherwise, if the wage is paid by compensation funds which obviate the need for a herding fee or necessitate only a small one, then the Saameby as a whole pays more for the big herder than for the small.

This may appear to be quite fair. After all, as the big herders themselves argue, the big herder has more reindeer to suffer from grazing encroachment than the small herder, and the chances of one of his reindeer being killed by a predator or auctioned for the Saameby's benefit are greater, compared with the risks run by a small herder, precisely in the proportion of their herd sizes (assuming that the intensity of care by big and small herders is equal). Thus, it might be argued that the big herder should indeed draw more benefit from the compensation paid to the Saameby collectivity. But the damages and losses caused by encroachment and predation do not necessarily injure herders in proportion to their herd sizes and, even if they did, because the flexibility of the small herder is less than that of the big herder, a 10 % loss of stock for the former may be

¹ Unidentifiable reindeer killed by predators are compensated by a sum which varies with the age and sex of the reindeer and is paid by the State to the Saameby. If the reindeer's owner can be identified, of course, the compensation goes to him.

disastrous, while the same 10 % loss for the latter might be easily accommodated.

The more collective herding tasks become, the less justifiable is the big herder's possible claim that his bigness is due to his own prowess and extra hard work. As Mr. Asplund argued in the debate on § 1 (see p. 314), the degree of a herder's rights is not simply commensurate to his herd size. It is of fundamental importance to realize that this dilemma of balancing rights according to property ownership (reindeer property) with basic rights according to membership category (herder and Saami), exemplified as between big and small herders, is *the same* as that between Swedes and Saamis as a whole, except on a hierarchically different level. That is, the need-greed of resource utilization by the majority culture must of necessity come to be weighed against the survival rights allowed a weaker minority culture if runaway systems continue unchecked. A system which breaks old bonds of property ownership and re-distributes property equally will in effect increase the flexibility of the smaller and weaker for a time. But, if runaway systems continue, equal rights and equal distribution will still not be enough to secure the survival of the system, culture or person. One simply cannot feed the masses on one loaf of bread, even if it is fairly portioned. As flexibility decreases for the majority, one might argue, the special rights to resources allocated for the protection of *any* culture to its membership in the *category* culture (regardless of its numerical strength) must be cut back. This is the painful result of runaway systems. Thus, if the Saamish herding system is to be maintained in the face of runaway encroachment, it must be allocated greater legal rights, at least until such time as it has come to renormalize its identity "freely".¹

Nonetheless, as mentioned earlier, the wage system, even if financed without a herding fee, can be of benefit to the small herder, if the daily wage paid for herding work is enough to make it worth the small herder's while. If financed largely by a herding fee, as in the ideal Saameby model, the wage system would help to even out work inequalities as well. As for cutting the costs of production by eliminating unnecessary labor for any task, its benefits have already been acknowledged. What then has hindered or blocked so far the institutionalization of wage systems in most of the Saamebys?

One might conjecture that, with their greater voting strength in these Saamebys, the bigger herders have found it advantageous to exploit the labor of the smaller herders. Yet, in order to continue such exploitation, the big herders cannot ignore the demands of the small herders for enough

¹ But will any holon renormalize if it is indeed free not to do so? One might argue that it is only through the tension between security and threat that the renormalization necessary for survival in a changing world can occur. Yet, if ethics are so stringent as to brook *not the slightest* imbalance in this tension, then we must be resigned to a changeless world and complete death.

incentive (maybe a small wage) to remain active in the field. Moreover, there will probably come a point for a big herder at which the amount of money taken from his herding fee which is lost to the small herder through the payment of his daily wage will be less than what the big herder would lose in time and money if he were *not* to support a wage system but instead stubbornly did the work himself or trusted that others would do it for him. The politics of the wage system will be discussed more fully in the following section.

I do not believe, however, that the lack of an institutionalized wage system, its occasional implementation and the suggested manipulation of it can (as yet) be held to stem from cut-throat politics within the Saameby. The presence or absence of a wage system does not necessarily indicate vicious, internal, Saameby conflicts, with herders pitted against each other to drive out the weak so that the fittest may survive. The reduction of herders due to other factors (for demographic reasons, such as scarcity of reindeer-herding women) may serve as a homeostat and make other methods of herder reduction superfluous. Currently, the flexibility for compatibility between herders in most cases has not been exhausted so far as to outweigh the benefits of a balanced wage system, on the one hand, or to bring about its use as a tool to drive small herders from the field through its unbalanced application, on the other. As I hope to demonstrate later, the current reasons for the unpopularity of a balanced wage system (one in which the daily wage is reasonable in proportion to the work done) are to be found in taxation policy. From a taxation point of view, previous to 1978 and the new form of taxation for herders, most herders, both small and big, found it highly advantageous to avoid a wage system.

In order to balance the Saameby's budget and to see if this will or will not require the imposition of a herding fee, it is essential to bear in mind the distinction between receipts and credit and between costs and expenditure, in keeping with the Swedish distinctions between *intäkt* and *inkomst* and between *kostnad* and *utgift* respectively. Knut Gustavsson clarifies these distinctions in the following manner:

When the Saameby buys a truck, it incurs an *expenditure* of 18,000 crowns. It is estimated that the truck can be used for four years, whereupon it is calculated as having a junk value of 2,000 cr. Thus, in four years the value of the truck depreciates from 18,000 cr. to 2,000 cr. or by 16,000 cr. On the average, that means 4,000 cr. per year. This yearly depreciation is a *cost* for the Saameby of 4,000 cr. per year . . .

The case is similar with respect to *credit* and *receipts*. Consider that the Saameby gets 20,000 cr. in encroachment compensation from a water-power company and that this compensation is meant to cover a 5-year period. Then the Saameby has a *credit* of 20,000 cr. but a yearly *receipt* of 4,000 cr. (Rennäringsgruppen, 1978, bilaga 16, p. 9.)

Obviously, a large purchase, such as a new herders' cabin, need not be

completely paid for in one year. Yearly costs must not exceed yearly receipts and, by keeping double-entry accounts of credit and expenditure, the balancing of yearly costs and yearly receipts will automatically balance the Saameby's total outstanding credit and expenditure as well. Thus the balancing of credit and expenditure does not mean that all debt has disappeared. The herding fee is exacted of herders to pay for the Saameby's outstanding yearly difference between costs and receipts, not its outstanding debts. Legislators have often confused the issue by failing to make the above distinctions. Compare, for example, § 8 of SOU 1968:16 (p. 12) with the RNL, § 40. In SOU 1968:16, costs are confused with debts. Fortunately, the matter was corrected in this instance before the proposed section became law, but elsewhere in the RNL the concepts are still confused.

The Saameby can take up loans or place capital in banks to accumulate interest. The Saameby may even vote to institute a fund and determine how much money is to be diverted to this fund each year. Such fund money may be accumulated for a specific purpose, to help to meet a large future cost, for example, so that the peaks and valleys of herding-fee amounts over the years can be somewhat evened out. As with the wage system, however, the creation of a fund may demand the levy of a herding fee, but not necessarily so. Similarly, the fund concept can also lend itself to internal Saameby politics and become a tool to force small herders from the field. By voting for the creation of a very large fund, big herders can drive up the herding fee.

As mentioned earlier, however, very few Saamebys have ever had to levy a herding fee, and this can only mean that costs have not exceeded receipts. Thus, the commonly heard complaint that the Saameby may not make a net profit is not true and derives from a misunderstanding. In any number of ways, the receipts may come to exceed the costs of a Saameby. This is especially the case when the level of encroachment, and thus encroachment compensation, is high. The existence of net profit, however, is a situation which is never envisaged in the RNL. The true complaint is that the Saameby has no formal rules concerning how to distribute any profits to its members.

According to the law concerning economic corporations (§ 6, point 10), the rules for economic corporations should define which principles will be applied to the distribution of resulting profit and in what way the corporation's dissolution shall occur and what shall be done with the corporation's remaining capital. No such correspondence to this is suggested with regard to the Saamebys. A Saameby's credits and debts must in principle be equal each year and distributable profit therefore does not occur . . . (Prop. 1971:51, p. 173.)

While profit may certainly occur, because of the Saameby's economic principles, no *distributable* profit is said to occur. This point is far from clear to the legislators themselves. Just three pages later on in the same bill, it is stated:

As just mentioned, the suggestion is based upon the principle that a Saameby's credits and debts shall balance each other at the end of the year. The net profit or loss which comes about during the year is then transferred over to the individual members. (Prop. 1971:51, p. 176.)

While costs are transferred to the individual herders, that is, distributed amongst them, profits generally are not. In a number of instances, the phrase "profit and loss" is thrown about as a cliché when actually it is inappropriate. As I shall attempt to demonstrate, the Saameby's supposed inability to distribute profit is most revealing, for this characteristic reflects its legal origin as modeled to a great extent on the law on the control of property of common responsibility (*samfällighet*) and not just the law on economic corporations. None of the propositions or investigations which led to the passing of the RNL mention the influence of the law on property of common responsibility (currently SFS 1973:1150) and its basis in the earlier SFS 1970:988. The only acknowledged model is that of the economic corporation. The similarities of the Saameby to an organization for the control of property of common responsibility and the differences between the Saameby and an economic corporation are highly significant for the study of the history of Saamish rights and the premises of the State with regard to herding and the Saamish minority. The following points demonstrating the Saameby's organizational differences from economic corporations are summarized from Knut Gustavsson's report:

- (1) A Saameby can engage in no economic activity other than herding (§ 9).
- (2) Membership is obligatory and limited to those with herding rights.
- (3) Saameby members share limitless responsibility for the Saameby's economic contracts. The herder is not responsible merely to the extent of his Saameby investment.
- (4) A Saameby cannot distribute profit.
- (5) A Saameby cannot be dissolved.

(Gustavsson, Rennäringsgruppen, 1978, bilaga 17, p. 2.)

Most of these points can be found directly in the law on property of common responsibility (SFS 1973:1150). On many issues, the correspondence between the RNL and SFS 1973:1150 is word for word. Amazingly enough, in some cases there is even correspondence in section number:

§ 43. If the available funds do not suffice for payment of clear and due debt for which the Saameby is answerable, then the board shall immediately charge advance payment according to § 42.

Should the board neglect its obligations according to this first section, then the members are jointly responsible for the debt. If the negligence is flagrant, then the community board upon demand of the creditors shall appoint a manager to charge and extract the requisite amount. The manager has the right to obtain remuneration from the Saameby decided upon by the community board. (RNL, SFS 1971:437.)

§ 43. If the available funds are insufficient for payment of clear and due debt for which the organization is answerable, then the board without delay shall call an organization meeting and there present a special debiting account and immedi-

ately extract that which is required.

Should the board's members neglect their obligations according to this first paragraph, then they are jointly responsible for the debt. If the negligence is flagrant, then the community board shall appoint a manager upon demand of the creditors to charge and extract what is required. On the question of compensation to such a manager, § 33, second paragraph, is applicable. (SFS 1973:1150.)

There are other significant points of agreement. In SFS 1973:1150, § 12, for example, voting power on financial questions in the organization is commensurate to each member's share of the common property. Yet no one member's vote can exceed one-fifth of the total assembled vote. In RNL, § 59, voting power is divided amongst Saameby members (class-I members) according to herd size. Similarly, no herder can exercise more than one-fifth of the total vote. This is a protection measure to guard the small herders against the big herders or property-owners to a certain extent, while still giving those with most property at stake the most to say about its administration—the dilemma discussed earlier.

Most important to this study, a direct correspondence is to be found between SFS 1973:1150, §§ 18 and 19, and RNL, § 9, already discussed at length. It is § 9 which bars the Saameby from engaging in any economic activity other than herding. It is also this same § 9 which gives the Saameby authority to organize herding for its members' collective good.

§ 18: The goal of the organization for administration of common property is to administer this property according to the reasons for its establishment.

This organization may not engage in activity which is foreign to the goal which the property is to satisfy.

§ 19: The administration of the organization shall satisfy the members' collective good. Each member's interests should also be considered to a just degree. (SFS 1973:1150.)

Here at last can be discerned the full, logical argument for the constraints of § 9 and the support given it by JoU 1971:37 (see p. 352). A brief example will help clarify the motives behind the law. If a number of land-owners find it difficult to gain access to their land, they may reach an agreement to build a road into the area. This road then becomes property of common responsibility and its administration is subject to SFS 1973:1150. There may be other land-owners in the area, however, who do not need the road or even strongly oppose it. Should the right to build the road be granted, then the other owners whom the road affects are brought into the administration of it *whether they desire it or not* (all herders *must* belong to a Saameby). Of course, once the road is built, it is wise also for those previously opposed to it to participate in its administration, and they have a right to such participation. It is also proper that the costs of upkeep for the road be divided amongst the members of the new organization, according to their share of land investment in it and benefit from it. Moreover, this road cannot involve the members of the organization in any net profit—rather it will only require costs for upkeep.

Theoretically, one might imagine that the road could become a source of income by making it a toll road or a race track, for example. This, however, would contradict the goal for which the road had been authorized: to give the land-owners access to their land. A profit-making toll road, a business, would never have been permitted under this law, and it is absolutely illegal (except for the government) to encroach upon another's property for such purposes. Thus, had anyone opposed its construction, the toll road could not have been built there, and certainly it would be illegal to force an opposing land-owner into the toll-road business. Hence § 9 in the RNL.

While the whole reason behind the desire for access to the land in the first place, the reason behind the creation of a road and a road administration, might be to begin massive, timber-cutting work in the forests at huge profits for the individual land-owners, the road organization *itself* (though composed of the same timber businessmen) cannot engage in profit-making activity for its own sake, nor usually gain profit to distribute to its members. Similarly, the reindeer herder's goal and hope is to make a profit from his herding, but the Saameby's goal is only to give each herder this opportunity (like the road), not to bring in and deal out profits itself. Any profits that the Saameby makes are usually to be retained for the rationalization of herding, funded for collective herding expenses.

There are, of course, basic points upon which the Saameby differs from other organizations over property of common responsibility. Among the most significant is the fact that it is the State that has demanded that all herders must be Saameby members. The Saamebys are created by the State and not by the herders themselves. In addition, it is the State that has decided what the goal of these Saamebys should be, not the herders. And the State has tied all the remaining "Saamish privileges" to this goal alone. In this manner, the Saamis' right of land use has become goal-directed and thus further restricted, for the goal institutes homeostatic controls directed not so much at preserving the rights of individual herders and maintaining a strong Saamish society as at achieving efficient reindeer management. The creation of the road in the above example was a means to an end; it gave access to valuable forest. In the case of the Saameby, rational management has become an end in itself. Had flexibility been greater, State rationality, Saamish culture rationality and herder rationality could all have been satisfied under existing policies of resource allocation. In today's situation, with no control of runaway systems, this is impossible. Priorities are legislated by the State for the State, with the inevitable, ethical dilemma.

The impracticality of the Saameby's distributing profit can in many ways affect the herding methods of a Saameby. As mentioned earlier, herders might see no reason to refrain from expenditure as long as they do not incur a deficit in the Saameby budget. Hobby herders and herders on their last legs might not see so much benefit in saving profits in the

Saameby treasury for future needs. By no means all herders are aware of the long-range consequences of Saameby spending policy. In this situation, the herders might well prefer to pay for helicopters, transport trucks and snowmobiles to do a job they would otherwise have done with far less mechanization. The practice of mechanized herding, in which herds are gathered together and driven from the air and in which migrations occur by truck, does not prove that such herding is most rational. New, vicious circles develop. Overly mechanized herding leads to a greatly reduced tameness grade in the herd. Herds which are *scared* into the corral by helicopters rather than being led and coaxed become very wild and finally impossible to control by any other means. Some mechanization leads to the escalation of mechanization. The herd which has been habitually scared by helicopters comes in time to necessitate noise machines fastened under the helicopters to be scared to the same extent. Reindeer which are habitually trucked from one grazing area to another in time do not know how to get from one place to the other on their own. They may scatter everywhere all summer and all autumn and still end up in a particular winter-grazing area.

Mechanization of this sort, in which extreme, enforced control is exercised only fitfully and the reindeer are otherwise left on their own (over-extensivity) and even hindered in forming more "normal" relations to herders and to the land, may result in loss to predators and lack of efficiency in marking. This in turn may lead to increased income for a Saameby as a whole at the expense of the individual members. "Whole-ears" are auctioned and payment goes to the Saameby treasury. Reindeer killed by predators are compensated by the State, and this money goes to the Saameby when identification of the earmark is impossible. Thus, the circle is completed and the impracticality of distributing profits may come to occasion further sources of profit—for the Saameby at the expense of the herders. Such a process is certainly not in line with a rationalization policy which is planned to raise living standards. On the other hand, it does foster an increased dependence of the individual on the collective Saameby organization. Of course, Saameby funds can be and usually are spent in such a way as to enhance the herders' income. But if all imaginable expenditures are made to enhance rationality and there is still money left over, some herders feel that it might just as well be wasted or spent on short-term comforts. The short-term gains of mechanization may lead to long-term problems. Instances in which a Saameby has paid all its debts and filled its coffers for future rationality expenses to the desired degree, while still having money left over, are extremely rare. Nonetheless, such instances can occur and, if the Saameby voters so desire, the profit can be distributed according to rules also made by the Saameby voters. Yet other factors, such as taxation, make such decisions extremely impractical. Because of this, the Saameby will usually try to see to it that profit never occurs.

To summarize, the Saameby has been modeled on different types of organizations. The result is a hybrid, whose legal status is quite confused. To have created the Saameby in the image of a profit-making and profit-distributing economic corporation and to have granted special Saamish rights to it would have been a case of over-much positive discrimination, according to the State. On the other hand, to create the Saameby in the image of an organization for the administration of property of common responsibility and to limit special Saamish rights to its goals alone seems to result in negative discrimination, which increases as runaway systems are left to continue uncontrolled. As runaway systems continually re-adjust the need-greed relation, an ethically just position can never be fixed. The search for a just balance in this situation has occasioned the evolution of a Saameby of singular legal form. Its uniqueness causes frequent problems in relation to other legal constructs.

State authorities as well as separate organizations use the expression "economic corporation" or "kind of economic corporation" to describe the Saameby or explain what type of organization it is. This occasions only confusion and unclarity. Should one use the concept of economic corporation about a Saameby, one is led to judge the Saameby's legal status from the perspective of the rules for economic corporations. This linkage has been especially evident in the last few years' reports and discussions on herding's taxation. It should therefore be an important duty for future advisors to emphasize strongly that the Saameby is not an economic corporation and to assert that the Saameby is a Saameby and its activity is totally regulated by the herding law. (Gustavsson, 1978, Rennäringsgruppen, bilaga 17, p. 3.)

Taxation: The Saameby — a firm with employees or a group of businessmen?

The legally confused issue of Saameby status causes difficulties with regard to the laws on work security, protection against injury, vacations and labor unions. For the economics of rationalization, however, this confusion is no more vital than with respect to income-tax laws.

It should be declared in the beginning that there is a fundamental difference between conceiving of the reindeer-owner/member as a reindeer herder employed by the Saameby, where he is surely himself a part owner in his position as owner of a certain number of reindeer, and conceiving of him as an individual, free businessman who practices a private herding business in connection with other similarly free and independent businessmen within the Saameby. This is of importance for, amongst other things, the voting-rights rules in the Saameby, for how the economic aid to herding should be formulated, and in regard to taxation. (Gustavsson, 1978, Rennäringsgruppen, bilaga 17, p. 12.)

In the rare instances in which the Saameby has managed to make a net profit, it may vote for distribution and compose rules as to how this is to be done. Prop. 1975/76:107, however, makes it clear that profit cannot be

distributed in any way without first being taxed at the Saameby level and then taxed again as income for the individual herder. Tuorpon Saameby tried such a distribution once, with such unfortunate results that it is doubtful if it will ever be tried again. Besides the double-taxation problem, much unnecessary enmity erupted between herders who considered that the distribution had been unfair. Indeed, it is almost impossible to conceive of a fair system of distribution, for the money which is to be distributed has come from different sources. One might argue that money obtained from one source should be divided equally amongst herders, while money from another source should be divided amongst owners according to herd size. Should a herder and his wife be given twice as much as a lone herder? Should encroachment-compensation funds be divided equally, even if the encroachment did not affect all herders equally? The problems are many and, because the law has avoided the issue, most Saamebys are glad to do the same. Instead, they find other ways of distributing profit, by raising the daily wage paid for herding work, for example, or by giving members compensation for their use of cars or snowmobiles for the collective good. In effect, the profit is eliminated before it actually becomes profit.

Yet, even this solution is not free from taxation difficulties. Prior to the implementation of the new taxation system, which was applied for the first time in the tax declaration for 1978, herders were allowed a very loose, general form of taxation (*schablontaxering*). No accounts or records were required of the herder other than his income from reindeer sales and his herd size. Even the estimated herd size would do. The term *schablon* refers to tax decisions based upon rough estimates or crude distinctions—stereotyped for easy handling. The authorities had ways of gaining a fair knowledge of a herder's true herd size, at least close enough for the relatively low accuracy demanded of the *schablon* method. Saami inspectors were often in the field and attended all reindeer counts. A former inspector, well versed in the supervision of reindeer counts, told me that, if one herder tried to give a false reindeer tally, another might be only too glad to correct it (cf. Rensund, 1968:41–42). Herders are not always the best of friends. Moreover, the inspectors were relatively well informed of a Village's total reindeer population through field experience and would know about any gross "oversights". The authorities would then produce an estimated calving percentage (depending upon the variable harshness of the herding year), upon which the herder would be taxed. That is, he would be taxed according to the figure obtained by multiplying the calving percentage by the herd size—the estimated number of calves born in his herd that year. The authorities would also estimate a herder's capital investment and work investment in his herd, for which he could make deductions. Members of Saamebys with long or difficult migrations were given somewhat larger deductions than those with easier working conditions.

According to the head of the Norrbotten County Administration (*Länsstyrelsen*), in the regulations presented on 2 February 1976, herders must declare as *income from employment* any daily wages obtained by them from the Saameby under § 44. This tax regulation says in effect that the Saameby is a firm employing herders at a wage. Moreover, this same regulation makes it very clear that the herding fee paid by the herders to the Saameby is to be *theoretically* considered as part of the capital and work investment estimated by the authorities which, under the *schablon* method of tax assessment, is deductible from the herder's *business income*. But the tax a herder pays on income from his herding business (meat sales primarily) is at a lower rate than the tax applied to income in the form of wages. This means that the money the herder pays to the Saameby for herding costs is deductible from the herder's business income, but as wages it is taxed as income from employment. Obviously, in the ideal and most probable situation, in which herding fees are accountable as daily wages, the herder suffers from this taxation system and, for this reason, herders for whom the evening out of work inequalities is not vital may prefer to avoid the wage system.

In actuality, however, the situation was made even worse by the fact that those herders who had paid a herding fee to their Saamebys, according to the estimates of the authorities for the *schablon* tax assessment, received the same deductible allowances for capital and work investment as those who had paid no herding fee—but no more. In effect, the herding fee was actually ignored as a deduction (although theoretically it was said to be included in the estimated deduction) but taxed as income from employment upon return as wages. Thus, the herding fee was in fact non-deductible (under the *schablon* method) and this naturally would mitigate against the institutionalization of a wage system requiring a herding fee, regardless of which category of tax the wage was to be classified under.

Various organizations protested this system (Lantbruksstyrelsen on 1 October 1975 and Lantbrukarnas Skattedelegation on 1 September 1975) and demanded that the wage earned by the herder be taxed as business income. The SSR in its protest on 30 August 1975 against this system demanded that herders should not be considered to be employees of a Saameby. Their herding labor is not service to a firm.

For the wage and herding-fee systems which existed in certain Lappbys in Arvidsjaur even before the creation of the RNL and which served as models for it, this confused taxation proved deadly. They discontinued their wage systems. Thus, taxation policy destroyed the very program which the RNL sought to establish. This adverse taxation of the wage system had begun in 1971 as soon as the RNL focused attention upon it and continued for 6 or 7 years thereafter, until wheels were set in motion for a new tax reform for herders which would eliminate the old *schablon* method. Finally, the National Swedish Tax Board (*Riksskatteverket*) con-

sidered the problem and ruled that income obtained in wages according to § 44 should be taxed as business income, while any income obtained from the Saameby for other, extra, part-time work or work of an administrative nature should be taxed as income from employment (see Riksskatteverkets report on 18 October 1977, Dnr 1004/77-302, point 3.7). Thus, in some ways, the Saameby is an employer and in other ways it is not.

While the category under which daily wages were to be taxed was cleared up, the much greater injustice concerning the actual non-deductibility of the herding fee was not set right until the *schablon* method was eliminated in the tax declaration for 1978. Under the new tax law, estimates of capital and work investments are no longer made for the herders by the authorities. Herders now document their own investments, *expenses* as well as income, and therefore can justify herding-fee deductions.

As Knut Gustavsson points out, however, the problem of the Saameby's legal status is far from clarified. All that has been clarified is to which category wages earned under § 44 are to be referred for taxation purposes. Other taxation problems persist. One still cannot say whether or to what extent value-added tax (*mervärdeskatt*) will apply to snowmobile compensation payments from the Saameby to the individual herder or to what extent the Saameby or the individual is responsible for paying the social-welfare charges for herding work (see Gustavsson, Rennäringsgruppen, bilaga 17, p. 27). The baffling actions of the "State", which at the Parliamentary level inspired a wage system and then at the local level penalized it, have caused many herders to distrust the wage system and the RNL in general.

The controversy over the Saameby's legal status has a bearing upon rationalization goals and not merely from the viewpoint of taxation. The controversy is also of significance, as it relates to the question of enforced or free adherence to rational goals. Those who tend to regard the Saameby as an employer feel that the RNL 1971 has automatically made all herding organizations into corporations under the wage system (though not necessarily of the economic-corporation type defined by the law in 1951). From this viewpoint, rationalization is enforced by law and the Saamebys are held responsible for producing detailed financial accounts and for striving to attain rational goals.

Yet the ruling upon SOU 1968:16 states that the introduction of the wage system or of new, rational, herding methods should not be a matter of force. The law demands only that the Saameby shall serve the herders for their collective welfare and outlines the measures which herders must take if the budget shows a deficit or in other respects the rationalization measures which they should take *if* the herders decide to move in this direction. The Saameby is given powers to move towards such a rationalization if it is the will of the majority: "It is the Saameby itself which by majority rule has to make the decision concerning the form by which

herding in its area shall proceed" (Gustavsson, Rennäringsgruppen, bilaga 17, p. 27).

Although the State does not demand forcible rationalization by the RNL, powerful incentives can be applied. As already noted, financial aid for the Saameby in the form of government "rationalization support" will not be granted unless the Saameby can demonstrate its thereby enhanced efficiency, as approved by State standards. The government subsidy for reindeer meat, 100 cr./head, is designed to stimulate calf-slaughter. In order to obtain catastrophe aid to help them to bear the massive loss of reindeer during a bad winter, the herders must prove that they have done all that could be expected of them by the authorities to combat losses. Thus, there are numerous points, including even government loans to individual herders for the purchase of stock, upon which authorities can make rationalization to some extent a conditional demand.

With the Act of 1976:925 actualizing a change in the law on municipal tax (1928:370), herders are to be taxed as businessmen. This change in taxation policy necessitates detailed accounting for all capital, income *and expenses* by each herder. Actually, the new taxation policy for herders is the result of the combined effect of two new acts. The first imposed on herders the responsibility of keeping business accounts by eliminating an earlier clause that freed very small businesses from this duty. The second required that herders file a tax declaration (beginning in 1978), something that was voluntary previously. Those who had not declared their incomes (by far the majority of herders) had been taxed according to the *schablon* method. It was the requirement for the keeping of accounts which made possible the requirement of a tax declaration for all herders. For a brief survey of the changing taxation policy for the Saamis, see Per G. Labba (*Samefolket*, 1978, no. 2, p. 17).

It is impossible now to grasp the actual effects of this new system or to know which herders are favored by it. Certain consequences, however, are assured. With the new tax policy, herders are taxed not only on an increase of the actual number of reindeer in the herd per year, as before, but are also taxed on the appreciation of their old stock. Of course, in the case of a bull reindeer, its appreciation will not only bring the herder a loss by taxation but will also bring a gain when the bull is sold. It can be sold for more. Consider, however, the case of the cow reindeer. The herder must pay a tax on its appreciation, but he will not get anything back. Female reindeer are generally kept for breeding purposes and not for meat sales. This "cow-tax problem" is one which the herders share with all farmers and livestock owners. If appreciation is high, a very serious tax burden can be placed on the herders, one which small herders may have difficulty in carrying.

The small herder especially is threatened in yet another way. One consequence of the new taxation policy will be to raise the actual subsistence minimum in reindeer needed by herders to retain the same living

standard. Now that the tax system demands accounting for the herder's purchases as well as for his income, "black" reindeer sales will not be as successful. Indeed, this was one of the motivating factors behind the new tax law. Under the old system, some herders might slaughter and sell some of their reindeer without bothering to declare this income for tax purposes. Under the new system, however, a herder will have much explaining to do if the income figures he presents do not match the expenses he must document. Once again, it is the small herder who will suffer most from the demands of strict honesty.

As the RNL 1971 created a new "judicial person" in the shape of the Saameby, so the new taxation law has created a somewhat new "judicial person" out of the Saameby member, a businessman. Just as the legal status of the Saameby is confused, so is the status of the Saameby member. The new taxation policy is presented as a benefit to herders and as a means of helping them to attain a more planned and rational herding economy through the maintenance of proper accounts. The need for proper book-keeping amongst herders was proclaimed in the early 1960s. To demand such detailed accounts of herders who under the *schablon* form of taxation had little, if anything, to calculate is quite a jump. Herding authorities have started many training courses for herders on the new form of taxation, but there are few qualified to teach it, many questions are still unclarified and therefore few herders are able to master it. In making out their 1978 tax declaration, many herders had to pay the cost of a lawyer's professional help. Although it is too early to say at this date, many herders fear that a taxation system designed to promote rational ideals will also be designed to stimulate the expulsion of the small herder from his herding business. Even though this is not the conscious goal of the new policy, it may have this effect nonetheless. If this is so, there will be even more cause to question the State's denial of enforced rationalization.

The self-rationalizing Saameby

Throughout this study, I have emphasized repeatedly how in different contexts Saamish consumer categories are reduced and the utilization of resources is rationalized in order to ease a situation in which the resource – consumer ratio has neared its critical limit. The need for this kind of measure has occurred repeatedly in the course of Swedish expansion into the north, but it has been applied at different levels of category, involved different kinds of resources and been implemented in different ways. In this section, I wish to shed some light on the most recent of these measures for the reduction of consumer category. In order to demonstrate the principles involved, I have been forced to speak in rather simplified

terms of "big" and "small" herders in opposition to each other. Of course, this is a very coarse distinction, chosen for the easy penetration of complex legal texts. While in reality herders can hardly be classed so crudely, I do not think the reader will have any major problems in fitting a more realistic situation to the legal system, once its basic principles have been explained.

I wish also to point out in a similar vein that big herders and small herders are not by any means always so opposed to each other as this discussion of their competitive relations might seem to imply. There are a vast number of axes dividing herders along other lines, just as there are reasons binding them together, regardless of herd size. But the focal criterion for consumer-category reduction, as programmed by RNL 1971, is *herd size*. Even though big and small herders might currently be the best of partners and even though the weapon inherent in the latest form of category reduction has not yet been used, I consider it highly important to grasp its principles. Not only does it seem to recapitulate the historical dilemmas of Saami-Swede interaction, but the day may not be so far removed when it will be put into practice.

Some of the reasons for resistance to the wage system have been shared by herders in general; others have been put forward by segments of the herder population only, big herders or small herders, for example. The position of any individual herder on this subject will depend not only on his own immediate economy, but also on the total context of the Saameby economy and reindeer population, plus the economies and herd sizes of his neighbors. Unfortunately, and contrary to its original motivation, the wage system can lead to the "rationalizing away" of herders. In this section, I shall consider this process and describe further how and why herders might resist it. Nonetheless, the legal structure of the Saameby permits only a certain degree of resistance. In this section, I shall also investigate the possible manner of capitulation to a "process of weeding-out" herders, a capitulation which is inherent in the Saameby structure (though yet latent) and which will arise as flexibility for herders decreases. The important point is not only what has happened, but also what can happen or, rather, what is already structured to happen by the Saameby's formal regulations regarding power distribution (membership categories and voting rights).

§ 11: Members of the Saameby are

1. Those with herding rights who participate in herding within the Saameby's grazing area,
2. Those with herding rights who have engaged in herding within the Saameby's grazing area and had this as a steady profession and who have not turned to another major form of income-earning,
3. Those with herding rights who are married to a member specified under (1) or (2) or are children of such a member living at home or who are widows or widowers or under-age children of such a deceased member (RNL 1971, i.e. SFS 1971:437).

These three classes of Saameby membership have different rights.¹ Section 59 of the RNL specifies that, besides the election of the Saameby headman and other administrators, such as the treasurer, only those members who are active herders, that is, class-1 members, have voting rights, according to their herd size. The criteria of distinction between different class members involve the valuation of herding activity (participation) and income from this activity, as opposed to income from other sources earned by the person in question.

The new taxation system, with its demand for accurate accounts for each herder's income and expenditure, means that the government will be put in the position of knowing precisely what each herder bases his livelihood on. This knowledge is pertinent to the class of membership each herder holds within his Saameby. By means of the information available from the new taxation system, the authorities (and maybe the Saameby) are provided with a concrete means of specifying who qualifies as a class-1 member and who should be demoted to class-2 status or even removed from Saameby membership entirely. Those demoted to class-2 status lose voting rights on many important issues, and those who must leave the Saameby lose hunting and fishing rights and can retain only restricted contract-reindeer-ownership rights.

Herders fear that such re-classification of members will be done by the authorities, but this fear, according to Mr. Lithander, the chief of the Reindeer Management Department in Norrbotten, is groundless (personal communication). For the authorities to step in here in this respect would signify a return to pre-1971 law. Today, the checking or interpretation of membership-class criteria is left to the Saameby. It is the Saameby which decides whether one is a member or not and, if so, of what class. This does not mean, however, that herders need not fear re-classification. There are big, active herders for whom a thorough review of Saameby-membership listings and a tightening of the criteria for expelling the "hobby herder" could be very beneficial. Should herders desiring such a "weeding-out process" gain a majority vote in the Saameby, the Saameby itself might initiate re-classification. As will be further explained, various types of economic pressure can be brought to bear on the Saameby to force it to try to rid itself of "burdensome" members.

Obviously, those herders who stand to be demoted in membership status, should the Saameby begin to exercise this power, are the small herders. Those with few reindeer are naturally forced to seek income from other sources and, where the ratio of herding income to other income is

¹ Throughout this study, when I refer to Saameby-membership class, I mean those class distinctions made by the RNL, § 11. Other systems of classification have been introduced, notably that used in the Saameby's reindeer-count lists. These lists group class-2 and class-3 members together and make a distinction between two types of non-members—those with and those without herding eligibility.

small, one can question the small herder's steadiness in the herding occupation and ask whether he has not gone over to some other major form of income-earning, that is, if he should not be expelled from Saameby membership (cf. *Rennäringsnytt*, 1980, no. 3:4–5). A small herder threatened with expulsion because of low herding income must cling to herding rights based on the participation criterion, but, as will soon be shown, even here he is extremely vulnerable.

It may appear that the demotion of a member from class 1 to class 2 might not be of such great significance to a herder. He is still allowed, as a class-2 member, to have an unlimited herd size, as is any class-1 member, and he shares the same hunting and fishing rights as well. What happens, however, if the herd population increases drastically, as it did in the early 1930s? Should herd size in a Saameby reach the rational limit allowed, cutbacks must be made, and the form these cutbacks will take will depend upon the Saameby vote, that is, the vote of the class-1 members.

The contract reindeer of non-members will be the first to be further limited or barred entirely from grazing consumption, but, should pressure persist, it would be natural for the class-1 members to vote for increased adherence to the standards of participation, or even to raise the amount of participation deemed necessary for class-1 status.¹ It might even be possible for the Saameby to vote for a reduction of the herding rights granted class-2 members, although this would probably conflict with the basic rights stipulated in the RNL. In any case, as it is today, many Saamebys have allowed inactive owners to remain class-1 members even long after they have begun to receive major financial support from non-herding sources. As long as their presence has not hampered the other, fully active and valid, class-1 members in any major respect, they have been allowed to stay on. Similarly, many class-2 members (and even class-1 members) would actually not be Saameby members at all if the Saameby chose to enforce the law. These members have often not been re-classified out of a feeling of Saamish solidarity. Active herding parents, for instance, have usually not wanted to deprive their inactive, other-major-income-earning children of Saameby membership.

Yet, given crowded conditions, big herders (usually class-1 members) must insist upon first preference for grazing, as it is they who both base their major livelihood on herding and are most active (note the current problems of Handölsdalens Saameby, discussed in *Samefolket*, 1979, no. 14, p. 10). Lacking voting rights, class-2 members will have nothing to say in the matter and the small herders' vote will be defeated, should the majority choose to apply economic pressure to less active herders. The manner of such pressure will be dealt with shortly. After squeezing inactive, class-2 members, the majority might turn against small, yet minim-

¹ At least one Saameby has established the principle that herders should work at herding for one day per year for every two reindeer they own, as a minimum.

ally active, class-1 members, should flexibility continue to decrease. If the total number of reindeer owned by class-2 members is not so great, pressure might be brought to bear first on the small, class-1 members. After these have been reduced to class-2 status, then pressure will be applied to this category. The most probable development would be to apply pressure to all less active herders at once, be they small, class-1 members or class-2 members. The kinds of pressure will depend on the distribution of resources within the Saameby and the degree of competition for these resources.

There may be a number of ways in which big, active, class-1 members can squeeze out small, class-1 members, as well as class-2 members (even fully qualified class-1 and class-2 members), should crowding, for instance, force the issue. The majority might choose to specify a minimal activity requirement for class-1 membership or raise an already existing minimum. This will, of course, put many more small herders beyond the limit at which they can afford to cling to class-1 status. In short, small herders who have herded minimally nonetheless with a herd size below the subsistence minimum and with an economy supplemented by other sources of income will then be pressed to the point at which they must lapse to class-2 status at least and probably even give up Saameby membership altogether, because of their necessarily sizable, non-herding income.

Rather than specify a minimal activity requirement for class-1 status, the class-1 members may vote to raise the wage paid to herders for collective tasks by a sizable amount. This, in turn, may demand a commensurate rise in the herding fee per head demanded of each herder to make the budget balance. If the Saameby does not already have a wage system, class-1 members can vote to institute one. The larger, more active, class-1 members are in a position to recover the money they pay to the Saameby as herding fee, for they can work for it and are paid by the Saameby under the wage system. Recovery of the money by class-2 members or small, hobby herding, class-1 members who are not equally active in the field, if active at all, would be a dubious proposition. In effect, small, class-1 members and class-2 members (even class-3 members) would have difficulty in affording the high herding expenses with respect to the low return they would obtain in herding income. In this way, they can be "rationalized away".

It might be argued that a raised wage for herding work will instead be a boon to the small herder, an incentive for him to re-activate or to increase his activity. In some cases, this may well be so. But it is the Saameby which by § 9 exercises the right to organize herding work for the collective good, and therefore the Saameby which decides which herders can do the job and are worth their wage. A small herder who has been inactive for years and does not have much skill or never had much skill in herding cannot simply demand the right to wage-paid work. If he does, the Saameby can refuse him the right.

In accord with what Renutredningen has stated concerning the duty and the right to participate in herding work and general activity of the reindeerby (Saameby), it should be understood that, in our proposal, the question of the right for a member or another to obtain a work position from the Saameby is left to the Saameby's own determination (SOU 1968:16, p. 99).

Moreover, the Saameby will demand for many jobs an investment of hard work lasting weeks or months. This is something few herders who have grown inactive are ready to jump into. They might not be able to take leave from other jobs. While the wage system (especially a high wage) can be a boon to the small herder who has stubbornly kept up a high degree of participation and would try to do so with or without a wage, it is certainly not a boon to the small herder who must pay the fee but is not in a position to work to earn it back.

The step-by-step division of Saamis into different categories, followed by the reduction of the rights of one category for the benefit of another, evident in Saameby-membership classification, parallels the precedents of earlier herding law quite closely. The reduction of the hunting and fishing rights of the settled Saami population in 1886, the restriction of their herding rights by limitation to contract-reindeer-ownership possibilities in 1917 and the gradually diminishing, herding eligibility imposed by § 1 in the Act of 1928 have followed this basic pattern.

The difference in the contemporary rationalization program is that with the construction of the RNL, which places the management of the wage system (and thus to a great extent the herding fee as well, though indirectly) in the hands of class-1, voting members and distributes voting power according to herd size, the squeezing out of the small herders is programmed to occur as an internal Saameby affair. It could happen at any time but probably will not as long as crowding is not actual or as long as the small herders pose no great difficulties for the big herders—as long as there is enough flexibility. Small, active herders are even welcomed, as they often have to do more than their share of the work. While the wage system designed by the RNL was partially intended to help to equalize the injustices of this situation, the same law, with its criteria of membership status and its organization of the voting system, can force many small herders to “participate” more than they can really afford to, simply to retain class-1 status and to assure themselves of the Saameby's permission to work for the daily wage. Thus, the mere institutionalization of a wage system does not necessarily imply a beneficial effect for the small herder. It all depends on the size of the wage, the size of the herding fee it may require, and the Saameby's policy of work distribution. The small herder's labor can be exploited by quite a number of arrangements.

It is an easy matter to create a sense of solidarity between herders with all sizes of herd as long as grazing is not scarce and the small herders prove no burden to the Saameby. Should grazing become scarce, or should the small herders, through lack of herding-work investment and the resulting

over-extensivity of their reindeer, cause real trouble for the big herders, solidarity can melt away very fast. The mechanism of the Saameby's voting system, in conjunction with membership classification and the wage system (or the Saameby fund possibility), are poised ready to thresh the "chaff" from the herding occupation.

Recently, many of the issues referred to above have been dramatically illustrated by Ivan Kitok's hunger strike in Stockholm in the spring of 1980. In brief, Kitok was once an active herding member of Sörkaitum Saameby. He left the Saameby (although apparently he always owned some contract reindeer) when his herding enterprise began to fail and took employment with the State Power Board and later with the State Railways. For a number of years, he has sought re-entry into his old, ancestral Saameby as a full-time herder, but he has continually been turned down by Sörkaitum Saameby.

In his hunger strike to gain the ear of the Swedish Parliament, Kitok condemned the Herding Act of 1971 for creating a "class society" ruled by big-herder "dictators" within the Saameby, who have gained power and now want to establish their own private herding kingdom. Kitok challenged the form of legislation which can rob a man of his culture and identity. While many other Saamis have condemned the occupational-cultural split before him, Kitok's action succeeded in bringing these problems to national attention.

If Kitok had merely been eligible for herding rights through a grandparent, his case would never have drawn so much support from other non-herding Saamis and even from herders. Kitok, however, had himself been raised in the area and had herded there before. He was forced to leave when his fortunes declined, and many considered that, under the circumstances, he should be welcomed back to his old Saameby. With the Kitok case, dammed-up feelings seemed to burst out and many pent-up quarrels started over legislation with a wide range. Kitok and his many supporters—especially small herders and non-herding Saamis who felt themselves deprived of their rightful heritage—formed a vocal group, demanding that Kitok be admitted to the Saameby and that the State review the law, so as to protect the small herder and combat the formation of large, herding monopolies.

Despite all the publicity, the Saameby voted to deny Kitok entry. Naturally, there is much more to this story. All manner of personal animosities and generation-old family feuds might well lurk behind this situation. The point here is not to establish whose case seems most sympathetic, Kitok's or the big herders' of Sörkaitum, whom he calls its dictators, but to see by what method Kitok was denied Saameby membership and to understand the deep problems created.

The vote which excluded Kitok was that of the Saameby class-1 members and was based on their individual herd sizes. As mentioned earlier, the RNL does provide some protective clauses to counterbalance big-

herder voting predominance. One such point already noted is the regulation that no one herder can himself represent more than one-fifth of the total assembled vote on any issue, according to the RNL, § 59, point 4. Another protective regulation states that herders are to be given one vote for each newly started herd of 100 head. Hence, a herder with 199 head has only one vote, while a herder with 200 head has two votes. It was suggested in the 1960s that the rule should be one vote for each newly started herd of 200 head, but the authorities considered that this policy would favor the smaller herders too much. Nonetheless, while Kitok was defeated in the vote graduated by herd size, he claimed that he would have been victorious had the Saameby voted on the one-man, one-vote principle.

The investigation secretary of the Department of Agriculture (by which reindeer-herding is administered), the former Saami sheriff Åke Wikman, declared that Kitok should appeal against the Saameby's verdict, for the Saameby had voted wrongly (and therefore has voted wrongly for the past seven years). According to Wikman, "The entire debate over his (Kitok's) membership in Sörkaitum Saameby is founded on a wrong interpretation of the voting rules . . . when it is a question of voting about membership applications, the one-man, one-vote rule should apply" (Wikman, *Dagens Nyheter*, June 11, 1980). In this statement, Wikman groups the membership-question vote with the vote of Saameby officials under the one-man, one-vote rule as per RNL, § 59, point 1. Thus, he wishes to distinguish matters of membership and Saameby board positions from the other, largely economic issues for which the graduated vote was designed.

Yet the RNL, § 59, point 2, does not really support Wikman's interpretation. Here it is stated simply that "in all other questions", i.e. other than the election of Saameby officials, the graduated vote of class-1 members only is to apply. Lars Pittsa, the headman of Sörkaitum, denies that the outcome of the vote would have been any different if the one-man, one-vote principle had applied. Most importantly, Pittsa makes it clear that in Sörkaitum, *where the rational reindeer population has nearly been reached, there is no sense in pretending that membership questions are not also highly important economic questions* (Pittsa, *Samefolket*, 1980, no. 5, p.18).

The Minister of Agriculture, Mr. Dahlgren, maintained that the Kitok problem was an internal Saameby affair. Because the Saamebys are left largely to their own devices in determining which voting form to use in different contexts, many different policies have evolved, and it seems that each herder within any Saameby has his own interpretation of the law's intention. In Tuorpon, for instance, the one-man, one-vote system is used regularly, even in deciding financial questions. The graduated vote has hardly ever been used. Only if a herder should make a special point of demanding a graduated vote must this system be used. In Tuorpon, such a demand will be made only when group politics have reached a deadlock

over some vital issue, and to demand this form of voting right is regarded as a major escalation of hostilities. The other members might at first refuse to comply or they might argue that the graduated vote is not meant to apply in that situation etc. A telephone call to the herding administration may be necessary in the middle of the Saameby meeting to straighten the matter out.

It can be argued quite appropriately that the legislation on big-herder voting dominance is not due to the fact that the big herder has responsibility for more reindeer but because he pays more money to the Saameby in herding fees. This attitude is supported by the observation that contract reindeer are not counted in determining the voting power of their "host herder".¹ But what should be the voting system of a Saameby which has not had to institute a herding fee? The RNL seems to assume that the economic organization it promotes is actually in practice. The explanation of the RNL given in Prop. 1971:51 is not clear on this point.

The fact that the voting right in many questions is reserved for the active herding members leads the experts to the position that the voting right upon these questions is differentiated with regard to the *interest* which each member has in the Saameby's activities and to the size of his contribution to the costs thereof. . . . in the Saameby, the influence of any person on the voting meeting should be graduated according to this person's *responsibility* to contribute to the Saameby's expenses. (Prop. 1971:51, pp. 180-81; my italics.)

To what degree does the size of an individual's reindeer herd constitute the size of his *interest* in Saameby activities? Is the vote graduated because the herder supposedly does actually pay a herding fee to the Saameby per head or because he merely has the responsibility to do so, if necessary, should the budget so require—the *responsibility* to pay a portion of the

¹ At times (for example, in the Saameby's reindeer-count lists) the reindeer of inactive Saameby members (class-2 or class-3 members) cared for by an active, class-1 herder (usually a relative) are referred to by the same term, *skötesrenar*, as are the reindeer owned by non-members. The term *skötesren* means actually "cared-for reindeer" and can therefore apply to the reindeer of both categories. I have used the term "contract reindeer" here to indicate reindeer of the latter category only, those owned by non-members, and it is these reindeer which are not counted in determining the host herder's voting power. The reindeer owned by inactive, class-2 and class-3 members will indeed be counted, to their active, class-1, host herder's voting benefit.

Which herder is accounted as caring for an inactive member's reindeer can be quite significant for a group's total voting power. If there are two active, class-1 brothers, one having 291 head and the other 280 head and their sister, a class-3 member, has only 10 head, counting her reindeer with her first brother's herd will give him an extra vote, while counting them with her second brother's will not add a vote.

Note also that the private, contract-reindeer transaction between non-member and host herder reflects pre-collective herding relations. The more collective grazing utilization and work organization become, the more such transactions actually come to involve the entire Saameby. Some Saamebys have therefore begun to demand a collective "contract" (i.e. payment to the Saameby) with the contract-reindeer owner, over and above any private transaction made between contract-reindeer owner and host herder.

Saameby's outstanding costs in proportion to his share of the Saameby's total reindeer population (RNL, § 42)?

As the case of an inactive herder who has not had to seek other income sources is rare (maybe a retired herder on old-age pension), as is the case of the fully active herder whose income is not primarily based on herding (one who works to a certain extent for the mere love of it), it becomes plain that even class-1 membership, based on the criterion of participation, is designed for those whose major income is from herding. Of course, a herder can participate in herding work in so far as his total economy is based partly on herding income. But there comes a point on the scale of herding activity below which the so-called "extensive spiral" is generated. That is, if a herder works with a herd below a certain minimum, then his return will decrease, leading to even lower work investment etc. Over-extensivity, with all its problems, will set in, and finally the herder will only be able to afford token participation. Although the Saameby may tolerate his presence, such a herder continues dangerously close to the brink of Saameby membership. And if the degree of his participation is questioned, the small herder caught in the extensive spiral must be careful lest he spend too much time on other forms of livelihood or prove too prosperous in them if he is to cling even to class-2 membership. Herders themselves comment that this is one of the reasons why their marriages to Swedish women with steady job incomes is so advantageous and has rapidly increased, now that the modern duties of a herder's wife can be fulfilled by Swedish women as well as by Saamish women. Their income allows the small herder to be active beyond his (herding) means.

Ideally, in the long run, one cannot afford to be a Saameby member unless one has a fair-sized herd, and one is not allowed to have more than a limited (usually small) number of contract reindeer unless one is a Saameby member.¹ This means, of course, that the recruitment of new herders is a difficult task indeed. It is almost impossible for them to work their way up slowly to a decent herd size, as in the old days. It is best for the new herder of today to enter the field with his pockets full of cash and buy up a good-sized herd immediately. This is a point admitted by the herding administration in making a case to increase financial aid to herders for the purchase of reindeer stock. As mentioned earlier, it was suggested that such aid be reserved for serious, development-oriented herders, those who can most readily achieve a herd size in accord with the precepts of structure rationalization and the specified goal for living standard.

A rational reindeer industry demands entities of a certain size. When it comes to building up new business entities, it is important that an adequately large herd size

¹ Previous to 1971, under the Reindeer Grazing Act of 1928, each contract-reindeer owner could own no more than 20 head. Under the RNL, such limitations were left to the discretion of the Saameby, but, on the whole, the limitations are still about the same.

can be established already from the start, if the business entity is to be able to demonstrate profitability. (*Handlingsprogram Rennäring*, Länsstyrelsen i Norrbotten, 1979:18, p. 15.)

In short, the new herding recruit needs loans, and loans for herding are very hard to come by. The government has a loan program, but this is the same government that proposed to "rationalize away" 30 % of the herders and may not be favorable to creating yet more. Nor is the Saameby always willing to accept more herders, especially if flexibility is limited. Applicants have often been turned down. Group politics can play a big role here. One group might vote against an applicant if it is known that he will become a member of another group and thereby alter the voting-power distribution to the other group's advantage.

The entire system, whereby hired herding hands have worked themselves up to independent herder status, has been generally eliminated by the combined effects of the RNL and taxation policy. If such a hired hand is to build up a herd, he must be a Saameby member already or become one as soon as he owns more than the contract-reindeer limit, usually about 20 head. It would be foolish for a big herder to hire such a smaller herder by private contract, when under the RNL the Saameby as a whole is responsible for work allotment and wage inducement. Only if a herder were to feel that his own interests were not properly satisfied by the Saameby might he be tempted to hire help on a private basis. But a herder who hires herding help must pay a large employer's tax, and the more collectivized herding tasks become, the weaker become the motivations for private, herding-hand contracts. The herder who pays for extra help himself wants this help to serve him alone and not the entire Saameby, for in that case the Saameby and not only the individual should be the employer.

If one takes a figure of 300 head to represent the current, average, subsistence minimum in reindeer for a family, then a *minimum* figure of about 150 head is necessary for a herder to support his family with herding still counted as the *major* income source. There is a big gap between this figure of 150 head and the 20 head usually allowed to one who is not a member and who has some other major income source. Either all members with a herd of less than 150 head are overlooked by the Saameby but are latently illegal or else they have managed remarkably to live on almost nothing. Alternatively, those who engage in some other major form of income-earning to avoid poverty and who can therefore retain membership only as class-1 members have managed to resist the extensive spiral and put in some degree of herding participation. Logically, the smaller a class-2 member's herd, the less income he can make from other sources, if he wants to retain Saameby membership. Even class-1 members, whose participation is so minimal that they retain their status only by the goodwill of the larger herders, would feel their position further threatened if their non-herding income were large. In that case, they would not be able

to fall back upon class-2 membership. It would only be asking for trouble if a small, minimally active, class-1 herder were excessively rich.¹ The Saameby might be willing to be lenient with regard to the enforcement of membership classification when those who would benefit from this generosity are needy. Hunting and fishing rights might be vital to their economy. But if this generosity only benefits the rich, so that hunting and fishing rights become nothing more than a sportman's luxury, then the Saameby will probably not be inclined to be so lenient. Note that this argument is almost identical to that offered by the State in defense of the restrictions of § 9.

Most Saameby members with small herds, however, are far from rich. To them, the government's decree that herders are free to build economic organizations and earn income outside of the Saameby (see p. 353) seems like a bad joke. Should they do this with any success, they might no longer be allowed to be Saameby members. There seems to be truth in the saying that "the small herder must be poor in order to be a Saami".

Fortunately for a great many herders, the law is bypassed by many Saamebys with regard to strict membership classification.² Outside income has not been minutely compared with herding income. The degree of participation is not yet carefully checked in most Saamebys. Although, according to Mr. Lithander (personal com.), the chief of the Reindeer Herding Department in Norrbotten, the meaning of the law's stipulation of class-1 membership is that the time which a class-1 herder spends herding should be greater than the time which he spends in any other job, many Saamebys count even a minimal activity as enough to justify a herder's class-1 ranking. It is very understandable that the new taxation system should appear threatening from this respect as well. The RNL forces a large part of the herding population to exist near the brink of illegality. The new taxation system will force them to declare this openly.

It is difficult to summarize the development of an institution and a management program that are changing as quickly as the modern

¹ It is interesting to note in this respect that, in Tuorpon, the number of contract reindeer permitted per contract owner in 1979 was reduced from 20 to 10. The reduction was not due to crowding, for Tuorpon had then a total herd size of only one-half its rational reindeer population. Instead, the move was made in order to keep all "whole-ears" from being bought at auction by contract owners who, because of other main jobs, had lots of cash and drove prices so high that the active herders had no chance to compete.

² In fact, for many Saamebys there is no true membership list at all. The list of owners of the reindeer in a Saameby—the annual, Saameby, reindeer-count list—cannot be considered to be the same as a real membership list. With the coming of the RNL in 1971, all herders who fulfilled the requirements of § 11 were forced to become Saameby members. But even those herders who did not comply with § 11's requirements simply continued as if they did. The issue was never pressed. According to Knut Gustavsson (personal com.), if a strict list were demanded according to § 11 today in each Saameby, the already small population of reindeer-owners (not contract owners) of about 900 people would be reduced to about 700.

Saameby and the State's rationalization of reindeer management. With respect to the new ideals, the actual organization of the Saamebys today and the actual reindeer management practiced are in their infancy. In its structural rationalization and economic policies, the RNL has, to date, proven itself of little consequence. The husbandry recommendations of the herding authorities have been hardly more successful. It seems that the greatest improvement has been made through the construction of technical facilities—fences, corrals, roads and cabins. While the government authorities try to ease the growing pains involved in their Swedish rationalization program, the herders and the Saamis in general question whether this is the kind of maturity to be desired. As we have seen here, their interests are only partially compatible.

While all are one in the desire to raise the productivity of the grazing lands with regard to reindeer, the Saamis cannot tolerate massive exploitation of the grazing lands by other interests. Nor can Saami cultural protagonists accept the improvement of the resource-consumer ratio by a drastic reduction of consumers, i.e. herders, when their numbers are already so small. Of course, some herders—the big herders who will remain—might find such a development attractive. Their sense of Saamish solidarity will be put to the test against their own well-being.

Grazing-land encroachments, the economic restrictions of § 9, the proclamation of the goal of a high living standard and the splintering of herders into different Saameby-membership classes with graduated voting powers are all developments that are often vehemently opposed by many herders and many non-herding Saamis. Yet we have observed that they originate from basic dilemmas, so that their opposites might be just as vehemently opposed by the same people. While the State must take responsibility for the balance that it strikes between the horns of these dilemmas, this is not to say that these dilemmas are solely the creation of State interference in Saamish affairs. These problems are basic to living in a hierarchically structured universe in accordance with the economics of flexibility.

On the other hand, the occupational-cultural split maintained in the structure of the Swedish herding law makes the State blind to these same dilemmas from the viewpoints of the Saamish culture, on one level, and of the Saameby, on another. As long as the State makes abstract the concept of rationalization, so that it seems to become an end in itself, removed from the subject(s) for whom it is employed, then it will always appear to be an incomprehensible mystery when "sound policies" fall flat. The great challenge in forming a higher-order system out of many independent sub-systems is to make the people understand that it is to the advantage of one and all to unite. For the Saamis, it is still highly debatable whether unification around a strong, Saamish, minority movement might not yield more than would acquiescence in a State program which promises a better life but seems to advance rather than to restrict grazing-

land encroachment. As long as much of the State rationalization program depends upon a highly competitive selection of the herders most fit to remain in the field, it is hopelessly naive to believe in any complete unification around the cause of collectivization in resource management for mere business ideals. Instead, as flexibility decreases, social traditions and minority solidarity will be strained.

The incompatibilities resulting from a program of collectivization superimposed upon the private ownership of individual reindeer have been indicated. Collectivized husbandry will easily decay into self-interest. The wage system, proposed in order to streamline labor and to help the small herders, might instead be used against them. Paradoxically, State policies seem to offer the attraction of a secure collectivity within comfortable limits of flexibility to those who can survive the ruthless competition fostered by law and runaway systems. In such a situation, one must expect to find that State policies lead to unintended consequences. To achieve the resource-consumer balance which the State thinks best, it must apply some form of discriminatory resource distribution amongst herders. It cannot go too far, however, in treatment which is easily considered unfair and, if it hands this unpleasant task over to the herders themselves, there is no guarantee that the competitive pressures might not result in an excessive weeding-out of herders. Or, at the other extreme, should flexibility be great enough and solidarity strong, there may be no weeding-out at all. In either case, the purported goals of the State rationalization program for herd management can be flouted.

Because of the partial compatibility of State interests, Saami interests and herder interests, it is a simple matter to lose sight of the larger context of conflict in which partial compatibility ("divide and conquer") plays a part. For example, there are obvious similarities in the production relations between the old hunting culture of pre-colonial times and the modern, tame-reindeer co-operatives of the present-day Saamebys. In 1968, referring to the then current, organizational form of the Lappby, Hultblad stated:

This current collective which builds the frame for summer reindeer-herding is often precisely the *Lappby*. It is, in other words, once more a work unit, as in the big reindeer-hunting times. It is also an economic unit, amongst other things, because it automatically becomes owner of the numerous unmarked calves—unmarked due to the extensive herding form . . . After various shifting fates, the Lappby has once again become a fully live, social organism of central meaning for the Saamish form of livelihood. (Hultblad, 1968:76.)

Hultblad's work does not encompass the revolutionary changes in the Lappby (now Saameby) under the new Herding Act of 1971. These changes, adumbrated by the extensive herding form which he mentions, were, in 1971, developed to a much greater extent under the tutelage of Swedish law.

Had Hultblad witnessed the continued spread of seasonal extensivity

and the legislation of 1971, he would have had more cause to regard the Saameby as a “fully live, social organism” than he had when he wrote (cf. Ingold, 1978b:153). Yet this “return”, according to Hultblad, to a living, Saamish, social organization is far more than that envisioned by him. It is a return only in part.

It should be plain from this material that the modern Saameby, formed under the Swedish State’s rationalization program, is by no means a true collective. While rationality principles operate for the collective as a working unit, and while unmarked “whole-ears” are owned collectively by the Saameby, just as the specially selected breeding bulls with a Saameby earmark would be collectively owned, I find it difficult to share Hultblad’s enthusiasm over the Saameby as an organism similar to that of “the big reindeer-hunting times”. Although the creation of the Saameby ideal is an important development, a fundamental change has occurred since the big reindeer-hunting times: the Saamish social organism has been encompassed as a sub-system in a larger State organism. The Saameby is an organism with many new relations to the Swedish majority. It holds a place quite new in the total context of Saamish culture. For instance, the modern Saamebys include as members only approximately one-fifth of the total Saamish population in Sweden. As the proportion of herders to other Saamis decreases, so, it seems, must the extent to which herding can be counted “the Saamish form of livelihood”.

The State organism has expanded into the flexibility available in the north, until now the critical limits within which the Saamish social structure, Saamish herding and Saamish culture can survive have become so narrow that they are being forced to change radically or perish. The Saameby is an instrument of this process, while at the same time it constitutes one of the bastions of Saamish rights. Thus, the Saameby organism is beset with commons dilemmas on many levels. Herders remark bitterly that the modern Saameby has simply been given the freedom to run its own demise. The Saameby reflects the utmost projection of the occupational-cultural split premise, a split that hardly existed in the big reindeer-hunting days. Now, even the degree of occupational involvement (participation) is under scrutiny for the determination of rights to be distributed to a differentiated Saameby membership.

Obviously, the Saami-Swede encounter preceded the Saami-Swede dichotomy as an important aspect of herding law. This original dichotomy has given rise to numerous other divisions of category, as flexibility has decreased. Because of this, the study of reindeer management in Sweden simply cannot proceed without awareness of this distinction and the many dilemmas it generates. Hardly any aspect of herd management can return to the pre-colonial pattern in the face of ever-decreasing flexibility.

Chapter 21

The Identity Determinant

In the foregoing chapters, there has been much discussion about the effect of the grazing/reindeer ratio upon the herder population. Similarly, the importance of maintaining a high herder population for the continuation and development of the Saamish culture has been mentioned in numerous contexts. While structural rationalization and production rationalization have been related to the survival of Saamish culture, little has been said as to how aspects of the Saamish identity, its incorporation into a strong, pan-Saamish struggle or its numerous, internal rifts bear in turn upon herd management.

In this chapter, Swedish-Saamish, majority-minority relations will be considered in a wider perspective than that of reindeer-management policies. Of course, as has been demonstrated, the State has gradually diminished the scope of its Saamish policies to concern almost only the herding occupation. Still, the development of a strong, pan-Saamish movement has forced the wider ethnic issue upon the State's attention. The Swedish State has ratified certain general proclamations concerning human freedom and justice, in order to set a good example and to secure international approval for its minority policies, while the Swedish Saamis seek membership of other international organizations, in order to denounce their state's policies to the world.

The first section of this chapter will serve to orient the reader briefly as to the nature of Swedish-Saamish relations in the macro-perspective. In the second section, the struggles and dilemmas of the pan-Saamish movement will be dealt with also in a broad perspective. The focus on the broad, larger-than-herding perspective of the pan-Saamish movement will then be narrowed by concentrating it on the local situation in Jokkmokk. In the final section, the shifting alliances and conflicts between various levels of identity and between different interest groups will be illustrated in relation to three specific situations.

Ethnic rights

The basic Swedish premises with regard to the Saamis and reindeer-herding have already been outlined. The State is willing to support the

Saamis' interests as long as these do not interfere with the requirements of Swedish rationalization. When such conflicts occur, the State draws boundaries based upon the occupation-culture split, which bring new divisions to the Saamis as a whole, with the result that Saami is pitted against Saami and herder against herder. While only Saamis are allowed to herd reindeer, according to §1 of the RNL, the State's current, economic program, if continued, may in time cause the number of herders to drop below the rational level. In this eventuality, the Saamish monopoly of herding may well be brought into question. It may not be secure for ever.

The pan-Saamish movement opposes these premises and demands that the State grant the Saamis legal rights as an *ethnic* minority, that is, rights because they are Saamis, not simply rights for a small herding population to herd increasingly as the State wishes. Saamish premises call for certain fundamental rights, free from the consideration of what is best for the population of the whole nation.

1. The Saamis' fundamental rights

- (a) The so-called "State lands" in the Saamish regions belong to us, according to old tradition and as inherited property. We do not accept that we have ever legally lost these lands, even though the colonial states allowed other people to take our lands and utilize our resources. (Saami Political Program, 1980.)

One of the most concise expressions of Saamish demands was presented in 1971 at the VIIth Nordic Saami Conference in Gällivare, the Nordic Saamis' Cultural and Political Program. This was followed in 1978 by an Industrial, Social and Political Program. Later, in 1980, at the XIth Saami Conference in Tromsø, Norway, a Saami Political Program was accepted (this program is printed in *Invandrare och Minoriteter* 1980:4).

The Saamis crave their rightful position in a *pluralistic* society and attack the State's program of enforced assimilation. They are asking that ethnic differences should be respected and that traditional rights to land and water should be maintained on an ethnic basis, whereas the State is at most willing to grant some occupational privileges, i.e. herding eligibility, on ethnic grounds. Besides the special, ethnic consideration with respect to herding eligibility, the members of the native Saami minority are given rights, along with the members of immigrant minority groups, (supposedly) equal to the other members of the larger Swedish nation.

With a pluralistic ideal, the Saamis hope to retain their current, occupational rights on ethnic grounds and to expand the rights allotted them as an ethnic category. To gain support, the Saamis in Sweden, Norway and Finland have become members of the World Council of Indigenous Peoples (WCIP), along with other minority peoples, such as the Indians and the Inuits. One of the prime movers for international minority solidarity from Sweden is Tomas Cramér, of the SSR. He has made trips to both the United States and to Canada to acquaint himself with Indian affairs. As demonstrated by his presentation of the Tax Mountain Case,

in which he has introduced material and witnesses from other minority-majority confrontations, Cramér views the Saamis' struggle in a world-wide perspective.

Although the world organization of minorities does not yet wield much power or influence, it has helped to spread to minority peoples everywhere and to the world at large the concepts of pluralism. The Saamish newspapers in Sweden, *Samefolket* and *Samenuorra*, along with Saamish radio programs, reach a wide audience. The efforts of David Schwarz as editor of the publication *Invandrare och Minoriteter* (Immigrants and Minorities) have served to widen the scope of the Saamish-Swedish debate. Minorities no longer struggle in a vacuum. The character of the conflict between any minority and its dominant society is becoming increasingly known to the entire world.

Even the most isolated reindeer-herder is aware of the Black Power movement in America, the recent Indian seizure of Wounded Knee, and the apartheid policies of South Africa. The Saami situation in Sweden is itself an important experiment. The Saamis are asking vital questions. Do we have any real alternative to quick and total assimilation? Must reindeer-herding dissolve as a Saamish livelihood? Do we want to save something of our Saamish culture, even if it is no longer necessary to us materially? Is cultural distinctiveness best preserved by a method of artificial feeding by a paternalistic majority or by the fierce resistance, maybe even violence, of the minority?

In the modern age of extensive, cultural leveling and standardization, such questions are extremely important. Consider, for example, the similarities between the Boers in South Africa and the Saamis in Sweden. Both are minorities, both claim to have occupied their land before the large invasion of the majority peoples. Both Boers and Saamis wish to defend themselves as distinct social entities. They differ in the methods they employ and the success they have obtained. If one does not condone the South African enforcement of racial inequality, then one must search for alternative ways of cultural survival or else abandon entirely the ideal of a peaceful, plural society, in which difference is accepted and respected.

If one abandons this ideal, then one becomes committed to the opposite view that peace and justice on earth demand complete uniformity of cultures and races and that, to achieve this, cultural leveling is the most recommendable policy. A sense of human decency may prohibit anyone committed to this construct from directing this process too quickly or painfully (as Hitler did in seeking to establish his master race), but the desirability of the eventual goal would be acknowledged. This is in many ways the situation confronting the Saamis today. The herders are given the option of a physically comfortable life by the Swedish welfare system, as they are gradually forced toward Swedish rationalization. Is this wrong? If so, who is hurt? If physical discomfort is removed, violence is done to culture alone, and this is less and less pronounced with time, as Swedish

transactions and modes of communication come to replace the Saamish. After all, cultures change and, by the process of what I have termed cultural flooding, the Saamis have also moved of their own accord into the new niches provided by Swedish contacts.

But, if we refuse to give up the ideal of difference within a larger unity, we are confronted by the question: To what extent, and at what price, can a minority maintain its identity? Surely the minority must bow to the majority on many issues of conflict. Saamish herders must sacrifice some grazing land, maybe for the building of a dam, to satisfy some of the most vital needs of the majority, the entire nation, including the Saamis. But must a minority face elimination as an ethnic entity for the benefit of the majority? Should the Saamis permit continued damming of lakes and rivers for the sake of providing employment for the dam-builders, even when the gain in electrical power is minimal?

Although the Swedish State claims on the whole to be extremely moral in the conduct of its Saamish policies and, compared to many other nations with similar problems, it may justify this claim, nonetheless it has not fully made the transition from the ideals of assimilation without physical violence to the ideals of active pluralism.

Besides the Saamis' own political involvement with international minority organizations, the Swedish State is also involved in organizations to safeguard human rights. It has ratified various international agreements stipulating codes of practice in this area. The United Nations, for instance, has established a Human Rights Commission under the ECO-SOC program. In 1948, this Commission presented a Declaration of Human Rights. This Declaration is concerned primarily with the rights of the individual, regardless of race, color, language, religion, place of origin or political beliefs. Problems arise, however, when one attempts to define or include a group or a minority. The Commission did try to include an article in the Declaration which would incorporate the rights of minorities, but the suggested paragraph was not accepted. It is nonetheless important and certainly not a dead issue for the Commission. It states:

In countries where a significant number of people live separated from the majority and differ from it in race, language or religion, the persons belonging to these ethnic, linguistic or religious minorities shall have the right to establish and maintain their own schools and cultural or religious institutions and use their language in the free press, in the courts and in other governmental business. (SOU 1975:99, p. 62.)

The above statement was found wanting in two respects. Firstly, it was argued that the minority should be granted its rightful share of financial support from the State government for the establishment of schools and, secondly, that these minority safeguards should be enacted only for those minorities desiring them.

In any such declaration of rights, it is, of course, necessary to declare

as well the limits of such rights and the obligation upon an individual or group to respect the rest of society. Article 29 of the Commission's Declaration confronts the issue of one person's freedom infringing on another's freedom. There are many articles in the UN's Human Rights program which can be interpreted as pertaining to minority problems. Most statements, however, are expressed in terms of the individual or the *people*, usually the majority in a colonized territory under the dominion of a powerful, foreign nation (SOU 1975:99, pp. 59 ff.).

Although Sweden has ratified many of the UN's declarations concerning racial discrimination, there has often been difficulty in applying these ordinances to the types of problems confronted by the Saamish population in Sweden. There is indeed some individual animosity against Saamis and Saami animosity against Swedes, often on purely racial grounds, but the State claims to exercise no policy of discrimination. It denies that the restrictions imposed by § 9 of the RNL have any connection with ethnic discrimination. The State's stance with regard to § 9 of the RNL is that its restrictions limit a privilege rather than curtail a right. The other legal conflicts which injure the herding occupation would occur whether this occupation were monopolized by the Saamis or not, for the common good of the nation. A fundamental problem is often involved in forming rules *against* negative discrimination (treatment with difference), on the one hand, and *composing* a definition of a minority (a definition based on difference), on the other, especially if this definition is then to form the basis of positive discrimination.

Since the 1949 General Assembly's decision to omit the article concerning minority rights in the Declaration of Human Rights, many attempts have been made by the Commission and its sub-commissions to have the problem taken up in the higher UN councils. These attempts, however, have not been fruitful, although considerable information has been gathered from minorities all over the world. The sub-commission has focused on the problem of minority definition. In 1967, it was authorized to report on the role of minorities in multi-national societies, that is, where no one group forms a dominant society. Following a directive from the ECOSOC in 1971, the sub-commission appointed the Ecuadorian expert, Jose F. Martinez Cobo, to report to it on discrimination against indigenous populations. Mr. Cobo submitted one report on June 29, 1972, and another on June 25, 1973. These reports more directly concern minority groups, such as the Saamis and the American Indians, which were once majorities but were later pushed aside by massive European invasion.

Commenting on these recent UN activities, the Swedish report SOU 1975:99 states:

One endeavours in the United States, Canada, and Mexico especially to establish well-meaning policies of special treatment for these minorities—whereas, for instance, the negroes in the United States are demanding a principle of equal treatment, not special treatment, a situation which has caused the United States to

promote policies in the UN concerning discrimination in precedence over those concerning minority rights. (SOU 1975:99, p. 69.)

The Swedish State claims to have reached the stage of equal treatment for all its people, but the Saamis question this and, most importantly, find that it is not enough to ensure the continuance of the Saamish culture—even with the Saamish, ethnic, herding privilege. The equal-treatment policies in non-herding contexts mean equal treatment as *Swedes*, not as Saamis. With the Swedish rationalization program, this is becoming increasingly true, even in the herding context.

Other organizations besides the UN also make declarations for the protection of human rights. In 1952, Sweden ratified the European Council's Convention on Human Rights and Fundamental Freedoms. Like the UN Human Rights Declaration, the European Council's Convention is basically concerned with the rights of the individual and names minorities only in so far as it specifies that minority status should in no way give grounds for discrimination. The European Council has also established effective controls for adherence to its principles. A Court of Human Rights has been created and citizens of member countries have the right to bring complaints before the Court.

Before Sweden could become a member of the European Council, an examination was made of the Swedish laws. These laws were found to be in accordance with the Council's principles and so Sweden was accepted for membership without changes being made in any of its laws. Sweden can justify its Saami policies through its UN and European Council membership. In its report on the Saamis, SOU 1975:99, the State presents an argument for not recognizing the Saamis as an ethnic minority. It is important to note that this argument is based not on the Saami's qualifications for minority recognition, but on the assertion that recognition is a meaningless proposition.

A recognition involves, in other words, that the recognizer accepts certain responsibilities or at least deprives himself of the possibility to hold a stance directly against the given content of the recognition. A minority too could be (officially) recognized, but this would gain legal significance only if one had arrived at a general category of principles concerning a minority as a subject of justice. Neither in the UN nor the European Council has clarity been reached on this point. (SOU 1975:99, p. 75.)

The Saamis are not only striving for recognition as an ethnic minority, but are also pushing for the formulation of the ideological principles involved in minority rights, so that recognition will have real meaning.

Part of this struggle is already won. In 1977, on the recommendations of SOU 1975:99, decisions were made concerning support for the Saamish Folk High School in Jokkmokk and for the establishment of a chair of Saamish Studies at Umeå University. In making these decisions, the State for the first time since the passing of §1 of the RNL mentioned the Saamis as a common, ethnic group. It initiated policies involving benefits for the

Saamish minority as a whole and not just for the herding Saamis—or via the herding occupation, as with compensation paid to the Saami Fund. Such recent policies are of great ideological importance and most Saamis hope that they will be followed by more positive, ethnic legislation. In the Saami Political Program of 1980, the Saamis demand, among other things, that they be given legal recognition as the aboriginal population in the lands they inhabit, that the Saamish language be legally accepted as an official language, that the Saamish representative organizations be officially acknowledged, and that Saamish culture and history be integrated into school courses.

In the revision of the Swedish constitution carried out in the late 1970s, an amendment was made as follows: “§15. The law or other regulation may not involve the unfair treatment of any citizen because he belongs to a minority with respect to race, skin color or ethnic origin” (*Sveriges Rikes Lag*, 1980, Chapter 2, Fundamental freedoms and rights, p. xxx). In his final submission to the Swedish Supreme Court in 1980 during the Tax Mountain Case, Tomas Cramér argued that, as this article against discrimination on the grounds of membership in an ethnic minority has only recently come into effect, all earlier legislation concerning the Saamis must be reviewed.

The pan-Saamish movement

The development of the pan-Saamish movement, as described by Eidheim (1971) in Norway and by Ingold (1976 and 1978a) in Finland, is similar in many ways to that in Sweden (see Svensson, 1973 and 1976). In fact, in striving for a unified, Saamish-minority identity, Saamish cultural protagonists have conducted a decidedly inter-Nordic campaign, sending their call for solidarity through Norway, Sweden and Finland. Saamish organizations in each of these countries now have places in an organized, pan-Saamish movement, the central hub of which is the Saami Institute founded in 1973 in Kautokeino, Norway, which contains representation from all three countries. The pan-Saamish movement refers to the Saamis as “one people in four countries” and some members of the movement polemicize against the validity of the national borders. The failure of the Soviet Saamis to join this brotherhood (see Eidlitz, 1979) is a thorn in the side of the pan-Saamish movement but must be explained in relation to the minority policies of the Soviet Union, policies which have a very different ideological foundation than those in the west.

As already mentioned, the pan-Saamish movement seeks bonds also with other minority peoples and includes the Saamis with them in the Fourth World. As representatives of “*the* Saamish minority”, leading, Saami, cultural protagonists have attended and hosted minority confer-

ences. For instance, as members of the World Council of Indigenous Peoples, the Saamis hosted its 1978 conference in Kiruna, Sweden.

Despite the unifying factors of the pan-Saamish movement, the similarities of many of the Nordic Saamish organizations, their predicament and their pluralistic ideology, we have seen that there are unique aspects of Swedish herding legislation and history which render the impact of the Saamish movement on reindeer management in Sweden distinct in many ways from that in Norway and Finland. Ingold (1978a) has considered the rationalization of herd management in Finnish Lapland. He has discussed the Finnish State and the influences of the Saamish movement on rationalization programs. Much of his analysis can be applied to the Swedish case, but, as will become apparent here, there are important differences in the Swedish situation. Earlier, Ingold has written:

It is generally assumed that, where there exists a minority, there must, logically, exist a majority in opposition to which the minority is defined. Yet those who speak of "Lapp (or Skolt) Culture", whilst in no doubt about the identity of the minority in question, are surprisingly vague when it comes to the specification of the majority. (Ingold, 1976:245.)

The above situation becomes even further pronounced as the definition of the minority is enlarged to encompass more disparate elements. As the definitions of Finnish, Swedish and Norwegian Saami minorities are merged or forged together, specification of the majority, the "others", grows even more vague. The Saamis of various localities within a single country are certainly not completely culturally homogeneous, and the Saamis of different countries, governed by entirely different legal and social constraints, must in some ways stretch the context of their identity definitions in order to be included in the same minority unit. A stretched minority definition, in turn, means a vaguer majority definition. The content of any identity definition must always be examined in the context which formed it and to which it is applied.

Actually, while those who speak of Saamish identity may have no doubts about the minority group to which they are referring, if their definitions are scrutinized, they are found to be quite vague. The question of a Saami census encounters difficulty as soon as one tries to specify the meaning of the term "Saami". The 1980 Saami Political Program has finally taken the bull by the horns. According to this Program, a Saami is to be defined as follows:

- (a) One who has Saamish as his first language, or one who has a father or mother or a grandparent with Saamish as first language, or
- (b) One who considers himself to be a Saami and who conforms to the Saamis' social order, and the representative Saamish organization accepts the person in question as a Saami, or
- (c) One who has a father or mother who is a Saami according to (a) or (b). (Saami Political Program, 1980.)

The similarities between this definition of Saami eligibility and the requirements for herding eligibility in §1 of the RNL are quite apparent. Should the Saamish language not be kept alive in a family for two generations, further descendants may not qualify as Saamis (unless by the other means specified). The one form of category reduction is constructed by the State, the other by the Saamis themselves. The problem is common to both, and their solutions are very similar. It is interesting to note that an active herder might lose his Saami status by the language criterion and, if he no longer considered himself a Saami or was not immediately accepted by the representative Saamish organization, then, by the Saamis' own definition, he would not qualify as a Saami and, therefore, his son might not qualify as being of Saamish ancestry, and this in turn might bar this son from herding eligibility, according to §1 of the RNL.

In the Swedish government investigation, SOU 1975:99, an attempt was made to calculate the Saami population in Sweden. A number of different definitions were considered, in order to facilitate the comparison of statistics. According to the different starting-points, the Saami population in Sweden may be between 15,000 and 20,000 people (SOU 1975:99, pp. 87-88). There is good cause to question even this most generous figure, however, for the herder lists of the period 1965-71 have served as a starting-point for the counting of also non-herding Saamis and, while most non-herding Saamis may be traced through family ties with a herder in the 1965-71 period, many may be missed. Many Saami families have never herded. Moreover, Johansson's criteria extend only one generation back from a herder on the 1965-71 lists. This has not been an oversight; the problem is simply that, while lists of herders have been kept, no similar documentation exists for non-herders.

The Saamish Folk High School in Jokkmokk has a course in Saamish handicrafts which in the past few years has been closed to non-Saamis. Numerous problems and bitter quarrels arose with regard to the Swedish spouses of Saamis or the children of such intermarriages (these problems occurred prior to the definition of the term "Saami" presented by the Saami Political Program). No difficulties were encountered, however, when a group of Canadian Indians representing another minority culture paid the school a visit. The Indians were welcomed to learn Saami handicrafts. In this instance, the context was completely altered. With respect to the Canadian Indians, the Saamis were not threatened by assimilation or by the incorporation of Saami handicraft work into Swedish traditions with accompanying market competition (non-Saamis have indeed ruined much of the Saamish handicraft market by producing "fake" Saamish products). Minority-culture protagonists can easily embrace brothers fighting for similar causes at great distances, but, when the distance is reduced and the lack of a secure boundary can bring a threat to minority-group integrity, then strict definitions with accompanying, discriminatory rules will naturally be maintained.

A basic dilemma faces the pan-Saamish movement and the problem of minority definition. While, on the one hand, it is necessary to cultivate the sense of unity and shared Saamish identity to gain maximal power in numbers, on the other hand, it is almost impossible to find universals which, if idealized, will not spill over into intra-Saami factiousness. Too sharp a distinction in defining who is and who is not a Saami can wreak havoc with the unity of the minority itself.

Only when some measure of idiomatic stability is obtained, can the repertoire be shared by a large number of the members of the group and serve the necessary organizational ends. But since there has been a traditional lack of cultural unity in the Saamish organization, it has been difficult to achieve the identity confirmation in interaction which would facilitate group organization. (Eidheim, 1971, p. 77.)

Hence, besides the problems faced in defining the term "Saami", to give a precise definition of the Saamish premises in the pan-Saamish movement is no easy task. Furious debates rage between Saamish political activists concerning what is a Saamish premise and what is really a Swedish premise. While some younger Saami politicians accuse their elder leaders of kowtowing to colonial premises by trying to achieve Saamish goals within the framework of colonial law, the elders turn around and ask the young Saami leaders if their agitation is really Saamish or something picked up from the majority society's youth movements or imported Black or Red Power premises (see the debate between Per-Mikael Utsi and Per Idivuoma in *Samefolket*, 1976:66 and 1976:107, for example).

An issue of great importance for the Saamis today, when confronted with increased land encroachment, is whether or not violence can be accepted as having a place in the Saamish culture. Historically, the Saamis have been a rather peace-loving people. Despite some sporadic, small-scale violence, the Swedish-Saamish colonial encounter has been remarkable for its lack of bloodshed, when compared, for example, with the colonial expansion of America or England. Today, however, sabotage and murder threats have been attributed to certain Saamis in their fight to preserve grazing lands from exploitation and, whether or not these accusations are true, the issue has been widely debated amongst Saamis.

In Norway, the bridge over the Skibotn River was blown up and the life of the Norwegian director Mr. Engstad was threatened. Although no one knows who is responsible for these acts, it was assumed by the Norwegian police to have been a Saamish act and a number of Saamish families in the area were detained. Many Saamis also supposed the actions to have been the doings of a rather radical Saamish faction "of ČSV convictions" (see *Samefolket*, 1976:46 and 1976:114).

Some Saamis defend the use of violence and claim that the peacefulness of the Saamis is not so much a part of Saamish cultural beliefs as a result of historical circumstances, circumstances which have now altered.

Others condemn any use of violence, as in the article in the Norwegian Saamish newspaper, *Sagat*:

In line with old Saamish tradition and ideals we cannot think of the possibility to use violent methods to achieve our goals. . . Do the Saamis wish to fight the round regardless of what happens? It is better to go under. . . while one hangs onto cultural values . . . Organized Saamish physical resistance has never occurred—this is one of the greatest cultural treasures which we have received from our forefathers. We cannot and should not allow any Norwegianized Saamis to break this valuable tradition. (*Sagat*, November 8, 1975.)

According to rumor, those Saamis responsible for the destruction of the Skibotn bridge were part of a ČSV group. Numerous explanations are offered for the letters ČSV. I have heard that they symbolize the Saamish movement, because they are the three most common letters in the Saamish language. Others deny that ČSV indicates the real Saamish movement. The most often heard explanation for the letters is that ČSV stands for *čiel'ga saami varra* (“clean Saami blood”) in Saamish. In any case, the letters often serve as a symbol of Saamish unity and struggle. As there is really no formally organized ČSV group as such, it is difficult to define its principles. In typical Saamish fashion, there seems to be no formal ideology, but everyone interprets the symbol in his own way. Worn on shirts or engraved on medallions, these letters identify the wearer as one who is proud of being a Saami. It seems that one of “ČSV convictions” may have attitudes which range from pride in being a Saami to contempt of anyone who is not. The symbol has generally become linked to the more radical elements of the Saamish movement. ČSV supporters have been accused of racism and cultural snobbism (see, for example, *Samefolket*, 1976:118). While these attitudes may be found in some of the members of the Saamish movement, as they can usually be found in any movement, they do not necessarily reflect the ideology behind the symbol. Nothing better illustrates the problems involved for the Saamis in rallying around cultural idioms than the lack of precision even in the explanation of the ČSV symbol. The issues it confronts are terribly sensitive. In an article entitled *ČSV, a Strategy for Survival*, Lars Anders Baer states:

In my opinion, ČSV is a symbol and almost an ideology for the Saamis' struggle on the theme “We are Saamis and want to be Saamis. . .” against the economic and cultural oppression from the Nordic states. The concept of ČSV can be seen as a necessary action of the Saamis, independent of Norwegian, Swedish and Finnish language usage, to redefine themselves. The “Saamish character”, which the Nordic majority societies have created and which many Saamis have made their own, must be broken down, so that the forces which are needed to think and act with dependence on the Nordic, western system are freed. The picture created by the Nordic culture of the inferior Saami in need of tutelage and as an undesirable element must be replaced with the picture of the brave and independent Saami loyal to his group. Saamish music, Saamish history, self-respect and pride in being a Saami are enormously important political points, in that they free the Saamis from the ruling culture's straitjacket. From this act of freedom a new identity is

formed and a new group solidarity. In this process, political energy is not only freed, it is rechanneled and reformed steadily. ČSV is proof of this. The process of freedom is often labeled "Saamish nationalism" by outsiders and by—I would dare to call them—unaware Saamis. Criticism for isolation from society at large and accusations of a kind of Saamish racism are quite usual. To call demands for group solidarity and identity "racism" falls on its own unreasonableness. This critique seems to come from the idea that those who do not keep within the framework of the Nordic system are objectionable and worth fighting against. (Baer, *Samefolket*, 1976:47.)

While Lars Anders Baer calls for the freedom to follow the call, "We are Saamis and want to be Saamis. . .", others wonder how he would fight to uphold the freedom of those who claim that "We are culturally only half Saami and wish to be culturally half Saami". This is maybe the Nordic system's "Saamish character", which "many Saamis have made their own" but which Baer says "must be broken down". The matter breaks down into the ČSV supporters' definition of what it is to be a Saami and their feeling that they have the right to press for the realization of an ideal which other Saamis may not share. While acknowledging the ČSV supporters' right to struggle for their ideals, Saamis with somewhat different ideals wish to have *their* right to struggle for their ideals respected. They may be willing to discuss ideals and to be convinced by the arguments of the ČSV supporters, but they resent the idea that they must be broken to the mold or that, if they do not conform to ČSV ideals, they are therefore brainwashed traitors to *the* Saamish culture.

Baer, however, does not mean that individual Saamis are to be denied respect for what they are if they happen to reflect the colonial character, but rather that they should have the right to a social environment in which they are not denied respect for being Saamis with Saamish premises or the possibility of growing up free from such colonial influences. It is a system, not individuals, which must be broken (Baer, personal communication). Note the similarities that this argument has with that discussed on page 298 with respect to the dilemma of culture and living standard. Unfortunately, some activists have difficulty in supporting those who exercise the freedom to be Saamis while accepting those who exercise the freedom to turn away. The crux of the argument is, what forms the basis of a "free" choice? Failure to recognize the dilemma involved in the ČSV issue results usually in a reversion to dogma on one side or the other.

As for the relation between violence and the Saamish culture, Lars Anders Baer argues as follows:

The myth of the Saamis' peacefulness is old, and people usually refer to something diffuse and internally peaceful about the Saamis. Reality is something entirely different, though, and it also has natural causes. There are many factors which play a part here, factors such as Saamish forms of livelihood, reindeer nomadism, hunting and fishing, as well as small-scale farming, ecological forms of livelihood, in other words. Ecological forms of livelihood seldom create surplus cultures and it is usually only expansive surplus cultures which create warrior classes. Saami

land became colonized by such surplus cultures with aggressive, imperialistic ambitions. We have two completely different social systems, one of which lives on the exploitation of the other. In this respect there is a limit to how far one can go. Maybe that limit has been reached. (Baer, *Samefolket*, 1976:47.)

The question of whether or not violence has a place in the pan-Saamish movement on the basis of old tradition and cultural values is one thing, but the moral question remains. And will violence help the Saamis achieve their goals or will it embitter their opposition and cause them only greater harm?

In Jokkmokk, the question of Saamish physical resistance is commonly discussed. While few or none condone injury to other human beings, sabotage as a political weapon is often accepted as a last resort. As the State Power Board justifies its aims to dam the last, unregulated, water systems by the need to keep its workers employed, some Saamis see sabotage of dam construction as the perfect solution for everyone. The dam workers build from Monday through Friday. On Saturday the Saamis blow up the dam to protect their grazing lands. In this way the workers will be constantly employed and the herders will guard their grazing needs.

One of the strongest elements of the Saamish cultural estate is, of course, the Saamish language. As noted, language forms one of the basic criteria for Saamish identity, according to the Saami Political Program. Even here, however, splintering occurs. There are still inter-dialect disputes over the matter of orthography, for instance. Just as the Saami minority as a whole maintains its place in the Swedish majority society in part through positive, legal discrimination, so the speakers of the minor dialects of Saamish often feel the need to sacrifice complete, orthographic standardization in the interests of individual survival. A common Saamish orthography might give strength *vis-à-vis* the majority, but, for a minority within a minority, it might mean the loss of separate survival. Either compliance with or resistance to an international Saamish orthography indicates a sacrifice of identity on one level, in order to demonstrate and build a greater awareness of another identity. The Lule Saamis, for example, experimented with the northern-Saami orthography but seem now to have returned to a more traditional spelling. It was found that many of the native Lule speakers could no longer read or write their language if the northern-Saami orthography was used. It was claimed that northern-Saami orthography leveled too many of the fine distinctions in Lule Saamish. Then, again, the Lule Saamis may, in time, find that survival of any part of their language at all will demand the use of an international Saami orthography.

Despite many shared ethnic idioms, herding Saamis and non-herding Saamis are distinctly split on certain issues. This is a split which many political activists would rather not touch upon, as it weakens the pan-Saamish position. They are, therefore, constantly stressing the gains to be

won for the herders by unified, political agitation and, indeed, the herders' cause is given great consideration.

Because of herding's central position in the Saamish culture, having been a reindeer-herder or a member of an active herding family is credited with a certain status amongst Saamis, as if it were a credential establishing the bearer's right to be a cultural guardian of his people (see Lars Rensund, *Samefolket*, 1976:111). Against this background, a Saami activist identifies himself with the herders and has a better chance of their support. Policies favorable to both herding and non-herding Saamis, however, often go only so far. It is significant that, once a cultural protagonist, in his zeal for Saamish rights, somehow steps on the toes of the herders or in any way draws them into an uncomfortable situation, he is immediately ridiculed as knowing nothing about herding, having been lazy as a herder, etc.

It is important to distinguish between the pan-Saamish movement and the influence of what might be termed "Kautokeinization". The latter may in some ways be a result of ideals sponsored by the former, and of the fact that Saamish political activity is largely dominated by northern-Saami representatives, but it is certainly not necessarily an ideal of the pan-Saamish movement.

Between neighboring districts, traditional rivalry is frequently organized on differences in speech, costume, folk-songs, etc. and standards of excellency in behavior. The innovators do not undercommunicate these differences; on the contrary, by linking them to the unifying myth, they are able to define them as manifestations of *cultural richness* and to initiate transactions and define situations accordingly. (Eiheim, 1971, p. 78.)

Despite the need to embrace all manner of cultural richness, it is an unfortunate consequence of traditional, district rivalry that the Saamish movement is used by some to further their own more limited goals. According to certain idealized notions of culture, Kautokeino Saamis can be considered to be in some ways more traditional than their Jokkmokk counterparts. In Kautokeino, the Saamish population is in the majority, the sense of Saamish neighborhood is far more intact amongst them, their dialect is in a dominant position with regard to the other Saamish dialects (see Korhonen, 1976), and Kautokeino is a center of pan-Saamish activity. These factors cause some opportunist activists from "Kautokeino" to consider themselves superior to the "degenerate" Jokkmokk Saamis. Olle Andersson, who at the time was editor of *Samefolket*, wrote of the ČSV group that "This group of extremists is of the opinion also that there are no genuine Saamis south of Karesuando" (*Samefolket*, 1976:34).

Of course, as noted earlier, all those of ČSV convictions, even though they may be quite intolerant of the convictions of other Saamis, are not necessarily all opportunists or racists. They may hold quite a valid position. However, there are always those who discredit this position, become so-called "culture snobs" and do considerable damage to the

unity of the pan-Saamish movement, although the fervor of their anti-State commitment may allow them to pass as cultural heroes and prominent members of the movement. The point I wish to emphasize here is that, rightly or wrongly, many Jokkmokk Saamis consider that cultural snobbery can generally be found among the Saamis living further north.

Native Jokkmokk Saamis are highly sensitive to northern "Saamification". The incoming waves of relocated northern Saamis constituted a real threat to native Jokkmokk herders economically. One must not ignore, however, the threat that this involved to Jokkmokk-Saami ethnic identity. In Jokkmokk, a herder who is forced by competition out of the herding occupation stands a great risk of being forced out of the Jokkmokk area. Along with northern-Saami relocation, Jokkmokk-Karesuando intermarriages and expansionist, Karesuando, herding policies came the penetration of Jokkmokk-Saami lands and herding units. The inevitable mixture of Karesuando and Jokkmokk dialects is also regarded by most Saamis with disfavor. To be dominated by the northern Saamis in political affairs within the pan-Saamish movement is a development that arouses strong resentment amongst certain, native, Jokkmokk Saamis.

Just as the threat from the colonizers has caused the Saamis to consolidate into a pan-Saamish movement, so the northern Saamification of this movement has given the Jokkmokk Saamis added cause to rally around their own cultural idioms. Obviously, in defining the differences between Jokkmokk and Karesuando Saamis, the intensive-extensive herding dichotomy presented itself immediately.

I believe that this process of Saami factional consolidation has contributed to the genesis of the idea that herding form can be explained by cultural tradition alone, rather than itself being a part of the culture needing explanation. The current ills of over-extensivity can be conveniently blamed on the coming of the northern Saamis. Intensivity is regarded as a part of the traditional, Jokkmokk-Saami culture, and it is forgotten that extensivity was also a part of this culture and that intensivity was by no means foreign to the northern Saamis. Herders are strengthened in this view by the large body of ethnographic literature in which such simplistic correlations are posited. If one questions a herder today about the differences between Jokkmokk Saamis and Karesuando Saamis, one is likely to get a large dose of early Ernst Manker. Jokkmokk Saamis and Karesuando Saamis can put forward the most fantastic postulates about each other.

Contemporary, intra-Saami tensions cause Saamis constantly to re-evaluate their past relations. Similarly, with respect to Saami-colonizer relations, the re-interpretations of the Kautokeino uprising of 1852 present a fascinating study of changing awareness. While it may be very difficult to determine what is or was the truth, the reasons for its shifting presentation may be equally interesting.

Diachronic studies reveal that the common distinctions made between Jokkmokk and Karesuando Saamis are often twisted or oversimplified. Elsewhere, it was noted that dietary customs did not always distinguish northern Saamis from Jokkmokk Saamis so easily and, while there were certainly differences, many of these differences could be explained on practical grounds rather than by mere tradition (see p. 119). On many other points besides diet, the impression is frequently given by researchers (as well as by northern Saamis) that the Jokkmokk Saamis *learned* new herding techniques, building forms, lasso expertise, use of corrals, etc. from the relocated northern Saamis. To a certain extent this is undoubtedly true. Yet one might with equal justification go to the other extreme and claim that the Jokkmokk Saamis were fully aware of corrals, lassos, permanent turf *kâtas*, etc. before the arrival of the northern Saamis but that their sudden massive infiltration *made necessary* a far greater use and dependence upon these materials and methods.

Olaus Graan, writing of the Jokkmokk Saamis in the 17th century, provides an excellent case to illustrate the difference between change by learning new techniques and changing conditions themselves necessitating the bringing forth and expansion of already known methods. Graan (1899 ed.) writes of Saamis who live by lakes and streams and build permanent *kâtas* in a number of ways, some of turf or moss (cf. Linder, 1850:349). "But those who are somewhat richer use all diligence to obtain a tent" (Graan, 1899 ed., pp. 46 f.). For anyone who wished to be an intensive herder in those days—the Saamish occupation which, above all others, made possible a moderate degree of security and even wealth—a movable, tent *kâta* was a necessity. The purchase of a tent canvas, however, was an item of major expense. Two poor Saamis, each owning half a tent canvas, could join forces and thus be in a position to begin herding.

Later, once the extensive-herding form was common and the herders could spend considerable time in more permanent camps, the turf *kâta* increased in usefulness and status until the tent *kâta* became looked upon as something primitive. It is easily forgotten that, in the intensive era, the tent *kâta* was the most suitable. Its disappearance as common, living quarters for herders reflects the total change of circumstances far more than the ingenuity of the northern Saamis. In fact, some northern-Saami herders who were already used to permanent, summer, turf *kâtas*, made the switch to summer, tent *kâtas* on joining Saami groups with a more intensive herding system upon relocation in the early 1900s. Moreover, stationary *kâtas* in the summer lands for the early, Jokkmokk, mountain Saamis were not unheard of, but they were used as temporary shelters for herders out gathering in tracts where no natural rock formations provided any shelter from wind and rain. They were not homes. Wahlenberg, writing in 1807 and 1810 of an expedition to the Tuorpon area, mentions the "Kerkevere *kâta*" in a way that can only indicate a permanent *kâta* (see also Wahlenberg, 1808).

The same can be shown for other items which have been attributed to northern-Saami innovation. The corral was not unknown to Jokkmokk Saamis; it was largely unnecessary. During the intensive era, herds were kept "clean" and the mixing that did occur was on a small enough scale to be corrected by "staff" division (see p. 90) on a snow patch or in an open field. Herds were tamer. The first corrals made for herd divisions in the Jokkmokk region after the arrival of the northern Saamis were put together with bushes in the high mountains. Herders have told me that, should a herd of today in Tuorpon be driven into such a corral, it would hold little better than a net holds water. Long before the arrival of the northern Saamis, however, the Jokkmokk Saamis used small brushwood enclosures for milking corrals or sometimes to contain tame oxen needed for the caravan.

Similarly, a number of my northern-Saami informants have told me that the Jokkmokk Saamis "could not throw lassos" before they were taught to do so by the northern Saamis; yet Engström (1834) praises and wonders at the great skill with which the Jokkmokk Saamis lasso their reindeer. As in all these examples, the truth lies somewhere in the middle. Because the northern herds were less tame and more mixed, demanding many large-scale divisions, the Karesuande Saamis naturally had to resort to the lasso more frequently than did the Jokkmokk Saamis. The Jokkmokk Saamis could simply use a staff or, when marking calves, grab them by the leg. Certainly they used lassos, but just as certainly the Karesuando Saamis were of necessity more skilled. Erik Hedbäck, the former Saami sheriff, illustrates this point nicely in an unpublished report written at a time when the confrontation between the central and the northern Saamis was most fresh and obvious: "The Karesuando Saamis seem to be more skilled as lasso-throwers, but then again they use only this method. They *pull* in the reindeer, which often causes great trouble. They break horns and choke the reindeer etc." (Hedbäck, 1928, ULMA 2139:1.)

It is most interesting to note here that Hedbäck (a Swede), although he attributes greater skill to the northern Saamis, considers the lassoing method itself, as used by them, quite negatively. His report is in fact full of condemnation of the Karesuando Saamis' sloppy slaughtering techniques, inhuman treatment of animals and low morals. Apparently, it was only later, in retrospect, that the Karesuando Saamis were viewed as clever harbingers of the modern age.

An analogous argument can be applied to the Karesuando Saamis' expertise in the placement and construction of corrals. Aside from an occasional, simple, milking enclosure, the Jokkmokk Saamis had had no need for corrals. The Karesuando Saamis not only came with expertise in "new" methods, but also brought with them the need for these methods or hurried on an already developing need for them.

I have dwelt upon this point in order to counteract the all-too-common over-simplification of Jokkmokk-Karesuando differences and the result-

ing over-simplification of the historical developments. The Karesuando Saamis have been viewed as the modern-age herders, jarring the Jokkmokk Saamis out of their long sleep. A great deal of romanticism has been woven around the intensive era in Jokkmokk, which would have one believe that the Jokkmokk region was devoid of all development of its own before the Karesuando Saamis ushered in the modern age.

Now that the old distinctions between the herding forms of Jokkmokk and Karesuando Saamis have been leveled and obscured by the tremendous modern developments affecting both groups alike, intensive-extensive differentiation has become viewed by many as basically a distinction between traditional and modern. Because of this tendency to superimpose two logically distinct, classificatory systems (intensive-extensive, traditional-modern) on each other, the aspects of herding recognized as intensive automatically come to be regarded as historical remnants existing for the sake of tradition or somehow beyond the bounds of contemporary practicality. Furthermore, because of the old typologies and the presence of certain, traditional, herding *elements* which are still of practical value in modern herding, many are quick to conclude that "intensive herding" (traditional herding) continues with little change.

Researchers have fallen over themselves for over 20 years in the rush to get on the "last caravan". Success in this attempt is continually being reported. The type of analyst who merely looks at the elements of outward form and disregards their changing content and context in the whole system sees the old, intensive-herding type lurking untouched behind every caravan and within every tent *káta*. As late as 1957, Kaj Birket-Smith wrote of the mountain Saamis: "Their old form of nomadic life can be found now almost nowhere, except in a couple of places in Jokkmokk" (1959 ed., p. 107). This statement was made long after the massive, Karesuando-Saami relocation and after the incredible changes in Lapland in the post-war period. Jákkákaska families, for instance, may still have migrated with their herds to and from the summer lands, but this in itself is hardly enough to confirm the preservation of the "old form of nomadic life" as a whole.

It is interesting to note that the concept of "Kautokeinization", which is adopted loosely by many native Jokkmokk Saamis and even by some relocated Karesuando Saamis, is extremely ill-defined. Some native Jokkmokk Saamis will declare, with a vague wave of the hand, that "all our troubles are now brought from the north." Although they are perfectly well aware of the distinctions between Kautokeino, Karasjokk, Karesuando and Utsjokki Saamis, for instance, when it comes to radical Saamish politics, all such northerners may be lumped together for convenience as adhering to Kautokeino dogma. Despite the fact that Saamish political agitation in Sweden owes much to the efforts of the SSR, which is based in Stockholm, and other Saamish organizations with mixed membership from all Saami districts, those in Jokkmokk who oppose

pan-Saamish policies on certain issues are likely to blame all disagreeable policies on Kautokeino, i.e. Norwegian-Saami *outsiders*.

I wish to stress here that, in using this term "Kautokeinization", I am using a highly *emic* concept. By using this concept and avoiding reference to the activist policies of the *pan*-Saamish movement, many native Jokkmokk Saamis can make the point that they have no cause to listen to these outsiders, who agitate out of self-interest and who have no business in Sweden. All, of course, do not feel this way. Although Jokkmokk herders and Saamis may in general feel themselves to be a minority within a minority and often resist being swallowed up in the pan-Saamish movement, which is dominated by the more northerly Saamis and in which their particular good is often subordinated to the good of all Saamis, at the same time they feel themselves naturally to be a part of it. As a result, ambivalence is commonplace.

Although it may misrepresent the goals of the pan-Saamish movement, Kautokeinization is not, however, a concept without concrete substance. Because of their numbers and their wider and more intact Saamish community, Kautokeino Saamis are not only in a position to recruit new herders or to expand in their own district, but, as the rationalization policies, the lack of recruits and the centralization of herders to the south have created herding vacancies in other districts, Kautokeino herders have been able to move in. In Talma now, Kautokeino herders are greatly extending their use of Swedish grazing lands. Kautokeino herders are also making great inroads into the Norwegian Troms herding district, where before them Karesuando herders, many of them originally Swedish citizens, herded and are still herding. In fact, if one goes farther back in time, one finds that many of these Karesuando families today and many of those Karesuando families relocated throughout Swedish Lapland originated from Kautokeino. Kautokeino has been the center of an incredible nomadic expansion through the years.

Because of their numbers, their more intact, Saamish neighborhood and old traditions, and the breadth of their spoken dialect, the Kautokeino Saamis are in a dominant position when it comes to establishing *the* Saamish identity, even in relation to the rest of the world. The colorful Kautokeino dress, still worn daily, captures the romantic interest of the world media. By far the great majority of foreign films and reports about the Saamis derive from the Kautokeino area. In many ways, therefore, the pan-Saamish movement boils down to a Kautokeino movement in the eyes of smaller Saami groups.

Realizing this, many cultural protagonists, in an effort to obtain unity on a difficult issue, play upon the ambivalence of the smaller groups. Often, when a conflict arises which is largely between the northern Saamis and the Jokkmokk Saamis, for example, the northern-Saami factions attempt to turn it solely into a pan-Saamish movement/colonizer conflict. Leaders of the Jokkmokk Saamis, on the other hand, seeing their powers

usurped and their relations with local Swedes strained (with whom they, but not the outside agitators, have close and often mutually beneficial contact) are prone to present many Saami-Swede conflicts in a northern Saami/Jokkmokk Saami light. Jokkmokk-Saami spokesmen find themselves in a delicate position. If they side with the northern faction, they are immediately proclaimed cultural heroes by the pan-Saamish media. Opposition brings equally quick condemnation, and opposition cannot be sure of winning strong local support, at least not great, publicly declared support. Even though many consider it justified, opposition will be condemned by ambivalent parties for splintering the Saamis, this being, of course, one of the cardinal sins to a weak minority.

The situation in Jokkmokk is not adequately described by the division of the Saami population into "locals and outsiders". The Saamish Folk High School in Jokkmokk has become a center for the pan-Saamish movement and often hosts Saami "outsiders" from "Kautokeino". A positive review of the development of Saami awareness in the Saamish Folk High School in Jokkmokk has been given in an article by Paulston (1976). Somewhere between these two factions lie the relocated Karesuando Saamis, whose background and dialect link them strongly to Kautokeino but whose local relations bring them close to the native Jokkmokk Saamis. The relocated Karesuando Saamis, together with the native Jokkmokk Saamis, form part of the permanent community, to whom the "Kautokeino" students at the school are outsiders.

One cannot ignore the basic divisions running through the Swedish population of Jokkmokk. While at times certain groups oppose Saami demands, other groups may support Saami demands, depending upon the issue at stake. The descendants of the old Swedish settler families often remain in Jokkmokk. Generally, they have strong bonds with the local Saami population and may be considerably intermarried with them. The greater part of the Swedish inhabitants, however, are so-called "new Swedes", who have come relatively recently to the area, attracted largely by the great job opportunities during the peak period of power-dam-construction work, along with its accompanying service needs. Mining and other industries have also attracted new Swedes. These Swedes usually have no strong bonds with the Saamish population.

To a certain extent, but by no means without exception, the distinction between old and new Swedes is correlated with the division among the Swedish population over conservation issues. Many of the workers brought north by industry are threatened by its ebb and by industrial rationalization, just as the Saamis are by the rationalization of herd management. They are also victims of the *glesbygdsproblem*, the problem of sparsely populated areas with declining services and little employment. But, whereas the herders must fight to preserve the natural environment in order to secure their herding economy, many of the Swedish population must fight for further exploitation of the environment in order to hold

their jobs. Of course, it would be a gross over-simplification to categorize all new Swedes as being in favor of continued and increased exploitation or to categorize all old Swedes as being opposed to exploitation of the natural environment. Though they are dependent upon the future of the extractive industries, many Swedes search diligently for other alternatives—job opportunities that are more favorable to the environment. Those whose jobs depend upon the extractive industries more indirectly, such as the teachers who teach the children of the dam-construction workers, are frequently very active, environmental conservationists. Members of the old Swedish families may be forced into exploitive jobs detrimental to herding (as are, indeed, many herders), but often they tend to be quite sympathetic to herder demands. They will not infrequently have some contract reindeer in the local Saameby and enjoy some special hunting and fishing privileges granted by the Saameby.

Although, through relocation, the Karesuando Saamis have been brought into contact with both native Jokkmokk Saamis and local Swedes, their relations with these groups do not have roots going back more than about three generations. Although I can offer no reliable statistics, I believe that there are noticeably fewer Karesuando herder-Swede intermarriages in Jokkmokk than there are Jokkmokk herder-Swede intermarriages in proportion to Jokkmokk and Karesuando herder numbers. For many years, the Karesuando newcomers formed a rather self-sufficient, social group. I believe that there is some justification for the statement that these relocated Karesuando Saamis, though confronted with the same possibilities of voluntary assimilation (cultural flooding) as the Jokkmokk Saamis and the same legal constraints in favor of assimilation, are operating at least on somewhat different "schedules of assimilation". The pan-Saamish movement catches them in a situation different from that of the native Jokkmokk Saamis also in this respect. One might argue that the Karesuando Saamis and the Jokkmokk Saamis possess somewhat different amounts of "cultural flexibility".

Some supposed adherents of the pan-Saamish movement, in favoring Saamish incorporation, express definite objections to Saami-Swede intermarriage (see *Samefolket*, 1976:152). The relocated Karesuando Saamis, with their closer ties with the larger, northern-Saami population and their "delayed" assimilation schedule compared to the Jokkmokk Saamis, are in a better position to implement sanctions against Saami-Swede intermarriage and to provide their members with northern-Saami marriage partners than the "diluted" and weakened, native Jokkmokk-Saami population. Note that only Karesuando *herding* entities were relocated. Until modern times, mixed marriages with herders occurred usually only when the Saamis had adopted a more settled life and modern transportation facilities enabled the family of a herder to travel independently of the reindeer caravan. In Jokkmokk, there is quite a long line of intermarriage between *settled* Jokkmokk Saamis and Swedes. Settled Karesuando

Saamis were not relocated. Hence, the relocated northern Saamis in Jokkmokk lack the same depth of familial bonds with the settled Saami and Swedish populations.

These differences, I believe, have considerable political significance. (1) In Jokkmokk, relocated Karesuando Saamis are better able and more willing to identify themselves with the pan-Saamish movement, at least in its more radical expressions, than are the native Jokkmokk Saamis. (2) Because of this, while relocated Karesuando Saamis are more prone to seek the fulfillment of political demands on a “mistreated-minority” platform, native Jokkmokk Saamis are often more prone to seek improvements instead as inhabitants of the sparsely populated, northern districts, that is, along with local Swedes, as far as possible in a combined front against the centralization policies of the State. In the past especially, native herders have had to seek the aid of government herding authorities to protect themselves against encroachment by northern Saamis, rather than by modern industry only.

In the past, when the expansion of the Swedish network brought many positive developments for the Saamis and herding flexibility was enough to absorb many of the ill effects, the native Jokkmokk Saamis could have good relationships and common goals with the local Swedes. The Saamis were given services, jobs, clinics and schools, before the arrival of the more radical factions of the pan-Saamish movement “from the north”. However, the Swedish services are being pulled back; jobs are on the wane; encroachments into the grazing lands have accelerated greatly in the post-war period. Each new encroachment only confirms that the northern Saamis, or rather the radical factions, are correct—survival is best aided by a united Saamish front operating on a platform of Saamish premises. Young, native, Jokkmokk Saamis frequently come to reject much of the ambivalence that they find in the older generation and join fully in the pan-Saamish movement and even its more radical segments.

Some of the major axes of division in the larger Jokkmokk community have been identified. The interrelations of these factions, their shifting alliances and their conflicts will now be considered with respect to certain specific issues.

Factional alliance and conflict

The issues to be presented briefly are (1) the Saamish-language teachers’ strike at the Saamish Folk High School in the winter of 1978, (2) the suggestion that a category of non-herding Saamis called “supporting members” be created within the Saameby, and (3) the debate and demonstration against the State Power Board’s and the Jokkmokk local authority’s plan to dam Lake Sitojaure.

It must be noted from the start that the position of any individual with regard to the axes of division outlined in the previous section may be quite variable, depending upon numerous other determinants which have not been mentioned. An extreme decrease in herd size, for instance, may significantly activate pan-Saamish sympathies in a herder. Certain Karesuando herders may find themselves aligned with anti-Saamish-movement sympathizers on one issue and pro-Saamish-movement sympathizers on another, while other Karesuando herders align themselves in the reverse order. Nor can one always simply determine a person's position with regard to a number of variables and thereby be sure of his attitudes and loyalties. One can, however, speak with some justification of tendencies.

Certain loyalties may override others. Rather than describing any set structure of relations, the purpose of presenting these different issues is simply to note the kinds of conflicts and alliances in such relations which each issue elicits. A better understanding of the complex social situation in Jokkmokk should result.

The 1978 teachers' strike at the Saamish Folk High School

The atmosphere at the school had been tense for some time, not only between Saamis and Swedes, but also between different Saami groups. Because of financial difficulties and an inability to acquire the necessary minimum of Saamish students, the Saamish Folk High School in Jokkmokk was thrown open to non-Saamish students in 1968, and in 1972 its operations were taken over by a School Board, to which the SSR, Same-Ätnam and the Jokkmokk local authority (*kommun*) appointed representatives. The school, which used to be a mission school, now became partially financed by the community. This, in turn, meant that the local authority, composed almost only of Swedes, gained great control over the courses and policies of the Saamish Folk High School. This situation naturally caused tensions between the school's Saamish group and its desire to maintain a strictly Saamish flavor in the curriculum, on the one hand, and the Swedish community and the Swedish-student majority, on the other. The small, Saamish-student body in the school was very active politically and contained Saamis from Norway and Finland who could be called outsiders by the native Jokkmokk Saamis. Relocated Karesuando Saamis tended to regard them less as outsiders, because they themselves were considered outsiders to a certain extent by the Jokkmokk Saamis. Native Jokkmokk-Saami attendance at the school had declined greatly, while attendance by "Kautokeino" Saamis had risen substantially.

The school has become one of the centers of the pan-Saamish movement. Many native Jokkmokk Saamis feel that the school has been taken over by northern Saamis. These have upon occasion shown themselves to be quite arrogant in their relations with Jokkmokk Saamis. Jokkmokk Saamis have been criticized for their desire to preserve their dialect. They

have sometimes been ridiculed for being ideologically soft and friendly to Swedes. In the lunch-room, it could happen that the Saamis at one table would get up and move to another table if a Swedish student tried to join them. A Saami boy who began dating a Swedish girl was ostracized to such an extent that he finally felt that he had to leave the school. A number of Jokkmokk Saamis have told me that they no longer want to set foot in the school premises. Concerning the debate on the situation at the school, see John Mäarak's and Birgitta Östlund's contributions in *Samefolket*, 1976:72-73.

In the winter of 1978, two office vacancies in the school were filled by southern Saamis. In a very short time, all the Saamish-language teachers at the school went on strike, and many other Saamis signed the protest that they circulated. School personnel should be able to speak Saamish, they declared. In a Saamish Folk High School, fluency in a Saamish dialect should be one of the main criteria for employment. They demanded that the positions be filled by Saamish-speaking persons. Saamish premises rather than Swedish premises should dictate the criteria for employment.

Many people in the local Jokkmokk-Saami community were outraged at the action of the teachers and supported the southern Saamis' appointment. While agreeing that fluency in Saamish should be *one* of the criteria for a position in the school, it should not be the only one. Because the process of assimilation is more advanced toward the south, there are many southern Saamis who do not speak southern Saamish. Should they be discriminated against in seeking employment and in their commitment to the pan-Saamish cause? There are many more northern Saamis and, even in proportion to numbers, more who speak Saamish. The Jokkmokk Saamis therefore interpreted the strike at the school as a "Kautokeino" action to maneuver out southern Saamis and to put in northern Saamis. Amazingly enough, when I inquired if the two southern Saamis could speak southern Saamish or any Saamish dialect, I received three different answers: neither could speak any Saamish, both could speak southern Saamish, and only one could speak southern Saamish. Those who claimed that both could speak southern Saamish regarded the strike with added anger, because they saw it as meaning that only northern Saamish was to be considered real Saamish.

With this kind of confusion, the debate grew to encompass all manner of different side issues. The real and difficult problem seemed to be lost sight of, as accusations of racism were hurled back and forth. Undoubtedly, the conflict had many ramifications which will never be known, but basically one can say that what many of the "Kautokeino" group proclaimed to be a Saami-Swede confrontation of principle, many Jokkmokk Saamis tended to see as an inter-Saami-group struggle for power.

Many Karesuando families seemed to remain non-committal or sided with the strikers. Few took the part of the Jokkmokk and southern Saamis. The Karesuando families usually agreed that fluency in Saamish should

be but one criterion for selection but that there had been other applicants with equally good credentials who were, moreover, Saamish-speaking. In effect, they turned the tables on the southern and Jokkmokk-Saami faction and accused them of giving preference to their candidates on the grounds of a group-power struggle. The rector of the school at that time was a southern Saami, and so he was accused of trying to strengthen his contingent by giving preference to his countrymen.

Other Jokkmokk Saamis felt that, if this were the case, then they would support the strike, but they did not believe this to be the case. They maintained that the other qualifications of the southern Saamis were superior to those presented by the applicants fluent in Saamish. Many Saamis simply ignored the issue as beyond them, while a few tried to tackle its serious implications.

The question really seems to boil down to what *weight* fluency in Saamish carries in establishing an individual's Saamish identity and what weight Saamish identity carries in relation to the ordinary job qualifications, such as typing ability. These are highly significant questions. Those Saami groups who feel most severely weakened by language loss and assimilation, while attributing significance to the ability to speak Saamish, may give such ability a different degree of importance for Saamish identity and therefore a different relative value compared to other job qualifications. These matters become highly topical to the pan-Saamish movement, as it faces up to the problem of inter-Saami job competition within its ranks. The debate raged for many weeks and received considerable coverage in the local newspapers and in *Samefolket* (1978, no. 11, pp. 3 ff.).

Saameby supporting members

In the comments which it submitted to the Swedish Parliament concerning SOU 1968:16, the SSR (1968) suggested that a new class of membership in the Saameby be opened to Saamis with herding eligibility or other Saamis. With the approval of the Saameby, they could become *supporting members*, that is, they would not be granted herding membership but given restricted hunting and fishing rights. The SSR justified this idea as follows:

The need of binding substance between Saamis has been presented above. It is a vital point for the preservation of the Saamis as an ethnic group. The Saameby should therefore be given the right to accept Saamis as supporting members. In this way the herding Saamis can show their solidarity with other Saamis and vice versa. (SSR Protokoll 1968, bil. 2, p. 49.)

Part of the directive to the investigating committee which presented the report, SOU 1975:99, was to consider this proposal and to obtain feedback on it from the Saamis, herders and non-herders. During this discussion, the proposal was refined and furnished with many protection clau-

ses. Before dealing with the different reactions to the proposal, it is worth discussing its highly significant, legislative meaning.

Despite various kinds of restrictions on which non-herders may become supporting members of which Saamebys and what such membership entails, precisely the fact that non-herders are being given legal privileges in relation to resources on *ethnic grounds* would be a point of paramount importance to the Saamish movement. It would constitute a major step in overcoming the State's occupation-culture split. In a sense, the idea calls for a partial reversion to the legal situation of Saami rights before the Act of 1886, when all Saamis could hunt and fish on Crown lands, but with the retention of §1 of the RNL (previously derived from the Grazing Act of 1928), which restricts herding rights to certain Saamis only. The incorporation of supporting members into the Saamebys in the law would mean a final admission on the part of the State that the Saameby is more than a business organization with occupational rights. Even if supporting members be limited to the right to catch only one fish each per summer on Saameby land, legally it would mean a breakthrough for the Saamish movement. It would be a Saami right, not just a herder's right, and it would be designed to protect Saamish culture, not by means of division but rather by means of unification.

The economic development has with a rapidly accelerating pace diminished the number of active participants in reindeer-herding and increased the crowd of Saamis who have sought out other employment, mostly outside of the old geographical Saamish areas. It is natural that the departed Saamis feel a wish for some form of organized contact with their old home regions. The Saameby has for them, thereby, another meaning than that which was expressed in the Herding Act of 1971, where it was described solely as a reindeer-herding organization or economic association. (SOU 1975:99, pp. 167-68.)

The program for enrolling supporting members in the Saamebys was not only for the benefit of those Saamis who had left the herding occupation and often the core area but wanted to retain ties with the Saamish culture and land. Such ties were also considered to be desirable for the herders' sake. The Saameby would gain a broader base of understanding and support. With the active involvement and concern of its supporting members, a Saameby, it was thought, would increase its political powers. Its voice, when raised against land encroachments, for example, would be louder.

These positive points in the proposal for the current herders, however, were accompanied by what they saw as risks and negative points. Naturally, the problems centered on the aspects of crowding and the distribution of rights to resources, the very issues which had occasioned the separation of herder rights from non-herder rights. What privileges would supporting members be given, and how many supporting members could a Saameby tolerate without negative herding effects?

Furthermore, many have pointed out that hunting and fishing resources are not

limitless and that it must be up to the Saameby to determine the extent in time and content of the privileges granted. Representatives of certain Saamebys in sparsely populated zones have pointed out in this connection the importance of good contacts with the local population and they feel uneasy lest the proposal to grant priorities in hunting and fishing to supporting members should lead to conflicts with the other settled population in the core areas. (SOU 1975:99, p. 166.)

Many herders felt they had far more to lose than to gain by opening the Saameby to supporting members. Even many non-herders were opposed to the idea. Some of these thought that the rights granted supporting members would be by no means enough (*Samefolket*, 1976:23). Others who opposed it pointed out that it would occasion new and unfortunate conflicts in the Saamish population, conflicts about which non-herders were to be accepted as supporting members and which were not. Would only those able to pay for such membership be accepted (*Samefolket*, 1976:62 and 111)? Can feelings of solidarity and unity be subjects of legislation?

Advocates of the proposal stressed that all stipulations as to who could be a supporting member, how many of them there should be and what their rights would be would all be left entirely to each individual Saameby. The supporting members would have nothing to do with the herding economics of the Saameby. The Saameby's economic side and its "idealistic side" would be kept strictly separate, if so desired. Various suggestions were made as to how best to restrict the number of possible supporting members. They could, for instance, be those with herding rights living in the herding area, all those with herding rights or only those with herding rights who had at one time actually been herders. Thus, the ideal of rights based on ethnic identity alone had to be diluted because of opposition from herders.

Even if the report in principle would have preferred to have advocated a free adherence to the Saameby which they themselves choose for all non-herding Saamis who so wish, it is apparent that, with regard to the Saameby members and for practical reasons, such acquiescence is completely impossible. (SOU 1975:99, p. 170.)

To date, the opposition between herders and non-herders on this issue has prevented its progress (although many herders have supported it). Just as the Saamis as a whole generally feel that they could not survive as an ethnic group if herding were thrown open to all Swedes, so herders of all districts feel threatened by the proposal to make certain rights open to non-herding Saamis.

Nonetheless, even if the proposal has not been actualized, certain gains have been made. The State's investigating committee states that "The right for a Saameby to accept supporting members for idealistic activities is, in this committee's opinion, a matter of course" (SOU 1975:99, p. 170). For this right to be secured in law, however, some change would be required in §31 of the RNL, and this has yet to be made.

In a special statement to the investigating committee by Lars Thomasson and Lars Utsi, the point is made that, regardless of the actualizing of the plan for supporting members, its restrictions and its scope, it is of the utmost importance that the Saameby be granted the right in law to devise such a program (SOU 1975:99, pp. 241–42). Without strong herding support, however, it seems that the issue will remain stranded. Recently, with proposals for the organization of a “new Saameby” to incorporate the Saameby created by the RNL in a larger, Saamish organization, many of the very same issues and fears have been raised (see *Samefolket*, 1980, no. 4, p. 12).

The demonstration against the damming of Lake Sitojaure

In February 1977, the Winter Fair in Jokkmokk, which has been an annual event since 1606, was marked by a combined Saamish and Swedish demonstration. The demonstration was against the proposed damming by the State Power Board (Vattenfall) of Lake Sitojaure in Jokkmokk parish.

The Jokkmokk municipality has already sacrificed more watercourses to hydro-electric power than any other municipality, and it is for this very reason that it is so hard pressed now to retain the prosperity available to the municipality through continued dealings with the State Power Board. A large part of the population in Jokkmokk is employed by the State Power Board. The Board pumps funds into the municipal treasury (though little in proportion to what it makes from the dams in the area), and its presence, which guarantees jobs and a stable community population, also guarantees that the community can maintain the services built up with government support. Should the population decrease below a critical limit, services such as schools and clinics may be withdrawn, due to lack of funds. Hence, the municipality of Jokkmokk faces a crisis with the end of the State Power Board epoch, and the offer of Lake Sitojaure to the Board by the local authority for damming was an attempt on the part of the Jokkmokk politicians to stave off this crisis for a few more years, in order to buy time until more long-term employment could be established.

The damming of Lake Sitojaure (referred to as “the Tjáhkevarasj project” by the Saamis and mistermied “the Tjäkavarats project” by the Jokkmokk politicians) would mean the irreplaceable loss of large grazing areas for Sirkas Saameby. It would also involve the building of a new road far into the western grazing lands, along with all the usual secondary consequences, such as tourist invasion. The damming of Sitojaure would also encroach upon the protected Sarek National Park. The rational reindeer population of Sirkas would have to be decreased; Saamish villages would be put under water, as would important archeological sites. The grazing cycle and migration patterns of the Saameby’s reindeer would

be dealt a heavy blow. The fishing in Lake Sitojaure, which provides a substantial income boost for a number of Saami families, would be ruined. For some herders, this encroachment might put an end to their herding. Moreover, once Sitojaure had been dammed, the next State Power Board project might be actualized in time, that of diverting water from Rappadalen into the proposed Sitojaure reservoir in order to increase the volume of water passing over the dam.

Some herders stand to suffer almost total ruin, while all Sirkas herders would suffer some negative effects from such a dam construction. These negative effects would be permanent and might even lead to further permanent damage. The interests of present and future herders were thus opposed to the interests of the few hundred Power Board employees whom dam construction would benefit for no more than about three years. Community politicians, of course, stressed that the sacrifice would be the last one needed to buy the time necessary to save the community as a whole. Herders, however, replied that this is the same song that the politicians have sung for about 20 years and they have still not managed to attract or create more jobs. Even worse, they continued, the local authority had not even secured any real, long-term benefits from the watercourses it had already sacrificed. Herders claimed also that some of the encroachment compensation payments owed by the Power Board to individuals had still not been paid after many years. For further information concerning the Sitojaure conflict, see *Tjähkevarasj—Lilla Hjärtberget, Tjäkovarats*, a mimeographed report issued by students at the Department of Cultural Anthropology in 1977 at Uppsala University, Sweden.

The fight to save Sitojaure from damming united Saamis of all backgrounds, livelihoods and nationalities. A large section of the Swedish community of Jokkmokk, led by the local groups of the Swedish Touring Club (STF) and the Swedish Society for the Protection of Nature (SNF), started a campaign called "Not Another Drop", to stir up public opinion in favor of the preservation of the last, untouched waters in Jokkmokk. The State's own investigation, SOU 1976:28, concerning the plans for further hydro-electric-power dams in the remaining watercourses in the north, classed Sitojaure as worthy of the highest degree of protection.

In reaction to this investigation, leaders of the Jokkmokk municipal authority wrote as follows:

It is necessary that construction be continual. . . By a conscious effort to adapt the projects to outer conditions, one can obtain a final result which is completely acceptable. . . One does not have to make a construction which is technically and economically optimal. Should one construct on these lines, our mountain areas will remain untouched even after continued construction, even for the little exclusive group of wilderness enthusiasts who are now, to the great injury of our district, trying to put a stop to all water-power construction. . . In taking a stance for or against water power, one must bear in mind that the small extremist group of wilderness enthusiasts, in which we count naturalists and field biologists,

compose but a fraction of the larger Swedish population, which has no such interest in putting a stop to the exploitation of our natural resources but which instead sees its value, in that the community gets the resources it must have to exist. It appears that the romantic viewpoint which expresses itself in an unwillingness to consider the actual conditions blooms greatest if the distance to the problem is large. For an inland community in northern Norrland with problems of catastrophic size, it is easy to realize that one must first answer for the people's livelihood before dealing with their vacation problems. When things have gone so far in a community that this is not obvious to its members, then it is not long to the end. Without employment and with a shortage of energy, Swedish society cannot live long. At least not the Jokkmokk municipality. (November 28, 1976. Sven-Erik Törnqvist, Fritz Granström and Börje Lundvall, printed also in *Tjåjkevarasj—Lilla Hjärtberget, Tjåkovarats*, 1977, bilaga C.)

The group of "wilderness enthusiasts" in Jokkmokk proved not to be so little. Much to the anger of the municipal politicians and Power Board employees, thousands of Jokkmokk people, both Swedes and Saamis, signed a petition condemning the damming of Sitojaure.

The Sirkas herder Henrik Kuhmunen, who had for 11 years, at the behest of the municipal authorities, driven his reindeer caravan through the grounds of the Winter Fair to please tourists, was one of those whose summer home would be flooded, should Sitojaure be dammed. Kuhmunen, his family and his reindeer went on strike during the Fair of 1977, and in the place of the caravan there came a big, sign-carrying crowd of marchers, consisting of herders and non-herding Saamis from Norway, Sweden and Finland, with a large following of conservationists, local Jokkmokk people and even tourists from the south. Soon afterwards, the head spokesman for the Jokkmokk municipal authority, Sven-Erik Törnqvist, resigned his post and the Sitojaure issue was shelved (for the time being) (see *Samefolket*, 1977, no. 2, and Ersson and Hedin, 1977, pp. 103 ff.)

Since the strike in 1977, the reindeer caravan has not been reinstated at the Fair, despite attractive offers from the municipal authorities and proposals to import a caravan of Saamis from Norway or Finland for the occasion. In response to this, an article in *Samefolket* (1979, no. 12, p. 3) called for solidarity from all Saamis in all countries to observe the reindeer-caravan strike at the Jokkmokk Winter Fair.

The three issues discussed above have served to illustrate the shifting alliances of different factions of the Jokkmokk community. They have exemplified some of the major axes which divide the herders in Tuorpon, along with the problems thereby entailed. With these examples in mind, one is in a better position to understand the situation in Tuorpon today, especially with respect to herding-group relations and the contemporary rationalization program for herd management, the subjects of Part III.

Part III

Tuorpon Today and Tomorrow

The Web of Determinants

In this part, I shall draw together the interrelationships of the determinants presented in Parts I and II for a limited discussion of Tuorpon's present situation with regard to the Swedish State's rationalization program. Part III is not a mere continuation of the historical analysis of Part I. I have not made the least attempt to construct a thorough presentation of Tuorpon herd management today from my own field experiences. Instead, I have been extremely selective, for my purpose is more specific. In this chapter, I wish to demonstrate the interaction of various herd-management determinants within a set legal structure (post-1971) in Tuorpon and, in so doing, to focus upon certain major differences between Tuorpon's herding groups. From this platform, it will then be possible to explain the variable resistance to and compliance with the principles of State rationalization of Tuorpon in particular in the next chapter. The Tuorpon situation is not without bearing upon reindeer-management developments in other Saamebys, and, in the final summary and analysis, the discussion will be expanded to touch upon the future of herd management and minority cultures in general.

A number of regenerative or vicious circles have been revealed, which under current conditions combine in the formation of what I have termed the extensive spiral. Ultimately, of course, like all natural systems, such a regenerative circle or spiral reaches a point where its flexibility is exhausted and it must correct itself if it is to avoid "death" (of course, even the establishment of a self-corrective linkage or a renormalization can be viewed as a partial "death" of the old structure). Many Tuorpon herders today are embarked upon an extensive spiral and face just this situation. Either they will succeed in reversing their herding trend and re-intensify or they will have to remove themselves from the circuit altogether and quit herding. Of course, such re-intensification does not mean a return to the classic, intensive form of the 18th or 19th centuries, but a self-corrective shift toward increased control over reindeer along the intensive-extensive continuum to avoid the irrationalities of over-extensivity (see p. 482). The Swedish rationalization program, aside from its larger political and cultural aspects, can be seen as an effort to stimulate (or force) this decision. Its goal is to raise the living standards of herders in part through a reduction in the number of herders and in part through the pressing of

those remaining toward a limited form of re-intensification of the reindeer-man relationship, along with collective-work organization and management policies. The reduction of the consumer category (number of herders) is in many ways regarded as a necessity for the success of the other elements of rationalization. Indeed, it is true that, in numerous ways, the small hobby herder, because of his inability to afford a greater work investment in herding, may constitute a hindrance to the control and reversal of the extensive spiral of the Saameby as a whole. Other small herders, however, may form the backbone of the Saameby labor force. Nonetheless, even these active, small herders will in time glide with the extensive spiral to a necessary non-participation in herding activities, if they cannot establish a steady state at least or an *intensive spiral* at best.

To the reduction of herders through the extensive spiral, one must add the reduction of herders through manipulation of this spiral in a competitive, weeding-out process by the Saameby, which may become actual, should flexibility become hard pressed—the situation discussed in Chapter 20. Yet another, usually more gradual form of fully active herder reduction which may predominate over the others when competition is not so intense has also been mentioned: the number of new herder recruits fails to compensate for the old who retire. Either the youth of the Saameby finds other, non-herding employment or else there is simply little youth to speak of. In Tuorpon, it is this latter form of herder reduction which appears most certain, even though the threat is somewhat distant for the time being. A brief glance at H. Johansson's statistics shows that, in the mid 1970s, only nine of Tuorpon's 32 active herders were married, and in the entire Saameby, there were only three children aged 0-14 years in the active herding families (SOU 1975:100, pp. 118-19). Even if fertility increases greatly in Tuorpon, there will still be a great gap in age continuity which will be difficult for an efficient labor force to bridge. Recruits will probably have to come from outside the active herding families and maybe even from outside the Saameby.

Of the forms of herder reduction, the most imminent is the first — reduction of activity and maybe even membership through the effects of the extensive spiral, freed from any competitive, weeding-out process introduced by the herders themselves. Hence, it is the ability or inability of the Tuorpon herding groups to establish steady states against the extensive spiral, to re-intensify if necessary, which will concern us here. Obviously, the success or failure of such endeavors is directly pertinent to the development of the State's rationalization program with respect to both herder population (structure rationalization) and improved profits with re-intensification (production rationalization).

A discussion of this nature will require an examination of certain features of the herding techniques, group structure and land utilization of Tuorpon's herding entities. The period studied will be 1973-78, the period of my most intense field work.

The Virihaure Group

The Virihaure Group is composed of four families: the Anders Blind (# 32) family, the Henrik Blind family, the Olov-Björn Blind (# 44) family and the Per Labba (# 40) family. The Henrik Blind family includes a young son, whose activity in herding work increases steadily but is not yet total. A son of Anders Blind, Nils-Anders, lives at home and is a major member of the Virihaure team. In a similar manner, Per-Henrik Labba, son of Per Labba, and Lars-Anders and Nils-Gustav Blind, sons of Olov-Björn Blind, fill out the Virihaure Group work force.

The three older men, Anders Blind, Per Labba and Olov-Björn Blind, are no longer as active as their sons. They are far from inactive, however, and will usually participate to the extent that their condition (and their sons) allow. They play key roles in planning herding strategy and, when the other herders of the group are in the west gathering for the autumn migration, they will be responsible for evaluating grazing conditions and "covering" the winter herd separations of other groups and Saamebys further east. The work force of the Virihaure Group is not particularly small, but it lacks depth. Should one of the younger men become ill, problems immediately arise during the periods of heavy work load. The families are all of Karesuando origin and closely knit by bonds of kinship and friendship.

Current determinants

By current Tuorpon standards, the families comprising the Viri Group are among the most well-to-do with respect to herd size. The entire Viri Group herd numbers 2,000–2,500 head and, although some herders own more than others, the differences are not great. Each herder has a herd which justifies hard work investment. Moreover, the size of the Viri herd is increasing steadily. In Tuorpon today, the total reindeer population is only about half of the rational limit; there is plenty of room for growth. While the size of the Viri herd relative to the size of the Nuortvalle herd may be of considerable importance in Village politics, the graduated vote, in which voting power is, within bounds, proportionate to herd size, has seldom been invoked, even where recommended by the RNL. To date, the big–small herder dichotomy has not been so evident in the ways structured by the RNL. Although the average Viri herder may have a larger herd than the average Nuortvalle herder, Viri herders certainly cannot be regarded as big herders when the supportive capacity of their herds is measured against the costs of their needs. No Viri herder has enough head to enable him to disregard the chance of a part-time job when herding does not demand his presence.

The tameness grade of the Viri Group reindeer is high, compared with that of reindeer in other groups. A difference in tameness grade between

the reindeer of different groups (usually a difference that varies with the season) will raise issues beyond those involving the absolute tameness grade. As mentioned elsewhere, Viri herders want to preserve their reindeer's high tameness grade, which is impaired by mixture with Nuortvalle reindeer, especially in the autumn and winter. Migration routes and speed of migration are planned by the Viri Group with this consideration in mind.

On the historical scale, the tameness grade of the Viri herd is, of course, not so high. Yet it has not altered much since the 1940s. The Viri Group's reindeer are used to a specific herding routine and make their own way to their traditional grazing lands, should any of them miss the migration in the company of the herders. Those reindeer which accompany (or are accompanied by) the herders on the bi-annual migrations (the greater part of the herd) have a habitual rhythm of grazing-land utilization. They need not merely be forced from one place to another. They are, therefore, relatively easy to handle, and the Viri herders take care not to spoil their condition by scaring them with snowmobiles and helicopters. While Viri herders use snowmobiles on the spring migration, they are careful about the contact between snowmobile and herd. The snowmobiles haul supplies and can be used to round up segments of the herd, should they have scattered too far, but the constant guiding, driving and containing aspects of migration are still relegated to dogs and to men on skis.

Usually, the Viri Group suffers only minor losses to predators each year. This does not mean that the threat is absent, only that Viri herders are active in protecting their herd, especially during crucial periods. While it is true that the concentration of predators in the Viri Group's grazing zone is far less than in the area occupied by the Nuortvalle Group's reindeer during the spring, autumn and often winter, some Viri herders explain sarcastically that this is partially due to the fact that the predators have learned where to go for an easy meal. Nuortvalle herders violently deny such assertions and point out that they are conscientious in their guarding. It is difficult, if not impossible, however, to guard adequately a scattered herd.

As has already been noted, the natural and artificial hindrances most relevant to the herding of the Viri Group now, as in the past, favor and make possible a westerly-oriented, herding schedule. The Kvikkjokk-Parka crosswise fence is of minor significance to them (if anything, an irritation), as they migrate with most of their herd in a gathered, orderly mass through the fence in both spring and late autumn. Some of their reindeer, of course, mix with the Nuortvalle reindeer, and for this reason it is necessary for one or more Viri Group representatives to attend the Parka separations in August. The missile-field fence and the Arvas lengthwise fence have little direct influence on the Viri Group. The fence which has real importance for the Viri Group's herding is the one separating Tuorpon and Jákkåkaska Saamebys in the western regions. This

fence hinders the spread of Viri reindeer north into Jåkkåaska territory, makes late-summer separations between Tuorpon and Jåkkåaska unnecessary (before the construction of this fence, separations were often held at Alkavare, by Mellätno, the Saameby border) and, moreover, both eases and makes more effective the late-autumn sweep of the western region before the eastward migration. On the whole, because of the location of the fences with regard to the Viri Group's land-utilization schedule and because of the Viri Group's greater herding intensivity, Tuorpon's fences are of less significance to the Viri Group than to the Nuortvalle Group.

The recent change in the tax system for herders will not impose any great difficulties on Viri Group herders. Some Viri herders had chosen the earlier option of keeping accounts and declaring income according to the new system before it became obligatory. As herding is the primary income source for all Viri herders, a law which demands detailed listing of all expenses as well as income will, if anything, be positive, for it permits considerable deductions for income plowed back into the herding business. Big herders are far more likely to re-invest their capital in the herding enterprise than small herders. Moreover, the yearly reindeer count, more stringently demanded by the new tax legislation, should not trouble the Viri Group so much, as its herd is gathered for much of the year anyway.

The fluctuations in winter climate, the season of greatest determinant strength for herd size and herding form in the area during the period of my field work, were drastic. To generalize grossly: in 1973-74, the winter was catastrophic; in 1974-75, the winter was poor; in 1975-76, it was normal; in 1976-77, it was very bad; and in 1977-1978, it was excellent.

For the herding of the Viri Group during these years, climatic variation was the most decisive, as changes in other determinants were minor. Furthermore, the relative intensivity of the Viri Group herding system gives Viri herders a greater ability than they would otherwise possess to master the effects of determinant variability. Although the above climatic variations caused in turn great fluctuations in both Viri Group and Nuortvalle Group herding, the Viri Group's control over other factors enabled it to meet these climatic demands in ways very different from those of the Nuortvalle Group.

Herding adjustments

The Viri Group met each instance of bad winter conditions with *increased* intensivity, through intensivity of remarkably different forms. In 1973-74, the grazing did not turn bad in the winter lands until after the Viri Group had already arrived there with the herd after the long, late-autumn migration from the Virihaure area. Bad grazing conditions made it impossible to maintain the normal winter intensivity. The reindeer strove to scatter in search of grazing, but, at the same time, had the Viri herders released their herd to extensivity, a total mixture of Viri and Nuortvalle

reindeer would have resulted. Even though scattered and mixed, the reindeer might not survive, and the toll taken by predators would be high. Moreover, once mixed, it might not be possible to separate them again till next autumn (it is not a good idea to separate in the spring, when the pregnancy of the cows is far advanced). This in turn means troublesome co-operation with the Nuortvalle herders, a reduction of tameness grade for the Viri reindeer, and a reduction of thoroughness in the marking of calves next summer, as there can be no orderly spring migration if the herd is mixed and scattered all winter. The Viri herd would, therefore, not necessarily be as concentrated to Virihaure's western end in the summer as usual. In short, release of the Viri herd to complete winter extensivity would be a very costly decision, one to be avoided, if possible, but not at the extreme cost of massive reindeer starvation.

The chosen solution of these problems was the use of artificial fodder. The herd was kept gathered in a large, fenced enclosure to prevent scattering for grazing. The location of this large "corral" was shifted a number of times. Otherwise, the corral gets very dirty, and reindeer can easily become sick. Fodder was given the herd twice daily in a number of long, wooden troughs. Fortunately, this expensive undertaking was partially subsidized by the State herding authorities. Although by winter's end the reindeer were weak and thin and many cows had thrown their calves, only eight of the original herd in the enclosure had died. Separation had been maintained and, come spring, the usual herding schedule, with orderly, westward migration, could continue, although it was a bad calving year.

In the winter of 1974-75, grazing was sparse but still available. By frequent moves, the Viri Group could maintain intensivity over their separately gathered herd. In 1975-76, the winter was normal, and the herd could be kept together without much effort all winter in the immediate vicinity of Stenträsk, the winter home of the Viri herders. In 1976-77, conditions in the lowlands were again terrible. This time, however, grazing in the lowlands deteriorated before the Viri herders had left the Virihaure area on autumn migration eastward. As usual, the herders had used the police telephone at Stalo to ring Stenträsk and find out about grazing conditions and the whereabouts of other herds, before embarking on migration. On learning of the terrible conditions, the herders immediately decided to cancel the eastward move entirely and over-winter in the mountains, the summer land.

Such a decision was not without risks and costs. The high, treeless mountains cannot afford the same alternatives as the lowlands, should conditions worsen. In the forests, good grazing patches might still be found in the midst of bad areas, where there is shelter from the wind or the temperature variations are just slightly different. But, in the high mountains, grazing in winter tends to run to extremes — it is either passable or dismal. The change from good to bad can come in one night, and then the

herd would be stuck without food 50–60 miles from the nearest evergreen forest. Even in the lowlands, grazing might be scarce, and to keep a herd together long enough to migrate through such foodless areas until artificial fodder could be provided would be a dangerous proposition indeed. The last time herders over-wintered with their herds in the mountains was about 12 years ago, and before that not since 1912–13; it is risky.

Because of the risk involved in over-wintering in the west, and the possibility that the herd might have to be evacuated quickly, should western grazing fail, the Viri Group had arranged for Sameprodukter AB to meet the herd in Kvikkjokk with their large, reindeer-transport trucks. After a fast, forced march eastward down the Tarra Valley, the reindeer could then be quickly transported to their habitual Stenträsk region before lack of food had weakened their condition overly.

Also, in making the choice to winter in the west, the Viri Group stood to take a considerable cut in income, as the herders would be unable to sell any oxen to the slaughterhouses at lowland, winter corrals. They would have to absorb the substantial costs of snowmobile fuel for trips to and from the lowlands for provisions, and the herders would have to tolerate a long, relatively uncomfortable and isolated winter, far from their families. On the other hand, should their gamble succeed, not only would their herd sustain less loss, but their calving percentage might still be good. The weakened, Nuortvalle, reindeer cows in the lowlands would tend to throw their calves and, moreover, the animals sold for slaughter in the lowlands would be thin and fetch a poor price. The Viri herders brought the slaughtered animals necessary for family consumption down to the lowlands by snowmobile.

As the conditions in the mountains remained good all winter, the Viri Group reindeer survived very well and the herd grew considerably, with an excellent spring calving. The success of this tactic and the failure of the Nuortvalle Group to cope adequately with this bad winter, resulting in high, Nuortvalle-herd loss, gave the Viri herders substantially increased political power in the Saameby. Relative herd size is very meaningful, even though the voting system employed in Tuorpon usually does not demand the use of a graduated vote. Of the numerous decisions which herders must debate, few need be referred to the Saameby board meeting. Even in these decisions, a herder's voice is largely carried by his herd size as a matter of course. The possibility of demanding the use of the graduated vote is always present.

The excellent winter of 1977–78 found the Viri Group wintering with their separate, intensively gathered and guarded herd around Stenträsk as usual.

Group stability

The camaraderie in the Viri Group is excellent, but its small membership necessitates a very large work investment to maintain intensity. The

Olov-Björn Blind family switched from the Viri Group to the Nuortvalle Group one winter, but this switch was short-lived. Olov-Björn has a brother, Nilas, in the Nuortvalle Group, and Karin Blind, Olov-Björn's wife, whose maiden name is Parffa, is a first cousin to the Parffas in the Nuortvalle Group. The ability to shift groups smoothly is, therefore, great for the Olov-Björn Blind family. The family switched back to the Viri Group quickly, however, because its active herders saw that they had too much to lose by Nuortvalle membership. Their reindeer would come to change grazing utilization and migration schedule. They would become less tame and, without the intensive guarding of an organized work unit, would sustain large losses to predators. In short, the Olov-Björn Blind family realized that as a Nuortvalle member it could not keep itself from being pulled into over-extensivity. Despite the greater work load in the Viri Group and the quarrels that may have occurred there over herding policy, the Viri Group was soon re-united. On the whole, the Viri Group has been remarkably stable.

The wide difference in herding methods and the disputes which thereby arise between groups inhibit switches in Tuorpon group membership. There are already too many herders in the Nuortvalle Group (from the viewpoint of organizational problems) and, if any permanent switch is to occur, it is more likely to be a swelling of the Viri Group to increase its manpower rather than a reduction. Reduction will probably occur only if a herder's herd size falls far below the subsistence minimum or if the herder without a young, active inheritor is forced by age to disengage himself slowly with his herd from a large investment in herding.

The Viri Group has shown itself favorably disposed toward increasing its work force. Frequently, non-herding relatives and friends from both Norway and Sweden (including myself) spend time with the Viri herders to help with the work, where herding expertise is not vital. The Viri Group has also hosted a member of the Nuortvalle Group who had decided to shift but for whom the Viri Group work schedule proved too much.

While Viri Group members realize the need for fresh blood, they are very particular about whom they permit to join. The reasons for not accepting applications¹ from prospective new members are based not only on the effectivity of the person in question, how many reindeer he owns, etc., but also on how active his close relatives are and how many head they have. For, if one accepts a new herder into the fold, one must realize that his less active relatives will try to push the care of their reindeer onto him and thus onto the Viri Group as a whole.

¹ Such applications are not formal or written. A herder will simply let his intentions be known and later request permission to pull his reindeer to the same booth in a winter corral to which his prospective team-mates pull their reindeer. It may take quite a while and a number of different separations before the transfer of reindeer from one group to another has been more or less completed.

Land utilization

Besides those rare shifts in land-utilization scheduling caused by very severe winters, such as those mentioned above, the scheduling of land utilization by the Viri Group has been quite routine for decades. Of course, within the winter land itself, each year will bring different, small shifts, but the Viri Group has not attempted to institute a new grazing routine, an alteration of the winter zone under normal conditions or a utilization of new spring, summer or autumn lands. The Viri Group holds to its old routine as far as the effects of climate allow. No other determinants have yet given cause for great change. The Viri Group herd is still small enough to put no strain on the grazing capacity of Virihaure's western end.

The Nuortvalle Group

Until the spring of 1978, all Tuorpon herders who were not members of the Viri Group were members of the Nuortvalle Group. It is not possible to give an accurate list of all the active herders in the Nuortvalle Group, as this would immediately give rise to troublesome questions of definition. As was discussed earlier, there are significant reasons for rejecting the Saameby's membership classifications as giving a true picture of herder activity and thus of the group's real work force. Unlike Viri herders, Nuortvalle herders are spread along a wide scale of herding activity. Whereas hobby herders cannot maintain themselves in the Viri Group, they abound in the Nuortvalle Group, which has a less demanding, herding system. To list merely the names of the total Nuortvalle Group would be of little value, and to estimate and somehow compare their various, shifting, work investments would be very difficult indeed. Suffice it to say that the Nuortvalle Group is very big and *can* field 18–20 fully capable herders, although in actuality this is rarely the case.

A large proportion of the Nuortvalle herders are over 50 years of age. Old age and sickness partially incapacitate about eight members and, although a number of recent marriages have produced children, there are still few children growing up to enter the herding occupation. Thus, the Nuortvalle Group work force has depth in the present, unlike the Viri Group, but very poor, internal-recruitment prospects, like the Viri Group, for the future. Despite its present work-force depth and the reduced requirements of its extensive-herding system, the Nuortvalle Group is often plagued by an inability to field enough herders at critical times. The organizational problems of the Group have already been discussed. There

are too many separate wills, largely the result of great differences in herd size between members, and as yet no wage system has been instituted to ease the problems of unequal work distribution or to stimulate greater herding activity.

In this respect it is also important to note that the Nuortvalle Group is composed of both native Jokkmokk Saamis and relocated Karesuando Saamis, a situation which, according to the herders themselves, is a cause of some disagreement and poor co-ordination.

Current determinants

There are many Nuortvalle herders with fewer than 50 reindeer. The total, Nuortvalle Group, herd size has decreased over the past five years. In 1977, its estimated herd size was only about 2,500 head. The Viri Group herd size has increased gradually over the past five years, so that, in herd size, the two groups are nearly equal.

The tameness grade of the Nuortvalle reindeer is very low. They have been herded extensively for most of the past five years, much of the herd in both winter and summer. Winter intensivity has been successfully established only sporadically and, even then, only for a fragment of the total Nuortvalle herd. Nuortvalle herders complain about the lack of tame oxen to lead their herds. Their dogs have had so little experience of driving gathered herds on migration that Nuortvalle herders often call them useless. Herding dogs are, on the average, active for only about five years and are thus not in a position to have become trained in more intensive methods.

Under the Nuortvalle herding system, the herders do not even attempt to gather their herds or to establish intensivity in the autumn until after the snows have come, when the reindeer have already scattered in the lowlands. This means that the gathering and driving of reindeer is conducted by snowmobiles. In contrast, the Viri Group conducts (most and, until 1976, all of) its late-autumn gathering and migration on foot or on skis. When a man on foot gathers reindeer, the reindeer move before him at a "safe" distance. The gatherer may shout or wave, but, unless the flock tries to turn in the wrong direction (and then especially at close quarters, for example, near the corral gate), the herder and his dog do not intend or need to panic the reindeer into flight. The herder navigates rather than simply scares the reindeer to go where he wants. Reindeer may even stop to graze briefly while being gathered. The shout of the herder may then be used to arouse the reindeer from this lapse into a grazing context. Gathering by snowmobile, however, often sends reindeer used to bare-ground extensivity into panic flights. The roar of the motor is constant, unlike the shout of a herder, and the snowmobile is fast enough to keep the pressure of panic on a flock, no matter how far ahead it tries to run. The reindeer

which finally becomes less sensitive to roaring engines, be they motors in snowmobiles, helicopters or motorbikes,¹ has *not* become more tame. On the contrary, he has often become harder to handle and demands the escalation of herding mechanization. Reindeer of high tameness grade have certainly not lost the ability to be scared, and scared by the least sudden movement or raising of voice. The trick is to make the reindeer do what the herder wants with a minimum of scaring or force. Success in this respect indicates high tameness grade. The calm, reassuring movements of the intensive herder harnessing his tame oxen epitomize the relationship meant by high tameness grade.

Relationships of this type between reindeer and man in the Nuortvalle Group have entered a vicious circle of deterioration. Where herders are not united on a policy of maintaining high intensivity and high reindeer-tameness grade, the mechanization of herding cannot be checked. Those who may wish to retain gathering methods on foot or on skis cannot keep up with those who introduce snowmobiles into the work.

According to the herding authorities' own official figures, Tuorpon Saameby lost more reindeer to predators in 1977 than any other Saameby. Tuorpon's losses exceeded 600 head (*Rennäringsnytt*, 1978, no. 3). This figure covers only the reindeer carcasses actually found. A fair estimate would put the total Tuorpon losses for 1977 at over 1,000 head, about one-fifth of the total Tuorpon stock. Losses to predators have been very high in Tuorpon for many years, causing a good deal of money to be pumped into the Saameby treasury. Such income reduces the probability that a herding fee will be instituted. Compensation paid to Tuorpon for losses to predators in 1977 constituted about 75 % of the Saameby's total income.

These losses have been sustained mainly by the Nuortvalle Group. The concentration of wolverine, the predator which usually takes the highest reindeer toll in Norrbotten (see *Rennäringsnytt*, 1978, no. 3, p. 6), is relatively high and is increasing in the Nuortvalle Group's spring and autumn zones (which include the Kaska Tjavelk area), according to a three-year investigation by the National Environment Protection Board (Björvall *et al.*, 1978, pp. 29 ff.). In fact, the report on this investigation concludes that the wolverine population in Sweden has doubled since 1974. The Nuortvalle-Kaska Tjavelk zone is full of cliffs and rocky terrain, a perfect place for predators besides the wolverine, notably the lynx, to hide, and it is difficult to guard the herd in this zone. This Tuorpon zone has always been recognized by herders as being full of predators, and for this reason Tuorpon herders have been outspoken in their opposition to the laws

¹ Motorbikes are currently used to gather reindeer over bare ground on the Varanger peninsula in northern Norway, for instance, where the terrain permits. In Tuorpon, the terrain is too mountainous for motorbikes ever to be of much use in herding. Moreover, it is doubtful whether they would ever be permitted within the National Parks.

protecting predators which were made in the 1960s (see Chapter 14). With the rising predator concentrations and reindeer killings, especially in Jokkmokk parish, local papers carry furious debates between herders and nature conservationists. Much of the same conservationist opinion which sided with the herders on the issue of protecting Lake Sitojaure from damming is opposed to herders over the predator issue. In a newspaper interview, Isak Parffa, a long-time Tuorpon headman and the most articulate member of the Nuortvalle Group against the State's predator policy, has warned that Tuorpon herders will soon be forced to become criminals, that is, to shoot predators illegally (*Norrbottens Kuriren*, March 26, 1977).

Despite the fact that the predator population in the Jokkmokk area is rising, many argue that in the past it was even higher and that reindeer losses were much lower. They conclude that the current high loss reflects a deficient herding method. Obviously, over-extensivity does contribute to reindeer losses, but, as demonstrated in the historical material, the over-extensive, Nuortvalle Group, herding method is not just simply a matter of free choice. One cannot alter the economic basis of the herding industry, exploit the grazing lands, legislate for rational policies and then claim logically that the herders must take sole responsibility for increased reindeer losses to predators.

In the past, there were experienced hunters, who, spurred on by the promise of bounties, fought to keep down the predator population. Since these predators have become protected by law, the great hunting skills of past generations have not been kept alive to the same extent. As a result, there are only a very few, truly capable hunters of predators in the Jokkmokk area today. In the past, such men could make a living by their hunting prowess, but, today, they can hunt predators only with special dispensation from the government authorities, when the predator population has shown itself to be (or is finally acknowledged to be) too high.

The relative concentration of predators in the still-untouched, wilderness areas becomes all the greater, the more roads, planes, snowmobiles and tourists invade the predators' old domains. The Pärälälven water system, including Lakes Peuraure and Karatj, is one of the few, still unspoiled, river-lake chains in Sweden. This is the heart of Nuortvalle spring, autumn and winter grazing and a haven for predators. As Isak Parffa puts it, "Tuorpon has been made into Sweden's predator nursery" (personal communication).

With yearly losses such as those suffered in 1977, the Nuortvalle Group cannot long survive. In an article entitled *Predators threaten to be the death of our Saameby*, Isak Parffa points out that many, prospective, herding recruits reject herding in Tuorpon as a dangerous investment of capital (*Samefolket*, 1977, p. 80). Even current herders do not wish to risk taking big loans to rebuild their herd size when so many of the purchased reindeer will soon be lost. Parffa comments bitterly on State policy with

regard to predators:

I hate this policy and am angry at the entire majority society which can carry on like this. The latest stupidity I have heard was when the spokesman of the Community Board said that, if herding does not become profitable, then the only solution is to socialize it. One cannot help but swear. It seems that the State powers are trying to make herding unprofitable so that they can socialize it. (Parffa, *Samefolket*, 1977, p. 81.)

To the Nuortvalle Group, fencing is of much greater significance than to the Viri Group. The Parka crosswise fence provides an obstacle against which the Nourtvalle reindeer can be gathered and marked in the spring and gathered again and separated from Mavas reindeer in the early autumn. This fence, together with the missile-range fence and the Arvas lengthwise fence, forms three sides of a box opening toward Lakes Peuraure and Karatj, that is, toward the worst predator areas.

The recent changes in taxation legislation will be extremely detrimental, especially to many Nuortvalle herders. Nuortvalle herders have never submitted full, income-expenditure declarations but have instead paid tax according to the rough formulas devised by the State, the method called *schablon* taxation. The authorities decided on a yearly, average, calving percentage, which was multiplied by each herder's rough estimate or count of herd size to reveal the amount of herd growth for which the herder would be taxed. Under this system, it was natural for some herders to try to report low herd-size figures. Since the gathering for herd counts was not always in the best interests of all Nuortvalle herders, there was additional reason for their reindeer to enjoy winter extensivity. One should say rather that the motivation to conduct a herd count was not strong enough alone to bring about any change in Nuortvalle herding policy.

Small Nuortvalle herders are not in a particularly good position to make large investments of capital for herding equipment. Hence, they are not in a position to ask (or have not chosen to ask) for the deductions which such investments might afford them. In order to obtain a deduction of this nature, a herder would have to file a true tax declaration, including an account of the deductible expenditure. Such a declaration would mean the presentation of income as well as expenses—the system demanded by the new taxation legislation. Apparently, as Nuortvalle herders have had little which they might deduct, they have not declared their incomes until forced to. This has enabled them to be somewhat lax in fulfilling reindeer counts; they have preferred to let it go with a rough estimate, if a count would mean much extra trouble, which it would if the reindeer were still herded extensively. Of course, as herds can be quite mixed, the failure of the Nuortvalle Group to bring its herd into the lowland corrals not only prevents herders in other groups from collecting their strays, but also destroys much of the accuracy of the counts held elsewhere.

Not only will herders in general find the transition to the new tax system painful with respect to the greatly increased demands of paper work and accounting, but Nuortvalle herders especially may be made uncomfortable by the closer scrutiny of their slaughter policies (this includes reindeer slaughtered for their own consumption) and herd sizes. Under the new tax system, it is to the herder's advantage to give an exact count of his herd each year, a practice which for the over-extensive Nuortvalle herders may prove difficult.

The method by which the information gathered by the new tax system may be utilized to re-classify Saameby members with small herds has already been mentioned in Chapter 20.

Herding adjustments

The same climatic variations over the years 1973-78 mentioned with regard to the Viri Group caused entirely different reactions in the Nuortvalle Group. These differences can be explained by viewing these same climatic conditions in connection with the other Nuortvalle herding determinants.

Nuortvalle herders met each bad winter situation with continued or increased extensivity. The Nuortvalle herd enters the winter season from an already extensive position, but efforts are usually made (though they are often unsuccessful) to round up the herd and separate it into smaller, more intensive, winter units, as of old.

The Nuortvalle herd was, as usual, spread throughout the autumn and winter zones when grazing became sparse in the winter of 1973-74. To gather the herd then was pointless and all the more difficult. A gathered herd would have to be sustained on artificial fodder immediately, and this becomes a grave problem when the herd is far from the desired winter area near the herders' winter quarters or a road. Even the Viri Group, with tamer reindeer, held together in the winter homeland and fed on artificial fodder, had to contain the natural splintering tendency of their herd with temporary fencing. Gathering, containing, moving and feeding their herd intensively was an option out of the question for Nuortvalle herders. Winter-herding activity instead became a matter of patrolling by snowmobile to scare off predators, to try to move scattered flocks from the worst predator zones, and to find the remains of predator victims in order to recover compensation. Reindeer losses were very high.

In 1974-75, the winter was poor but not catastrophic. Intensity was indeed possible, although with frequent shifts in grazing area. Nuortvalle herders, however, were not fully successful in establishing winter intensity. Gathering was begun too late and the reindeer were loath to budge from the good grazing in the Karatj zone. Nonetheless, many other Nuortvalle reindeer regularly reach the eastern lowlands in company with the Viri Group's "intensive", late-autumn migration, and these the Nuort-

valle herders can obtain directly from a separation corral at Karats,¹ Rahanåive or Juongavare (frequently called *Trettiattan*), to which the Viri herd is brought. In a similar manner, Nuortvalle herders can recover reindeer from the Mavas herders, who have also swept their western summer lands and brought their herd by orderly migration to a lowland corral, for instance, at Rävudden. These Nuortvalle reindeer are thereby already gathered and under control. They can be sold at the corral to a slaughterhouse or separated there as a group herd, to be broken down further into various, smaller, intensive, family herds at another, more favorably located corral.

The Nuortvalle herders themselves gathered a herd and held a separation to allow non-Nuortvalle herders to collect their stray stock and to select slaughter animals, but many Nuortvalle reindeer never saw a winter corral and remained roaming in the Nuortvalle autumn lands. One can, therefore, characterize Nuortvalle herding in such instances as partly intensive and partly extensive. Of course, other groups will be angered by such a situation, for they will have many reindeer mixed with the free-roaming Nuortvalle reindeer in an area from which all consider it a Nuortvalle Group responsibility to gather. Herders from other Saamebys cannot begin gathering in Tuorpon territory. The Viri herders, however, have become so angry on occasion that they have talked of going into the Nuortvalle area themselves to get the job done, so that they can separate out their strays. Although the law might support such action nowadays, in reality it would constitute a major breach of herding etiquette, and so far there has been nothing more than talk on this subject.

When the part of the herd under more intensive care is large, the Nuortvalle Group will frequently be broken down further. The Kitajaur Ommas, offspring of Guttorm G. Omma (# 37), are usually eager to form their own group, and the brothers Anders M. Omma (# 58) and Ola Omma (# 57) from Stenträsk are also disposed to "pull" separately. If the Nuortvalle herd under control in the lowlands is small, however, it is more likely that the group will not bother to split. Splitting and herding in smaller, separate herds would just mean extra work. Small herders usually cannot afford such a work investment and so will tend to stick together.

Exactly how many *kontora* or booths will be established at a winter separation corral is never really known in advance. Partnerships may last all winter or only between corral occasions. The herders themselves do not always know in advance what they will decide or how they will separate, for this depends upon how many of their head they will find in the corral, the sizes of potential partners' herds, etc. To list every small split and merger for the Nuortvalle Group during such winters—winters when

¹ While there is no permanent separation corral at Karats, separations may still be held there and in other favorable locations by erecting a temporary corral with wire fencing for the occasion.

some intensivity is possible—would be highly confusing. Suffice it to say that, whereas the Viri Group remains as a single, intensive entity all winter regularly, the Nuortvalle Group displays a wide spectrum of changing group partnerships. The Nuortvalle Group tends to break down into successively smaller units, the better the winter and the more reindeer over which they are able to establish intensivity. During the excellent winter of 1977–78, the normal winter of 1975–76 and the poor winter of 1974–75, the Nuortvalle Group was able to establish winter intensivity over various portions of its total herd.

During the terrible winter of 1976–77, herding for the Nuortvalle Group was totally extensive, as it had been in the winter of 1973–74. The fact that grazing conditions were already dismal by late autumn in no way altered the Nuortvalle Group's reaction possibilities, as it did for the Viri Group. Because of the Nuortvalle Group's pronounced, eastward shift and easterly-oriented, migration schedule, their reindeer were already scattered throughout the lowlands when the grazing turned bad. Only small flocks were brought into corrals and, once some slaughter animals had been taken, the reindeer were released to extensivity again. The poor condition and low weight of the reindeer and the herder's own lack of herd knowledge made many hesitant to slaughter at all. Later in the winter, when the death toll rose ever higher, many herders regretted not having slaughtered more.

Neither in the winter of 1973–74 nor in that of 1976–77 was artificial fodder utilized by the Nuortvalle Group. In such conditions, the intensivity required for the use of fodder cannot be established from scratch in the face of hard, extensive pressures. It is instructive to compare the herding of the Nuortvalle Group in the bad winter of 1976–77 with that of the old Nuortvalle Group (the Pära-Petter Group) in the bad winter of 1912–13. In both cases, the Nuortvalle Group wintered, as usual, in the lowlands, while most of the other herding groups in the entire Jokkmokk area wintered further west in the mountains (see Anta Pirak's and Nils Anti Gruvvisare's 1913 reports to Erik Bergström). The easterly position of the Nuortvalle Group or the Pära-Petter Group, as it was called in 1913, can be explained in part by the easterly location of the Skeltavare mountain massif. Despite equally strong, extensive pressures in the winter of 1912–13, however, the Pära-Petter Group was able to herd intensively in the lowlands. In 1912–13, intensivity could be maintained in the lowlands because it had never really been broken and did not have to be re-established. Even later, when summer extensivity had spread to the Pära-Petter Group, intensivity was re-established early, with the eastward move to Puollemåive. Old Nuortvalle herders had the choice of maintaining intensivity, increasing it or dropping it in the winter. These alternatives are no longer available to the Nuortvalle herders in bad winters.

The necessary extensivity in bad winters, combined with the powerful, intensive pressures from predators, has caused Nuortvalle herders to

suffer terrible losses. It is difficult to say to what extent these losses are the result of starvation. Whether all losses are due to predation and lack of adequate guarding or to starvation and lack of fodder utilization (of course, these effects combine, as starving and weak reindeer are much easier prey), the fact remains that the problem lies with the lack of intensivity—given a seemingly inevitably great threat from predators.

Of course, Nuortvalle herders realize their predicament. Their herding form, in combination with the great threat from predators, puts them at the mercy of climatic determinants of an extensive nature. Either they must accept an accelerating glide away from the herding livelihood and a transference to dependence on other jobs (or old-age pensions) or else they must try to resolve the problem within the herding context. This can be done in two ways or a combination of two ways. One way is to reduce the intensive pressure by reducing predator concentration. The other way is to withstand the extensive pressures of poor winter-grazing conditions by maintaining intensivity, that is, by re-establishing the old possibility of choice for intensive winter herding under bad grazing conditions with the help of artificial fodder— basically, the Viri Group model.

The killing of predators is closely restricted by law and, despite the herders' pleas and the acknowledged increase of predators, the authorities have been grudging in the granting of special wolverine- and lynx-hunting licenses to Tuorpon. Licenses were finally approved early in 1978, but only for a couple of months and for a limited number of kills. The licenses expired before the hunt could report any success. The great danger from predators remained, and frustrated herders broadcasted publicly threats to break the law and continue the hunt.

The authorities have reacted to the tense situation by forming a special police force for the protection and study of the predators. This force of snowmobile patrolmen or nature experts (their character and duties are hotly debated) is insultingly termed the *skräpo* police or "trash police", a term formed from the term *säpo*, which stands for the Swedish security police. *Skräpo* patrolmen have been known to shadow the movements of herders all over the mountains. There was even an incident in which a herder had his snowmobile keys taken from him in the mountains when he came too near the den of a wolverine. Herders claim sarcastically that there is a *skräpo* patrolman for every herder and that, rather than watch the predators, the patrolmen watch the herders. Tempers are inflamed.

Meanwhile, the government-approved experts on wildlife are investigating a solution by which the law on the protection of predators would be altered so that predator-population fluctuations would be regulated and a new system of compensation payment introduced. Tuorpon herders, however, cannot afford to be patient. Even an altered State policy on the hunting of predators would not produce an immediate effect, an effect sure and fast enough to help many Nuortvalle herders. The right to kill predators is one thing and the implementation of this right another.

Nuortvalle herders are, therefore, forced to face the other alternative (re-intensification). This is the more comprehensive solution, one which can combat the losses from both predation and starvation. This alternative, however, meets with many problems. Re-intensification demands sizable investments of time and money, investments which may yield no pay-off for a number of years. The small herders who are already well along the extensive spiral have difficulty making this commitment. If some herders make no efforts at betterment but hope to draw benefit from the intensification of others, it will not be long before the whole project sinks again to the lowest denominator of inactivity.

With respect to the regenerative spiral of extensivity, one can say that the Nuortvalle Group's herding has reached a limit at which it must either destroy itself or change sign—either Nuortvalle herders must leave the field (resign themselves to hobby herding) or else they must try to re-intensify. In re-intensification, an attempt is made to turn the spiral in the other direction. Re-intensification means a higher tameness grade for the reindeer, better herd knowledge for the herders, better herding profitability and, in turn, more ability to invest time and energy in the herding occupation, i.e. further re-intensification.

A basic problem in turning this spiral round is that the feedback between elements in the spiral can take a good deal of time. Much of the positive reinforcement is delayed. It may take three to four years before the herd has formed new habits and before the calves saved from predators as a result of re-intensification are ready for slaughter. Moreover, such reinforcement, whenever it begins to make itself felt, may be small at first and not enough to justify or to sustain the jump to the increased investment demanded of re-intensification. In short, while re-intensification demands a minimal, all-or-nothing jump for the herder, a cost in money, time and labor, this reinforcement, while ideally promising a net increase in income, may take too long before it even balances the herder's account. There is a *reinforcement gap*.

It is arguable that the system of calf-slaughter advocated by the Swedish rationalization program provides the best solution to this problem. In this way, more positive reinforcement may be speeded to the herder. But if he can wait just 3 years and protect his reindeer from excessive loss to predators, the herder will be in a position to reap much more profit upon slaughter. This issue will be discussed in the next chapter.

Group fission

Re-intensification is certainly not a new idea for Nuortvalle herders. The matter has been discussed endlessly for years, but it was only after the terrible winter of 1976–77 that desperation enforced concrete action.

A group split seemed called for before the possibility of re-intensification could be actualized. The total Nuortvalle herd is not so large that

it cannot be the object of re-intensification as a whole (according to the ideals of Swedish rational herding, a herd size of 3,000 head is optimal). The group split which occurred was occasioned by personal differences, possible Jokkmokk-Karesuando identity variables and the politics of grazing-land utilization. While some herders saw the best means of re-intensification in following the Viri Group model, others could not afford this investment. Without the benefit of an institutionalized wage system and an organized system of labor division, reduction of group membership through fission was considered necessary by most.

Much of the disharmony of the Nuortvalle Group stems from the old Nuortvalle and Kaska Tjavelk Group merger. These groups were to a great extent marked by the Jokkmokk-Karesuando split. For the native Jokkmokk Saamis, the re-intensification drive could be used as a means of gaining independence and once more establishing a better claim over the Nuortvalle grazing area, theirs by ancient right. By refusing to comply with the Viri Group model of re-intensification, the original Nuortvalle herding families could force the others to separate from them, in order to maintain their intensive independence elsewhere. Of course, those favoring the Viri Group model were not really offering a one-group option and were just as glad of their resulting independence from the old Nuortvalle herders and the Nuortvalle grazing area. In short, while all Nuortvalle herders hoped to achieve some degree of re-intensification, some sought to accomplish this by reducing the group size through fission and by shifting migration scheduling and grazing-land utilization, and others hoped that reduced numbers and hard work with the same general schedule on the same grazing lands would be enough.

The work investment demanded by such a split is considerable, especially for those seeking to change migration scheduling and land utilization. It is understandable why Nuortvalle herders preferred to hold on so long to a descending economic spiral, with reduced commitment to herding and reduced income, bolstered by the advantages of the Swedish social reforms and outside sources of income. Compensation money and public services, however, produce no calves and, when finally faced with the ultimate extinction of their reindeer management, Nuortvalle herders were forced into the long-awaited split.

Fission and attempted re-intensification could not be actualized until the next winter (1977-78), which proved excellent. The good winter made winter intensivity in small groups possible, which then served as the springboard to the year-round separation of the Nuortvalle Group into two distinct entities. As one would expect, the line of separation, with three interesting exceptions, followed the old Nuortvalle-Kaska Tjavelk split, which had been dormant for about ten years.

Two former, Kaska Tjavelk, herding families preferred to stay with the remaining Nuortvalle Group, and one old Nuortvalle member shifted over to the new group. Per Gunnare (# 54) had for many years helped the

Kitajaur Ommas in the winter and wanted to stay in the same group, the old Nuortvalle Group, with them. Moreover, his herd was not so large. A totally new herding pattern would be more trouble than it would be worth. The Nilas Blind (# 43) family also stayed with the old Nuortvalle Group for much the same reasons. Nilas Blind's wife, Anna, is a daughter of Guttorm Omma (# 37) from Kitajaur, the first Karesuando herder to be accepted into the Nuortvalle Group in the mid 1930s. Nilas has two young and active, herding sons. Although he admires the Viri Group's herding today, he does not think Viri Group membership or membership of the new splinter group (which I shall refer to as the Tjuolta Group, for reasons which will be explained later) would be especially wise for his sons. According to him, these groups will in time be composed only of old men. They have no real youth to speak of. The remaining Nuortvalle Group has more youth and, in this respect at least, a brighter future.

The G. Omma (# 37) and Lars Hotti (# 41) families had joined the Nuortvalle Group at a relatively early date, and these families have long since given up almost all vestiges of any earlier, western, herding involvement.¹ These Karesuando families had joined the Nuortvalle Group when summer intensivity was still demanded and had built homes in Parka and Puollemåive. For them to have herded with the Nuortvalle Group but to have lived in Stalo during the summer would have been considered preposterous and would never have been permitted by the other herders or by the authorities. According to the Saameby regulations, herders were to camp no more than 5 km from their reindeer, and, in those days, the reindeer were relatively gathered or supposed to be gathered all summer. Later, when crowding and conflicts occurred more rarely and extensivity was commonly accepted, a shift in herding affiliation did not necessarily imply a shift of homes. When Kaska Tjavelk herders joined with Nuortvalle herders in the 1960s, the former stayed, as usual, all summer in Stalo, where the fishing was excellent. There was no need to move closer to the herd, because, under extensivity, the herd was everywhere. With improvements in communications and transportation facilities, Stalo was as good a place as any, and better than most, from which to set about summer gatherings for calf-marking.

Hence, despite that fact that one can speak of a single Nuortvalle Group from around 1968 with respect to *enforced* reindeer policy (the reindeer might, of course, still behave according to their own different habits), as far as settlement pattern and acquaintance with the land are concerned,

¹Lars G. Omma, a Nuortvalle herder and son of G. Omma, sometimes visits his sister, Anna, wife of Nilas Blind, in Stalo to "cover" summer calf-markings from this base. From Stalo, he can cover markings at Virihaure's western end, those hosted by Jákkákaska Saameby at Párkas and those at Jálli, to which his Nuortvalle comrades will come from their base at Rovi. Similarly, during my years in the field, Johannes Orpus, the husband of Inga Hotti, spent part of one summer in Stalo, "rooming" with me.

one can speak of a westerly-oriented sub-group and an easterly-oriented sub-group, Kaska Tjavelk and old Nuortvalle herders respectively. Some active herding descendants of old Nuortvalle herders, native Jokkmokk Saamis, know surprisingly little about the western reaches of their own Saameby. With almost a touch of pride, some have told me that they have never been west of the Jállí corral.

It is important to note that the formation of the new Tjuolta Group from the division of the Nuortvalle Group did not simply occur along Jokkmokk Saami-Karesuando Saami lines. While it is true that all members of the Tjuolta Group are of Karesuando origin, it would be wrong to claim simply that this proves current Karesuando-Jokkmokk rivalry to have caused the split directly. I believe that it is more correct to see the split in terms of a never fully completed, Nuortvalle-Kaska Tjavelk union. Those who had been members of the Kaska Tjavelk Group (Karesuando Saamis) had never given up Stalo as their summer camp. They had never settled in either Parka or Puollemåive. A westward shift in migration scheduling and land utilization on the Viri Group model would, therefore, not entail the leaving of one home for another. Their housing pattern was already well suited to a westward shift. It should also be recalled that the reindeer of the Kaska Tjavelk herders followed a somewhat hybrid pattern between the old Viri and the old Nuortvalle models, and the ingrained habits of these reindeer did not change immediately, simply because their owners changed their system of separation and work co-operation. In short, for both the herders and the reindeer of the old Kaska Tjavelk Group, a westward shift was in part a return to an earlier, lingering, herding form in many respects. One might say that it was a re-emphasis of one of the two forms which had merged into a hybrid. Tjuolta herders thus had a historically conditioned pre-adaptation to a westward shift which older Nuortvalle herders lacked.

Johannes Orpus, a herder from Karesuando who had become incorporated into the Nuortvalle Group in 1946 by his marriage to Inga Hotti, demonstrates the most radical shift in his alliance with the new Tjuolta Group. Here we find a member of the eastern Nuortvalle sub-group (though non-native) attempting a westward shift while lacking the pre-adaptation described above. One must bear in mind, however, that the Hotti family had also come from Karesuando, as well as Orpus, and that Lars Hotti had had to force himself upon the Nuortvalle Group. The Hotti family's bonds with the rest of the Nuortvalle Group have never been as strong as those of the G. Omma family (see p. 174).

Apparently, Orpus was one of those who had felt the desire to re-intensify for a long time. Other Nuortvalle herders, however, have been more lukewarm in this respect and, in the resulting lack of co-ordination, much work has been expended uselessly each winter in trying to establish an intensivity which should have been established months earlier. For Orpus, the shift to the Tjuolta Group may even mean *less* work, although

he will benefit from the re-intensification efforts of the group as a whole. Orpus is old, and his family is limited in its ability to field active herders. Even if Orpus remains in Parka all summer, as before, he will probably try to send some kind of regular representation to Stalo—maybe a son-in-law¹ on vacation from regular employment in the city. Nonetheless, the other Tjuolta herders will carry most of his work load. This is little to ask, however, for the Orpus herd is very small. The other Tjuolta herders can consider themselves quite fortunate to have such an ally and representative in the heart of the Nuortvalle Group's sphere of influence.

Land utilization

Although the membership of the new Tjuolta Group coincides almost exactly with that of the older, Kaska Tjavelk Group, Tjuolta herders want to avoid the predator-filled, Kaska Tjavelk, land area at all costs. To establish a herding schedule similar to that of the Viri Group, this new group had to utilize new spring and autumn zones (the two are not necessarily the same, as they are in the case of the Viri Group). Their land options are quite limited.

These herders have tried to abstain from the Nuortvalle and Kaska Tjavelk zones, leaving them to the remaining Nuortvalle Group. The western end of Lake Virihaure is already occupied by the Viri Group. Tuorpon has once again come into a pattern of threefold division, and naturally the same land areas discussed in the 1930s, when Tuorpon was also divided into three groups, come to the fore. In the 1930s, the Kaska Tjavelk Group had been assigned the Kerkevere zone as summer land. The huge reindeer population had necessitated a separate autumn land for the Viri Group. Their reindeer had not been able to survive all spring, summer and autumn at the western end of Lake Virihaure. The Viri Group had been assigned the Tjuolta zone as autumn land.

The new herding group formed in 1978, mainly out of old Kaska Tjavelk families, drove their herd up to the Kerkevere area in an orderly, spring migration. Winter intensivity had enabled them to separate their reindeer from the other groups and to keep them under separate control. They held an early calf-marking at the Jälli corral before Nuortvalle reindeer could have much chance of roaming westward and mixing with their herd. Later in the summer, such mixing would certainly occur. The Kerkevere zone is summer land for Nuortvalle reindeer as well (and even for some Viri reindeer), but, after each calf-marking at Jälli that summer

¹ This son-in-law to Johannes and Inga Orpus, named Páve, has recently sought Tuorpon membership but been denied. Of course, he has not been stopped from working as the Orpuses' hand. The elder Orpuses are not very active, and it seems that herding-group membership may, therefore, be largely a decision for Páve to make. His preference for the Tjuolta Group rather than the Nuortvalle Group can be explained by the fact that he is a first cousin to Per Nils Blind (# 49) of the Tjuolta Group.

of 1978, the mixed herd was always released toward the west, in an effort to make the reindeer remain in the west. Tjuolta herders did not want their reindeer following Nuortvalle reindeer eastward in August any more, although they would have to accept that many would do so out of old habit, and these they would have to separate from the Mavas reindeer at Parka along with the Nuortvalle Group, as usual.

Before the split, Nuortvalle reindeer had been swept eastward in August for the big herd separation at Parka. Gatherers had combed the summer land all the way to the eastern edges of Lake Virihaure. Now this would have to be changed. The Nuortvalle herders could still make less far-reaching, gathering sweeps from Parka, as far west as Rovijaure but no further, as Tjuolta herders, who followed the Viri Group model, wanted to keep their herd in the west about three months longer than did the remaining Nuortvalle herders. Just as some Tjuolta reindeer would accompany Nuortvalle reindeer eastward in August nonetheless, some Nuortvalle reindeer would be mixed with the Tjuolta herd remaining in the west. This occasioned some disgruntlement amongst Nuortvalle herders, but, short of re-instituting a late-summer, herd separation in the western mountains, there was nothing to be done. Tjuolta reindeer accompanying Nuortvalle reindeer eastward would not be recovered by the Tjuolta herders until the winter separations, and, likewise, Nuortvalle reindeer remaining in the west with the Tjuolta herd would not be recovered by Nuortvalle herders until the separation following the Tjuolta Group's eastward sweep and migration in November or December—the same way in which Nuortvalle herders recover their stock from the Viri Group.

Once the main Nuortvalle herd has vacated the western regions by mid August, Tjuolta reindeer can have the eastern end of Lake Virihaure, the Tuoddar zone, largely to themselves. The Tuoddar zone can serve as autumn grazing land or the Tjuolta area can also be used for that purpose. In 1978, the Tjuolta area was used as autumn land, and it is for this reason that I refer to the new splinter group as the Tjuolta Group. Next year may see the use of another autumn zone, maybe the Tuoddar area. Some experimentation is necessary at first. Should the threefold division of Tuorpon persist, the new group will establish some type of general routine in land utilization. Until then, no group name is fully secure. What I term here the Tjuolta Group is currently alluded to in a number of different ways by Tuorpon herders.

For the Viri Group, the formation of a new Tjuolta Group is quite positive. The westward shift and re-intensification policies of the Tjuolta Group mean that, come November and December, Viri herders may get some help in sweeping the Tuorpon summer lands. During the late-autumn gathering, Viri and Tjuolta herders may be in a position to help each other or to complement each other's efforts. Although they will try to migrate eastward separately to avoid mixing (either by different routes or

by the same route at different times), it is not unthinkable that combined migrations may occur. As the work forces of both groups decline without replacement, one may even foresee chances of a Viri-Tjuolta Group merger, an event which would signal an even greater reversion to aspects of the earlier Tuorpon structure. This is, of course, highly speculative, but speculative for the herders as well as for the ethnographer.

Moreover, as some Viri reindeer always fall into the herds of other groups, it is better that they fall into the hands of a group actively striving for re-intensification and one which, like the Viri Group, is westerly-oriented, so that the reindeer's routine will not be so altered. From the viewpoint of Saameby power politics, the split of the Nuortvalle Group is also of advantage to the Viri Group. The Viri Group may now, for example, expect support from the Tjuolta herders on matters concerning Saameby expenditures for artificial fodder or for new, westerly located, herders' cabins. Now that they have attempted to pattern their herding on the Viri model, Tjuolta herders will be more often in the same boat with Viri herders than with Nuortvalle herders. Should an important issue be taken up for a graduated vote, voting strength would now be distributed in something like the following manner: 27 votes for the Nuortvalle Group, 22 for the Viri Group and 11 for the Tjuolta Group.

The Tjuolta Group faces a number of difficult problems with respect to land utilization before it can firmly establish itself (assuming that it survives the other threats to its existence, such as increased investment versus slow reinforcement, mentioned earlier). While the Tjuolta zone is an excellent, autumn-grazing area, it is somewhat of a dead end when it comes to eastward migration. The herd can be easily gathered on Valli mountain, but from there down to Kvikkjokk or over toward Lastak there is no good route. The steep sides of Valli mountain are covered with thick forest, and it is nearly impossible to move a herd down the mountain. The Tjuolta Valley route to Valli mountain is fair, but from there the route is blocked further south and east. The deep Ruonasvagge gorge and the steep sides of Tarrakaisa mountain prevent any exit for the herd. The only solution is to drive the herd far back to the west near Slittajåkkå, where descent is possible into the Tarra Valley, and then to try to take the herd across Kartevarjåkkå. This too can be problematic. The Valli mountain acts as a block to an otherwise excellent migration route and reduces the attraction of the Tjuolta grazing zone.

It is also for this same reason that reindeer killed during the pre-rut bull-slaughter at the Valli corral in September must be flown down by helicopter to Kvikkjokk where the slaughter-company truck waits. This is an added expense. For both of these reasons, therefore, it would be extremely advantageous if a path could be cut through the forest down one side of Valli mountain, so that a herd might be driven along it.

For the Tjuolta Group in particular, such a path would solve the worst problems. For the Saameby as a whole, it would obviate the need for

helicopter transport of slaughtered bulls from the mountainside, as the bulls could then be driven down to the lowlands near Kvikkjokk before slaughter. Because of the current need for helicopter transport, pre-rut bull-slaughter has been dependent upon good weather conditions for flying. As the pre-rut bull-slaughter is a critical time (because of the bulls' hormonal changes, which can ruin the taste of the meat), poor weather conditions can (and did in September 1978) cancel an entire, pre-rut bull-slaughter for the year, at great loss for the herders. This problem would disappear if a path were cut through the forest down the mountain-side. Which route is taken down the mountain is another matter. In *Handlingsprogram Rennäring* (1979, bilaga A, p. 5), a path from Valli down to Tarraätno is proposed. Another, and possibly easier, solution would be to cut a path down the northern side to join the road which is already blazed toward Ruotevare.

The Tjuolta Group was delayed a month or more in its eastward migration because of its inability to pass the Valli hindrance. Repeated efforts were made to turn the herd back westward, but Kartevarjåkkå proved difficult to cross, and the herd preferred the excellent autumn grazing on the Valli-mountain massif. Finally, the herd was brought down into the Tarra Valley, driven over toward Vuoka and then taken along the tried and true Peuraure-Karatj Lake route to the winter lowlands.

With the costs of re-intensification driven even higher by the Valli hindrance and with the "accounts" of the herders already overdrawn, the Tjuolta Group is in a very fragile position and may not live much past its birth. Further land-utilization experimentation seems called for, but the Tjuolta Group cannot afford so much experimentation before obtaining good results.

Chapter 23

Resistance to and Compliance with Swedish Rationalization

This chapter will deal with Tuorpon's resistance to and partial compliance with certain rationalization principles. Much of this resistance or compliance can be explained within the same framework of determinants and legal structure as that used in the previous chapter (determinants such as herd size and grazing availability), but on other, highly important points, the relations of such determinants, as they apply to each individual herder or group, are not enough. Along with the other determinants, one must add the consideration of cultural values and solidarity.

Explanations are not lacking in discussing the problem of resistance by the herders to what is called "improvement":

Certain attitudes and ways of reacting need changing for some Saamis: ways of reacting which maybe today or at least earlier have laid obstacles in the way of society's function and modernization. This concerns the tendency to cling too much to traditional patterns, to promote the familial at the cost of the collective and organizational goals and interests all too narrowly, to plan and organize activity, for example, in the case of reindeer-herding or the Village's affairs insufficiently, all too easily to fall into apathy, passivity, subservience, humility, lack of initiative and lack of ambition. (Dahlström, 1970:53.)

A difference becomes apparent between Saami districts in that the mountain herding Saamis from Norrbotten have on the average less reindeer than do those from the Västerbotten and Jämtland districts. We know from other sources that the development has been less favorable in certain aspects in these Norrbotten areas, probably connected with the greater isolation and traditionalism's stronger position. (Ibid., p. 61.)

Statements such as these to account for the resistance to the rationalization of herd management are common. While they may not be without some justification, rather than explaining anything, they use explanatory concepts, such as "traditionalism", to pass the buck. To blame the herder's lack of interest in supposedly helping himself on apathy, humility, passivity or want of ambition is to commit the error of attributing independent, variable status to dependent traits, an error condemned by Hutton and Cohen (1975) and labeled "spurious causality". The obvious question which the above statements try to avoid is, why are these herders tra-

ditional, apathetic, passive, humble or ambitionless, if indeed they are? While small herds are taken as an indication of a less favorable development, they are not recognized as a partial *reason* for it. Apathy or lack of ambition may certainly result in small herds, but, just as certainly, small herds can result in apathy and lack of herding ambition.

To account for such traditionalism in Norrbotten, Dahlström alludes to the fact that the inland regions have been isolated. Isolation itself, however, does not breed qualities such as apathy, for then the Saamis could never have existed in such a demanding world. Moreover, Dahlström accounts for the tremendous changes in the inland of the north caused by communication facilities, increased population, jobs, technical innovations, etc. The herders in the inland of Norrbotten are certainly not too traditional or passive to refrain from the use of the snowmobile or the helicopter in herding. Herders in the Arvidsjaur area formed Village collectives, with herding fees and wage systems, before these things were advocated in the State's rationalization program. Other, non-spurious explanations are needed to account for the Tuorpon herders' resistance to Swedish rationalization and at the same time to account for their very active, proud and ambitious development of Saamish rationalization (to the extent permitted by the law).

This study has been concerned with uncovering certain fundamental determinants of herd-management form and with seeking the relations or circuits by which such determinants are linked. A diachronic analysis, incorporating the changing content of herd-management legislation, has then been applied to uncover the shifting structure of these determinant relations. By so doing, one can begin to approach the problem of change. But, by the very explanatory power one invests in such a determinant analysis within its particular range of context, one must be able to explain stability, a clinging to traditions, as well as change. Nor must we forget that, with hierarchical holons related by an economics of flexibility, change on one level may be necessitated by stability on another. Just as with the question of to whom rationalization efforts are to be related—the world, the State, the Saamish culture or the herder—one must question on what level the variable resistance to and compliance with Swedish rationalization originate. The consideration of financial profit for the individual herder may be tempered to a certain extent by his solidarity with the larger Saamish community in its resistance to Swedish assimilation. While a herder may “promote the familial at the cost of the collective”, he may also promote the collective at the cost of the familial or individual. The choice will depend upon the economics of flexibility and the resulting assertive-integrative balance which each holon must strike with the others.

In the first section of this chapter, I intend to examine the resistance to and compliance with Swedish rationalization from the economic viewpoint of the Tuorpon herders alone. I hope to demonstrate that many of the principles of Swedish rationalization are not in the least profitable for

Tuorpon herders in their present position. In the second section, the discussion will be broadened to include the consideration of non-economic values (cultural values). Of course, clear distinctions cannot be maintained here; a herder may sacrifice a certain degree of direct, individual gain for the sake of helping the pan-Saamish movement, for example, but this sacrifice may be (and, one hopes, will be) indirectly in the herder's own interests, even in economic respects. Without a strong pan-Saamish movement, herders may be far less able to protect themselves against grazing-land encroachment from large, competitive industries. Should one herder seek to ruin the other herders in his Saameby, so that he can increase his own herd, he may be driving out the labor force he needs for survival himself. Nonetheless, there are other aspects of the same behavior which are motivated by the sincere desire to further the cause of other holons. In fact, totally selfish or totally altruistic acts must be transcended in the hierarchical system and become acts for self-in-other. The interesting question is then, where and to what extent do the Saami herders demonstrate in their actions or lack of actions their recognition of "self"?

Economic considerations

This section will be divided into two parts. The first part will deal with resistance to and compliance with Swedish rationalization with respect to those aspects of production rationalization discussed in Chapter 18. The second part will continue in the same vein with respect to structure rationalization, notably with respect to a herding fee and a wage system, which were also discussed in Chapter 18.

Tuorpon and Swedish production rationalization

In Tuorpon, the intertwined complex of calf-slaughter, rational herd composition and selective breeding is largely non-existent. To claim that conservatism alone hinders the application of these principles, however, is to ignore the obvious. The most economical utilization of grazing becomes a consideration only when a high reindeer/grazing ratio is achieved, the rational reindeer limit, *and* when competition between herders for grazing is eliminated or greatly reduced.

Where there is a low reindeer/grazing ratio, as there is currently in Tuorpon and the Village is far from the rational reindeer limit, grazing conservation and rationing for maximal meat production are unnecessary. The herder stands to gain much more profit if he can sell his slaughter animals fully grown. By allowing his male calves to grow to peak weight, the herder does not deprive other reindeer of grazing. It makes no differ-

ence if the bull's rate of growth is slower than the calf's when there is grazing enough for all. There will be no reason for the herder to curb the growth of individual reindeer by calf-slaughter. One full-grown reindeer is worth much more than a calf, and the herder's greatest gains lie in reducing the mortality among his calves, for example, through the control of predators.

Moreover, as I mentioned earlier, when there is competition between herders for grazing, if one herder takes to calf-slaughter, thus limiting his grazing consumption, the grazing he saves may simply be consumed by another herder, who profits by allowing his reindeer to grow to full maturity.

Hence, the system of grazing conservation and slaughter recommended by the herding authorities is rational only under certain circumstances. Where an entire Village consists of only one herding entity or where the owners are very few and united by blood and/or interdependence, competition gives way to unity in herding policies. When a high reindeer/grazing ratio is reached in this situation, the rationalization of grazing use and reindeer slaughter is a definite advantage. Many of the principles of rational herd management must be accepted or rejected as a total system. Rational herd composition and selective breeding, for instance, stand or fall to a great extent with calf-slaughter.

Comparisons between Saamebys will confirm the importance of lack of herder competition and the relation of the actual reindeer population to the rational reindeer limit for the application of the management principles mentioned above. I believe that these rational principles operate to the extent that the conditions of low herder competition and high reindeer/grazing ratio are met. As with the intensive and extensive methods, Swedish rational management is not a herding form which can simply be imposed at will for the best results.

Elsewhere in this study, I have demonstrated how competition between herders is directly linked to the relation between the actual reindeer population and the Saameby's rational limit. Obviously, it is only when the rational reindeer-population limit is approached that the reindeer of one herder will curb the expansion of another herder's reindeer. It is when flexibility is reduced in this way that the weeding-out process described in Chapter 20 may become highly topical. It seems, then, that one condition for the compliance with rational-husbandry principles (high reindeer/grazing ratio) will be attained at the expense of the other (low herder competition). This will be the case unless the Saameby in question has a very small number of herders, so that all have big herds, and competition, therefore, becomes a struggle about who is to attain his most superfluous desires rather than about who will or will not be able to subsist on the herding occupation. In the former case, a competition for non-essentials, herders will have enough flexibility in their economies to take the risk of establishing collective-husbandry policies. Should the trust on which such

policies are grounded prove unjustified, a herder can always revert to his former practices without suffering serious damage.

As noted, however, the authorities have calculated that there is a 30 % herder excess. With many herders in excess of what one might call the rational herder limit—the condition existing today in Tuorpon (and in many other Saamebys)—it will become impossible to avoid cut-throat competition as herd sizes increase. Moreover, the Saameby with a sufficiently low herder population and a sufficiently even reindeer distribution, so that each herder owns the subsistence-minimum number of reindeer, still might not be free from competition. There is little assurance that these herders will feel themselves to have enough economic flexibility to risk the institutionalization of collective-husbandry policies. Mere subsistence may not be enough to quench the desire for a weeding-out process.

Under certain conditions, partial or hybrid forms of rational principles may occur. Even where the number of herders is in excess of the rational herder limit for a Saameby and competition is not reduced, calf-slaughter may still be quite attractive to certain herders. Grazing capacity is not the only factor limiting herd size and meat production. In Villages where, for instance, climatic conditions, predators and rough terrain cause high calf mortality, it may be to a herder's advantage to sell a certain number of his calves before they are lost (see p. 344).

Although the calves do not bring as much as they would fully grown, the herder still receives the additional State subsidy of 100 crowns per reindeer on animals he might otherwise gain nothing from. The slaughter-houses are favorable to the system of calf-slaughter, as calf meat is more salable as a delicacy than ordinary reindeer meat, and, of course, they believe that, through calf-slaughter, meat production will increase.

Calf-slaughter of this kind may be a hard gamble, not as with the fully controlled, ideal, slaughter system, in which calf-slaughter yields demonstrably better profits. In a gamble of this sort, the herder must take into account the size of his herd, his calving-percentage losses, his ability or inability to decrease these losses, his chances of finding and obtaining compensation for those calves killed by predators (assuming he has marked them first), his desired program of herd expansion or stability, the effects of a bad winter on varying herd sizes and herd compositions, the government's subsidy policy, the taxation system, etc. There is no standard formula for all herders in this respect, as in the table in page 342.

Calf-slaughter, when motivated in this way, to reap benefit from reindeer before they are lost altogether in a situation of high calf mortality, is not necessarily a collective concern at all. It is not motivated by collective concerns for grazing conservation and efficient utilization. Instead, it is a decision to be taken by each herder for himself. Should the calf mortality improve somewhat, then the herder must re-evaluate his position and possibly reject calf-slaughter. So far, only one herder in Tuorpon, Henrik Blind, has chosen even to experiment cautiously with calf-slaughter.

When I have presented the high-calf-mortality argument in favor of calf-slaughter, a number of herders have countered with what I have come to call the "full-stomach argument". According to this argument, the predators are going to see to it that they have full stomachs, whether or not the herders slaughter their calves before the predators get the chance to. If the predators cannot kill as many calves as before, then they will kill more reindeer of greater maturity, maybe more reindeer cows, the most valuable stock.

This argument contains a number of assumptions which may not be justified. High calf mortality is not necessarily caused by predators only. Other reasons for loss may account for more missing calves than are lost to predators. Harsh climatic conditions, treacherous terrain and starvation can take their toll. The stomachs of the predators will not be empty because they are deprived of the chance to kill these calves. Moreover, predators do not necessarily kill only what they eat. In this case, they may survive comfortably, although they have killed animals with fewer pounds of meat.

The above discussion has demonstrated that the current Swedish rational-husbandry principles for the maximization of meat production do not in fact lead to maximization in every context. The greater goal of rationalization, however, is to make herd management as profitable for the herders as possible, and recent market developments are beginning to make themselves felt which may lead to a complete re-evaluation of the most profitable form of reindeer production. The maximization of meat production may be dethroned as the primary mode of rationalization. Already the rising value of other parts of the reindeer is causing herders to seek profitable compromises in meat production, even though meat is still the main source of income.

Reindeer horn has found an enormous market in the Orient, where it is used widely as an ingredient of various health cures. The velvet-covered, soft, blood-filled horns of the reindeer in July or early August are especially prized by exporters to the Orient. Such horn is believed to provide valuable minerals for a feeling of well-being and even increased sexual potency. As a result, herders are constantly being approached by businessmen, exporters to the Orient or Oriental importers with offers of up to 150 crowns per kilogram (fresh weight) or more for this high-quality horn. A herder stood to gain 300–400 crowns for the horns alone of a full-grown, male reindeer in the late 1970s. Prices may rise even higher in the 1980s, as competition becomes more intense.

A system of calf-slaughter deprives the herder of this potential income. Not only the horns, but also the hooves, penis and tail are attractive on the Oriental market. In Alaska, the byproducts of reindeer slaughter already bring in more profit than the reindeer's meat. Even where this is not so, the profits to be made from the sale of byproducts demand a complete re-adjustment of slaughter policy, herd age/sex composition and selective

breeding policies. The ideals of the herding authorities are already outdated.

The maximization of profits from horn entails the production of the most horn of the best quality. That is, the product of the weight times the quality times the price of that quality (assuming that quality can be given a numerical value for the sake of computation) should be maximal. The optimal slaughter time for a reindeer from the viewpoint of horn growth, however, may not coincide with the optimal slaughter time from the viewpoint of meat production. On the basis of the shifting prices of meat and horn, therefore, and the seasonal shifts in slaughter weight and horn weight and quality, the herder must aim at a slaughter time which gives him the best total yield.

It seems that a slaughter time in August would produce the best compromise between meat profits and horn profits. The horns of the castrated oxen at this time are still of good quality, and meat-wise the oxen are almost at peak weight. The gains from horn sales should more than compensate the loss from reduced meat sales. In other countries, Finland and America, for example, the problem of timing the maximization of horn and meat production has been solved by cutting the horns from living reindeer. In this way, the horn crop can be reaped early and the reindeer can be slaughtered later at peak weight. This procedure is painful for the reindeer, and in Sweden it will probably never be allowed.

As for the reindeer bulls, the weight loss at an August slaughter will be greater and the horn quality will probably be worse (too hard) than for the oxen at the same time. For this reason, it may be most rational to engage in a more thorough castration program. Herders must calculate the weight difference between bull and ox at the proposed August slaughter and relate this to the gains to be made in selling ox horn of better quality. The loss in profits from the sale of the meat from an ox slaughtered in August which could have been a bull grown to full weight for slaughter in the pre-rut period (September slaughter) will probably still be more than compensated by the profits from horn sales.

Adaptation to the new marketing possibilities can help herders to lower the subsistence minimum in reindeer (assuming that the herders manage to secure the profits from horn sales for themselves and do not allow most of them to be lost to the slaughterhouses or other middlemen). At the same time, however, development of the horn market may so raise the price of horn that handicraft workers have difficulty obtaining material (*Samefolket*, 1979, no. 2). Were the handicraftsmen to be sold horn at a lower price, herders would lose profits. Handicraftsmen hope that they can in some way reach an agreement with the herders to retain a horn reserve at a low price for handicraft work in the name of Saamish solidarity. Exporters will, of course, oppose such a development if it is on such a scale as to reduce their gains seriously. Many herders feel that they cannot or need not afford the price of solidarity with Saamish handicraftsmen. As usual,

economic interests splinter the Saamis.

It is interesting to note that those calling for solidarity on this issue must lay some kind of pan-Saamish claim to the reindeer, a claim that causes many a herder to clench his fist and protect his rights over his, and only his, reindeer.

One can understand the slaughterhouses and other buyers of reindeer horn saying that there is no reason to sell cheaper to handicraftsmen or to *Sameslöjd och Material AB* when the world market is crying out for horn and pays much better. But the raw material is from the beginning the Saamis' own and *Sameslöjd och Material AB* is a Saamish business. (*Samefolket*, 1979, no. 2, p. 3.)

From the beginning, the reindeer and its horn belong to the herder. Of course, the herders are Saamis, but to say that the horn belongs to the Saamis and to suggest, therefore, that the Saamish organization for the provision of material to handicraftsmen should have a right to a more favorable horn price is a very different matter indeed. The above statement seems rather ambiguous. At least, it is a plea for Saamish solidarity; at most, it is an assertion of Saamish (all Saamis') rights to reindeer horn.

To summarize, the resistance to the combined package of calf-slaughter, rational, sex/age, herd composition and selective breeding in Tuorpon (and I believe in many Saamebys today) has deep-rooted, economic causes. In situations of low reindeer/grazing ratio and/or intense herder competition (the two are often related), calf-slaughter may not be particularly rational. It may still be practiced by individual herders to advantage when calf mortality due to predation and harsh conditions of climate and terrain would otherwise be inordinately high. Without the unified, Saameby, calf-slaughter system prescribed by the authorities, the other principles of rational, sex/age, herd composition and, to a large extent, selective breeding also crumble. With the recent developments in the reindeer-horn market, there is further cause for a total re-design of rational-husbandry policies. Similar kinds of economic reasons will be discerned behind the resistance in Tuorpon to the wage system and herding fee, aspects related to structure rationalization.

Tuorpon and Swedish structure rationalization

As the historical background clearly demonstrates, Tuorpon had formed co-operative "big groups" long before the government authorities tried to stimulate the formation of such large collective units by new herding legislation. In fact, the large collective herding which accompanied extensivity was noted by Malmström, the Saami sheriff, in the 1930s (see p. 177) as being already quite old in the Jokkmokk area. For many decades, traditionalism in herding was promoted mainly by the authorities rather than by the herders. Of course, the old Nuortvalle Group, which was at first composed only of native Jokkmokk Saamis, wished to maintain separate, summer herds and high intensivity, but for reasons somewhat

different from those of the authorities. The Jokkmokk Saamis were mainly interested in protecting their hereditary grazing areas from northern-Saami encroachment, and were not so pre-occupied with protecting the crops of the farmers. There was more at stake than simply tradition for tradition's sake.

Today, Tuorpon, like most other Saamebys, has not implemented the wage system. Certainly, extra work, like the building or repairing of corrals, will be paid for by the Village treasury, but herders do not pay the Village a herding fee per reindeer and do not draw a wage for regular, daily guarding or gathering operations. Tuorpon is, therefore, in this very essential aspect still operating more as a Lappby than as a Saameby.

One may wonder what factors inhibit acceptance of the wage system and what are the consequences of its absence. The factors which have to date rendered the wage system unnecessary are many. Each family *can* still supply its share of the work force (though it may not choose to). The differences in herd size between the owners in each of the three current groups are not overly large and, where significant herd-size variation did occur, as in the pre-split Nuortvalle Group, even small herders usually managed to afford the minimal herding activity demanded of Nuortvalle extensivity. Most of the herders, large and small, feel a great sense of duty to do their share. It would be quite shameful for all the herders of one family to remain at home, while all the other families contributed to the collective work of gathering for a calf-marking. Tuorpon's organizational problems stem from a relative dearth of such common goals and unity in policies. It is when these goals are not shared by all that some herders may stay at home rather than work.

The re-intensification drive of 1978 demonstrates that even small herders in Tuorpon are willing to work harder without the added incentive of a wage. The motivations for re-intensification were far more compelling than a small daily wage would be. Moreover, if the wage system were to be introduced without necessitating a herding fee, this would mean that it would be paid for mainly by compensation money, for predator victims, land encroachments, etc. As the rate of predation has been high in Tuorpon, this could indeed be a possibility (for a short time). It could mean, however, that only the active herders would draw benefit from money which had also in part been paid to compensate the losses of inactive herders. In many respects, the wage system, with or without a herding fee, may introduce various types of capital redistribution within a Saameby. The wage system also implies a form of work rotation, and one must also ask why this aspect is not enough to make its institution attractive to a Saameby with an excessive work force.

The four families constituting the Viri Group certainly do not have an excessive work force, even though this is the case in Tuorpon as a whole. In the Viri Group, there is no need to work out a system whereby work rotates evenly between households. Here, it is usually only *within* house-

holds that work rotation between father and son or between brothers occurs, so that the household is not always represented by the same herder. The considerable intensivity of the Viri Group, however, frequently requires that all the active members, regardless of household distribution, lend a hand. Viri herders form a tight work unit based on mutual respect. They are proud of their group and of their herd. No one tries to lighten his work load at the expense of the others. Their numbers are few, so that co-ordination is smooth.

The large, pre-1978, Nuortvalle Group, however, was in a different position. Not only did it have more manpower than the Viri Group, but its more extensive methods craved less work from its herders. There was a surplus of manpower and one might assume that a wage system would have been quite helpful. Instead, Nuortvalle herders tried to organize labor assignments fairly without recourse to money compensation for the work. Frequently, this resulted in the fielding of an overly large work force or at other times almost none at all.

A number of reasons for the resistance to a wage system have already been indicated in previous chapters. Pre-1978 taxation policy was detrimental to the institution of a wage system with a herding fee. Furthermore, the amount of wages earned would become a measure of herding activity and, as we have seen, small, less active herders are justifiably fearful of anything that constitutes a check on their herding activity. The small herder's participation may be deemed too little to qualify him for class-1, Saameby membership. This fear is compounded by the fact that, purposely or not, the wage system may contribute to a weeding-out process. The small herder may be given even less work than the little he has already managed to devote to herding. His participation may, therefore, be reduced, for the Saameby will not want to pay for unnecessary work. If the wage is paid by a herding fee, the inactive herder is in a poor position to earn his money back. This may be dangerous for his herding, if the herding fee is very high (see Chapter 20).

Herders are extremely jealous of the herding freedom they still retain. Under the wage system, herders have said that they would feel that they had become, in effect, 'employees of the Saameby, even though the tax authorities have finally conceded that they are not. The majority rules and, even if a herder opposes a certain policy and does not pursue it himself, given a herding fee and a wage system, the fees he has paid to the Saameby treasury will be used to pay other herders to do the job. The individual loses power to the collective. Herders naturally do not wish to pay for work which they feel they would do better without.

For Tuorpon, in particular, further reasons for resisting the wage system present themselves. The difference in the work expenditure of the Viri Group, compared with that of the pre-1978 Nuortvalle Group, was sizable. Were the Saameby treasury to pay each Tuorpon herder a daily wage for herding work, Viri herders, who are far more intensive and who spend

months in the late autumn sweeping the western districts before the eastward migration, would receive wages that were relatively large, compared with those earned by the Nuortvalle herders. Were a herding fee required to balance the Saameby's budget, Nuortvalle herders would in effect be paying Viri herders to a great extent, while Viri herders only paid themselves.

Herders might use the graduated vote to try to introduce a shifting wage scale between groups, decide to omit certain Viri work periods from wage payment or decide simply not to pay at all for work which did not benefit all herders. It is, after all, the collective Saameby vote (supposedly the graduated vote) which decides what work is to be done. If herders choose to work outside of the program decided upon by the collective vote, it may well be argued that this work is not an object for remuneration by the Saameby.

The institution of a wage system (with or, at first, without a herding fee) in Tuorpon must eventually lead to a test of strength between the different herding groups, for, if *all* the work done by Viri herders was paid for from the treasury, Nuortvalle herders would feel themselves exploited. Some of the work performed by the Viri herders aids the Nuortvalle herders, but not all. If, however, Nuortvalle voting strength should predominate and the majority should decide to pay for only a portion of the Viri herders' work, then the opposite situation could arise, in which the wage system would become a disadvantage to the Viri herders. Viri herders should at least be able to earn wages in proportion to their part of the total Saameby vote, even though they do not constitute a majority.

Under such circumstances, no group is going to campaign and vote for a wage system unless it is absolutely sure to win the resulting power struggle. Winning the power struggle involves far more than simply winning a majority vote for the group's best interests. Should, for example, the Viri Group be put at a disadvantage in the Saameby's work and wage program, the Viri herders could simply hold a herd separation in the mountains on their eastward move and force all other herders to attend or round up their own animals.

While the Saameby collective can deny members the right to specific paid work and can entice herders to work for a wage, it cannot simply force a herder to do a job against his will. With problems such as these accompanying the institution of a wage system, it is understandable that no herding group in Tuorpon has actively tried to bring it about. With the formation of the new Tjuolta Group, loyalties and group voting strengths have entered a new political phase of great uncertainty. All feel it better to avoid the issue.

An obvious solution to this problem might be the establishment of separate treasuries for each group. Indeed, this was the case for a while in the late 1950s and 1960s (see SOU 1966:12, p. 149). But even here other problems come into play. Into which treasury should the money obtained

from the auction of "whole ears" or from predator compensation or from compensation for land encroachment be paid? Which treasury should pay for collective-herding installations? Such problems might possibly be (and occasionally have been) handled by forming smaller, specific, group funds for limited purposes within or outside of the larger, collective, Saameby treasury.

Of course, besides the problem of how money is to be paid in to separate treasuries within the same Saameby, there is the problem of how funds are to be paid out from them in wages. How is payment for labor to be worked out across group lines? The Viri Group aids the Nuortvalle Group greatly by sweeping down both Nuortvalle reindeer and Viri reindeer in their eastward migration. And Nuortvalle herders bring many Viri reindeer to the corral during their gathering operations.

As regards the herding fee, its institution is mainly out of the hands of the herders directly. It can be manipulated only within limits. Of course, the enormous sums of money which have flooded into the Tuorpon treasury from the compensation paid for predator victims obviates the legal demand to institute a herding fee. But, even in years when compensation payments are not so high, Tuorpon herders have tried to avoid a budget deficit by keeping herding expenses down. Not only have they abstained from the costs that a wage system would entail upon the Saameby treasury, but they have also planned carefully purchases of equipment and repairs, so as to keep the annual, total costs within the existing budget.

When the Saameby has considerable funds from auctions and compensation payments, spending has not been so restricted, but it has been carefully watched, in order to avoid a budget deficit. As the case of Tuorpon illustrates so well, however, this situation cannot last in the long run. Saamebys cannot evade the establishment of a herding fee forever, by using funds paid to the treasury as compensation for killed reindeer or ruined grazing territory.

Recent taxation difficulties have been cleared up by the new tax system, and one may assume that the Saamebys will not be so hesitant to incur a budget deficit in the future. If, or rather, when a herding fee is required, however, many of the same problems and power struggles mentioned above with respect to the wage system will rise to the surface. Even if the Saameby does not have a wage system with a herding fee, the use of its funds will take on entirely new political dimensions. One group may be contributing to a facility, such as a corral, which helps only another group. When a wage system exists at the same time as a herding fee, power struggles can occur not only between herding groups, but also between big and small herders, as described in Chapter 20.

With the herding fee, as well as with the wage system, Tuorpon herders have opted to evade the destructive consequences that may be entailed. They do not in the least enjoy the prospect of what they term *förenings-*

renskötsel, that is, association herding. In the following section, I shall try to explain their aversion to association herding from another point of view. In Tuorpon at least, resistance to the rational principles which help to constitute association herding is not only the result of fear of the consequences that economic-power struggles may have for oneself or one's herding group.

A case of solidarity

Two axes of division over which competitive struggles might rage have been mentioned. In one case, there might arise a struggle between big herders and smaller herders. In another case, there might arise a power struggle between different herding groups. The two types of conflict might combine, so that small herders in one group would be pushed into an untenable position, while small herders in another group would survive quite comfortably.

In any of the above forms of conflict, I believe that, in Tuorpon today, the Viri Group would have the upper hand. Its herders are relatively big, compared with the average Tuorpon herder. As a group, its voting power approaches superiority in the Saameby's graduated vote. With but slight support from other big herders from other groups, smaller herders could be forced from the field. In an inter-group conflict, Viri herders could expect considerable support from Tjuolta herders on questions of how to best spend Saameby funds. Because the Viri herders are not so dependent upon the other Tuorpon herders, and the Tjuolta herders and Nuortvalle herders are to a considerable extent dependent upon the work of the Viri herders, the Viri Group could easily maneuver the other groups into difficult situations.

In any competitive context, that which is negative for one's rivals can often be positive for oneself. Even where crowding and competition for grazing are not so great, it is still advantageous for fully active herders to rid themselves of non-active members, should they become burdensome in any way. The herding methods of one group may still cause problems for another group. A number of instances in which the over-extensivity of the Nuortvalle Group has caused problems for the Viri Group have already been considered. Viri herders have difficulty in retrieving their stray stock from the winter herd, for example. It is important to consider when and how certain herders become burdensome to others.

While all active herders, big and small, may think it advantageous to squeeze out hobby herders on purely economic grounds, big herders who work in groups with small herders and who draw much benefit from their labor must be careful lest they throw the baby out with the bath water. Should they begin a hard, re-classification drive, a weeding-out cam-

paig, they may find themselves weeding out some of their best labor, along with the non-active, hobby herders. Still, for the Viri herders, who do not utilize the labor of herders whose Saameby-membership status is shaky, a hard, re-classification drive might be beneficial. The interesting point is that, in Tuorpon, no such measures have yet been taken.

One explanation offered for this situation is that the Viri herders are afraid of possible reprisals from the small herders or herders of other groups, should the Viri herders attempt to put them at a disadvantage. Threatened herders could easily take revenge in secret by cutting down a large number of reindeer belonging to those issuing the threat. This explanation is based on self-interest. This is not impossible, but, when I have asked big herders why they have not taken action in their own interests, their answers have often been of a very different nature. They reply that, as long as they live well and make do, they should allow their less fortunate neighbors to continue as best they can. The small herder is pressed hard enough to give up herding without having his own neighbors turn against him. "The State will see to it that they do not last long anyway", I have been told. To squeeze a herder out of herding can mean squeezing him out of Lapland and the Saamish cultural milieu. The over-extensivity of the Nuortvalle Group causes some problems for the Viri Group, but rather than seeking to expel small Nuortvalle herders, Viri herders have organized their herding so that the problems that Nuortvalle over-extensivity can cause them are minimized.

One might interpret this Saameby solidarity as being mainly the result of self-interest on the part of the big herders in yet another way. Should the population of herders fall to a level even lower than it is now, the political voice of herders as an interest group with respect to the other, competing, industrial-interest groups in Sweden will sink even lower, maybe so low that the unrestrained ravages of competing industries will destroy herding possibilities for many of the remaining big herders (even more). This too may certainly be true, but, rather than negating my point, it only serves to illustrate even more clearly that resistance to the ideals of Swedish rational herding is in part based on the desire to maintain an identity and the value of living as a Saami herder rather than just as another Swede. Rationalization has at least succeeded in stimulating the formation of a broad herder collectivity to resist it.

Both big herders and small herders generally wish to remain herding Saamis, even though a future as non-herders might offer a better living standard. After all, by this standard alone, the most rational thing to do for the herder is to quit herding altogether and become a plumber further south.

Resistance on grounds of self-interest to certain aspects of change which conflict with values of higher hierarchical solidarity should not be taken as resistance to change in general, pure traditionalism or resistance to modernization. Such attitudes stem from the failure to recognize that

the individual herder is not the only "self" on which to evaluate self-interest. Similarly, one may recognize a specific herding group as a unified self which is changing or resisting change. It is important, however, to regard such different-yet-inclusive selves together and to realize that their interests are also different yet inclusive. From this viewpoint, resistance to and compliance with change can be regarded as nothing more nor less than the interplay of the survival of different holons.

While herders may resist a process of change which leads to the "rationalizing away" of the Saamish herding culture, this is by no means a resistance to any and all forms of modernization. In fact, some forms of modernization will readily be seized upon in order to stave off other forms of modernization which are attacking the herder's position. Many of the modern, rational methods and equipment aids will be used by the herder to maximize his efficiency, so that he can withstand the pressures to rationalize him from the field. Tuorpon herders are not at all opposed to rationalization which can boost the herding business, so long as such rationalization does not demand the sacrifice of group members or the start of power struggles which will rend their entire social network asunder.

The 1978 Nuortvalle Group split and the re-intensification drive mark the extent to which Swedish rational ideals were possible within the context of Saamish premises and the common business sense of the herders, that is, the definition of Saamish rationalization.

Of course, as I mentioned earlier, there may come a point at which individual survival demands giving way to Swedish premises. Crowding has been discussed as precipitating a situation in which Saameby solidarity will splinter. Tuorpon is very far from its rational reindeer limit, but there are other ways in which small, inactive herders, even those with hardly any reindeer, can become burdens to the other members.

Government regulations which specify that the Saameby must pay a certain sum per member for group insurance may mean that the small, inactive herders become financial burdens. Active members who want the Saameby to help to pay their snowmobile and gasoline expenses, for instance, may not appreciate Saameby aid of this type being distributed to all members. Whenever the Saameby incurs expenses for all members, depending upon the amount of these expenses, pressure may come to be applied for the weeding out of the hobby herders. As a former Tuorpon herder, Lars Walkeapää, has expressed it, "Mothers and fathers will be forced to kick their own children from the *kåta*."

Chapter 24

Analysis and Summary

Despite the fact that legislation concerning herd management, notably the new taxation policy and the Saameby voting system, presupposes that herd management today functions as it is designed to in the RNL, in truth, it appears that only one Saameby, the Udtja Forest Saameby,¹ follows the RNL's guidelines. Of course, old legislation which has been retained by the RNL may continue to be applicable to the modern situation, but little of the new herd-management ideal which formed the heart of the new Herding Act has, as yet, won much recognition. Instead, many Saamebys do their utmost to avoid the new system. It seems odd, therefore, to find even later legislation so out of step with reality and clinging, it seems, to a dream which is considered fact. While the RNL has dispensed with the "reign of the Saami sheriff", it has been a failure to date with respect to the rationalization principles that it has sought to induce.

The question why Tuorpon herders resist certain aspects of the Swedish rationalization program but not others has been answered. As with the engine's fuel supply, which changes in order to conserve flywheel speed, and as the genetic code of a species changes so that the species may survive, so have Tuorpon's reindeer-management patterns altered not only for the survival of each individual herder, but as far as possible also for the survival of Tuorpon as a larger social organism. Conflict and resistance occur where the survival of the individual herder is in opposition to the survival of the larger Saamish cultural context (a condition constantly aggravated by State policy) or where the cultural-survival policies of the pan-Saamish movement come to oppose survival of the individual herder (supportive Saameby members or lower horn prices to handicraftmen, for example). Conflicts also occur when the survival of the individual herder and the Saamish culture as a whole come into oppo-

¹ I suggest, but am not in a position to prove, that Udtja's compliance with State rational ideals stems at least in part from the fact that a military missile-testing ground was established on its territory. Udtja was, therefore, in a position to receive large amounts of government financial compensation, the utilization of which meant adherence to rational ideals as a requirement. Besides this, Udtja is composed of only about three actively herding (and closely related) families, which gives rise to a situation in which collective co-operation can overcome cut-throat competition for grazing. Reduction of herders in Udtja would not be rational when numbers are so low already.

sition to the rationalization needed for the functioning of the State. Survival as a herder imposes certain restraints, and survival as a Saami herder, in more than just the racial sense, demands further restraints. The common ground or logical product of these states is rapidly shrinking.

Although this has been a micro-study, I have always attempted to discover the relations of factors which restrain herding development in Sweden in general and guide it in a certain course. It is not enough to state that reindeer management in Tuorpon is like this; one must also explain why it is not like that. In approaching this task, I have availed myself of certain cybernetic principles which hold that change in a holon on one level occurs in order to maintain relationships of a more dominant order, that any holon or system exists within certain critical limits created by the common ground or logical product of all its relationships, and that these relationships can themselves exist only within certain critical limits, so that a change of any holon involves a complex "economics of flexibility" with all its component parts or subsystems. Furthermore, change is required of a holon when runaway systems consume its flexibility and threaten the critical limit of a vital relationship. The only way to avoid the destruction or demise of the holon is either through the action of some form of homeostatic mechanism which regulates the runaway (assertiveness) or through renormalization of the holon's original structure (integrativeness).

In analyzing the problems of the Saamish minority movement, the changing structure of herding circuits and the resultant shifts in the critical limits of such circuits, it is important to grasp also the cybernetic meaning of the terms "organism", "system" or "holon". To purposeful human beings bent on their own survival, man may be seen as a unit organism. While this is true, man must realize that he is composed of the relations of smaller organisms, cells (in turn composed of smaller parts), while at the same time he functions as part of a larger organism, man plus environment. Organisms are thus interrelated in complex, concentric patterns. The nexus of these patterns constitutes what may be termed "mind" in its broadest sense.

The use of biological models and analogies may seem threatening to the anthropologist determined to maintain the integrity of his own discipline. Yet man is a product of evolution, like every other living organism, and it would therefore be logical to find the same principles at work throughout the biological world. Even that supposedly most private of human products, culture, cannot be dissected in such a way as to bar it totally from other species; rather, each of its elements is revealed as a matter of degree (admittedly with abrupt, structural variations) along a continuum which stretches throughout the conscious world. Indeed, how else could it have evolved? The important point, therefore, is the realization that biological relationships serve as more than just analogies for anthropology. The structure of a cell and the organization of human society are

both steps along the path of continual evolution of consciousness toward what some philosophers have termed “absolute idea” or “total mind”. It would be a shame to ignore the relevance of one part of such a continuum for another, especially as this would be to commit the same kind of error of punctuation to which this study is addressed.

Cybernetics seeks to formulate the general principles inherent in such seemingly disparate disciplines and systems. Hence, Norbert Wiener (1948) has defined it as “the science of control and communication in the animal and the machine”. Rather than being diminished by such company, the analytic powers of anthropology are multiplied.

We get a picture, then, of mind as synonymous with cybernetic system—the relevant total information-processing, trial-and-error completing unit. And we know that within Mind in the widest sense there will be a hierarchy of sub-systems, any one of which we can call an individual mind.

But this picture is precisely the same as the picture which I arrived at in discussing *the unit of evolution* . . .

In considering units of evolution, I argued that you have at each step to include the completed pathways outside the protoplasmic aggregate, be it DNA-in-the-cell, or cell-in-the-body, or body-in-the-environment. The hierarchic structure is not new. Formerly we talked about the breeding individual or the family line or the taxon, and so on. Now each step of the hierarchy is to be thought of as a *system*, instead of a chunk cut off and visualized as *against* the surrounding matrix. (Bateson, 1972:460.)

Where man marks boundaries between living and dead or between organism and environment is usually due to his own survival-oriented modes of perception, his place in the hierarchy, and not necessarily to any objective criteria of truth. It is a matter of punctuation or closure. Of course, living systems are not totally closed, but, in order to study them and in order for them to exist temporarily, to define themselves as self-correcting systems, it is necessary to limit the variables acknowledged as information-bearing and to define these “permanently”. Yet, in so doing, certain important variables may be excluded from consideration. The divisions and boundaries that we have punctuated may prove inadequate for the predictive capability of our models and will hinder greater understanding. Lately, the communications theory developed by Bertalanffy, Wiener, von Neumann, Shannon, Craik and others which crystalized in the late 1940s has shattered our traditional (and highly dangerous) system of punctuation.

Though necessary for the existence of any organism, through punctuation, a boundary is declared between organism and environment, so that the former is in a position to survive at the expense of the larger system (organism plus environment). As the human case so well demonstrates, ecological disaster can result. Of course, what is extermination of one organism is simply a homeostatic control from the viewpoint of a larger organic unity. The vicious-circle runaway of any part of the circuitry of total mind will always be ultimately resisted and eliminated. The individual herder, his Saameby and the Saamish culture, all must change

in order to survive. As the relations of these systems are largely hierarchical and closely intertwined, their survival depends upon striking an assertive-integrative *balance* with each other, with all concentric, resource-consumer relations, ranging from grazing/reindeer through reindeer/herders and herders/Saamish society and culture to Saamish society/the Swedish nation.

Minority politics

As the chapter on Saamish identity management demonstrated, punctuation is a difficult problem for the Saamish movement. There is an inherent dilemma with any organism which seeks strength to survive through a strict delimitation of *its* boundaries, while at the same time the struggle for survival puts these very boundaries in motion. The more concretely a Saami is defined, the greater the risk of estranging the support which has been thereby excluded. When pressure for cultural change is high, it is only natural that those who feel threatened will seek to consolidate their resistance. But, as the very idioms by which such consolidation can occur are pressed into new forms by the same pressures, the situation resembles that of an artist trying to paint his own picture from an image in a mirror while running. Though consolidation of identity may be necessary for the successful pursuit of minority politics, it leads to the dangerous situation where the concept of an encompassing *system* may be lost and, as Bateson says, a chunk cut off becomes visualized as *against* the surrounding matrix.

Swedish industrial society also wishes to survive and for hundreds of years has been in competition with the Saamis over survival resources. The dissolution of Saamish rights and the weakening of reindeer-herding are changes which the Swedish State has seen fit to impose in order to allow the exploitation of the northern region necessary for its own growth and survival. Destruction of the environment, the necessary context of all organisms, has been massive.

The Saamish minority struggle has serious implications for all of mankind, because it challenges the narrow concept of mind which permits the State to destroy the environment and the minority's forms of livelihood, which are more favorable to the environment. Should the minority movement fall into the same narrow concept, however, by seeking merely its own survival, without regard to the larger, systemic organism of which it is a part, then its cause will be lost in a simple power struggle in which might will be right. So far, the Saamish movement in its declaration of principles has only espoused half of Bateson's cybernetic definition of love, the feeling for systemic interdependence. Compare the following two quotations:

I regard myself as a system, whatever that might mean, and I accept with positive valuation the fact that I am one, preferring to be one rather than fall to pieces and die; and I regard the person whom I love as systemic; and I regard my system and his or her system as together constituting a larger system with some degree of conformability within itself . . . (Bateson quoted in *Our Own Metaphor*, 1972, pp. 279:80.)

We are Saamis and we wish to be Saamis, without therefore being either greater or less than other peoples in the world. (From the Nordic Saamis' Cultural and Political Program, adopted at the VIIth Nordic Saami Conference in Gällivare; see Svensson, 1973, p. 244.)

Many Saamis feel that interaction with the Swedish State has been so negative that it would be better to adopt an "equal but separate" stance and to obtain Saamish minority rights (regardless of Saamish-category-membership strength or weakness) based on a "we-were-here-first" philosophy—better this than to seek an acceptance of difference with an ever-changing allotment of "privileges", in which such acceptance and rights are balanced against the needs and desires of the small Saamish population in relation to the needs and desires of the large majority population. Population changes with time might then gradually weaken the Saamis' claim for special rights and push Saamish culture past a theoretical point of no return.

Thus, a solution to the Saamis' ills cannot be found merely in the attainment of a status neither greater nor less than other peoples in the world. Even if attained, this will not necessarily avoid the dilemmas caused by runaway systems. As these continue, even equality with other peoples (all with population runaways) will be insufficient to maintain a living Saamish culture. It is vital for the Saamis today certainly to make their needs and desires known to the world. It is also vital to face up to interdependence and to agitate for a just balance under present conditions. This is the important subject of debate: to determine what is a just balance. This can be no one fixed point, for what is just is proportionate to a rising tide of needs. Moreover, it is necessary to help to establish control over runaway systems, so that these conditions may be changed and afford more flexibility for both herding and cultural development, so that the just balance will not demand great sacrifices from either the minority or the majority. Unless such a course is charted, the alternatives seem equally distasteful. Enforced assimilation will race against increasing Saamish separatistic consolidation. The result of such a race will be either the end of the Saamish "problem" (because the term "Saami" has become insignificant) or the explosion of the Saamish problem with violence.

The more the call for systemic consideration goes unheard, the more the environment will be exploited and the Saamis threatened. The more the Saamis feel threatened, the more clearly will they punctuate themselves as a separate unit of survival, which will be able to incorporate all its

disparate factions. Other minority groups, such as the Basques and the IRA, have gone further along this road. State policies which lead to enforced assimilation through economic pressure, whether designed for this end or not, only add fuel to the fire of minority, separatist struggle. One may choose to regard State policy with cynicism or one may see such policies as the inevitable result of runaway systems. The truth may lie in the large, gray area between these poles on the assertive-integrative continuum. Nonetheless, when pressed by the commons dilemma, however caused originally, it is only natural that restrictions should be made. Where resources cannot be expanded limitlessly, it is necessary to regulate consumers. This in turn calls for some type of discriminatory criterion by which to weed out some consumers (herders) and support others. It is for this reason that the policies have evolved which tend to pit one group of Saamis against another.

The prevailing tendency seems to be that the greater the crowding, or rather the competitive conflict over resources, between Saamis and Swedes, the greater the eventual, legal splintering of Saamish groups into limited sub-categories. The discriminatory treatment which results from such splintering (whether it is deliberate or not) serves to counteract the swelling of the previous categories to the point of intolerable conflict over resources. As colonial confrontation gradually caused herding to reduce its flexibility, the pressures of conflict were extended to the nomadic, herding Saamis, as opposed to the hunting-and-fishing Saamis, followed later by division between herding Saamis and herding-and-farming Saamis. Constraints were imposed to limit the herding involvement of farming Saamis. As pressures mounted within the category of herding Saamis, herding-eligibility rights were imposed. The category of actual herders was later further subdivided, with accompanying constraints imposed on the different classes of Saameby members. Resource conflicts have become increasingly severe and will occur at an increasing rate with time in Lapland.

In this manner, the natural punctuation of the Saamis into a strong, unified, survival unit is blocked. New factions are created, and the unit of survival is driven down the hierarchy of organism until, eventually, it is every man for himself. The self-rationalizing Saameby is a prime example of this mechanism. Rather than imposing homeostatic control, allowing the Saameby to engage in some economic activity other than herding and favoring the individual Saameby member's major investment of time and income from non-herding sources (relations which would help to conserve living standard *and* cultural context), §§ 1, 9 and 11 of the RNL lead to a conservation of living standard by gradually eliminating herders. Again, the herder population will be regulated in some way, so the problem once more is to find a just balance, that is, one which takes into account the needs and desires of the Saamish minority and not only the State's needs and desires for rationality. § 9 blocks the herder's possibility

of utilizing his Saamish (herding) privileges to bring in non-herding income. His flexibility as a herder is thereby reduced and, if he is forced from the field, § 1 can bar his descendants from returning to herding after two generations. If flexibility for the Saameby as a whole is small, for example, with a total reindeer population pushing at the rational, reindeer-population limit, § 11 (which stipulates the different classes of Saameby membership), in conjunction with the Saameby voting system, may facilitate the "rationalizing away" of the small herders by the big herders.

The Swedish State no longer needs reindeer-herding, and herding interests often conflict with more lucrative utilization of the land. Yet, as with the relation of the Saamis to the State, the relation of the State to that larger systemic level which includes the environment must be based on balance if the State is to avoid homeostatic punishment for a destroyed environment. If the State refuses to control its runaway needs, its flexibility will be continually reduced and its need for rationality of every type will necessarily increase.

Of course, it is only natural that the Saamis have not officially proffered the hand of systemic love to a State which may only take advantage of the gesture and, in fact, cannot stop itself from doing so as long as it has no control over its runaway systems. Similarly, while the State has been aware of the growing needs of the population and has concerned itself with meeting these needs, often at the expense of the Saamis, it has not been so ready to maintain balance by offering the Saamis extended rights and support. An often-heard argument against increased support for the Saamis is that they would simply take advantage of the situation to an extent more than their real needs would justify. In short, each side fears, and with good cause, that the other would take advantage of the sacrifices in resource allocation that it might make for the other side. Hence, minority-majority problems have aspects similar to those of countries involved in an arms race.

In this study, it has not been my primary object to contend with the intricacies of the Saamish-minority movement. I have had to deal with it, however, with regard to its influence upon herding form. I have had to content myself with one brief chapter, in which I have tried to demonstrate the shifting patterns of alliance between certain groups observable with shifting issues. This is certainly not intended to be a thorough account of the subject but is rather a necessary and logical outgrowth from the larger discussion of State legislation concerning Saamis and herding. Readers interested in the Saamish-minority movement in Sweden *per se* should consult Svensson's works (1973 and 1976). I have instead kept to a far narrower scope in my treatment of certain factions within the Jokkmokk community, for the specific purpose of establishing a context for Tuorpon herders. At the same time, however, I have sought to illustrate how the same cybernetic principles can be usefully applied to minority

problems as well as to herding transformations. Indeed, it is a fundamental point that the “economics of flexibility”, which governs the *system* of change of any natural structure when that structure has come to push against its critical limits, is the same.

Herding transitions

In early, intensive, Tuorpon herding, a regenerative loop was established, connecting man, reindeer and environment, which can be depicted as in diagram *A*. In the transition to extensive herding, with its growing emphasis on meat production, a somewhat new, regenerative loop, *B*, had to be established, which, of course, followed a large part of the loop in *A*, so that the relations of *A* and *B* can be figured as *C*.

Similarly, the rationalization of herding seeks to establish further new regenerative loops based on arcs of the regenerative loops of both intensive and extensive methods.

Such loops, however, operate on a feedback principle, and the herder faces a necessary *gap in his feedback reinforcement*, should he abruptly make the jump into a new loop. He would then find himself without reinforcement from the old loop before reinforcement from the new loop could be obtained. It is clear that the transition from intensive herding with milking to extensive herding based on meat production could not be made overnight, even without taking into consideration the added restraints of custom. Herding-form transitions are thus determined not only by the quantities of investment versus return, but also by the *timing* of investment versus reinforcement.¹

The bigger herd necessary for meeting needs with an extensive herding policy would endanger the possibility of successful milking and the maintenance of the intensive milking required. Examples have been noted in which gains in herd size were sacrificed for milking efficiency (see p. 44). Moreover, even where herd size could increase under strict milking intensity to a certain extent, such an increase in herd size would not necessarily occur without sacrificing potential meat resources, counted in units

¹ Theoretically at least, herding loops of investment and return might be analyzed, with a time factor for each linkage, in the manner of PERT (Program Evaluation Review Technique).

of weight. In herds which were heavily milked, the calves, deprived of much milk, would not grow to be as big as those in herds which were not milked. Hence the aggregate of meat, if not total herd size, would be sacrificed for milk. Each system has its own homeostatic controls, its own critical limits.

Similarly, as noted in the case of Tuorpon, a sudden transition to rational herding methods, with the increased work investment and the calf-slaughter system required, would be impossible for most herders, because they could never survive the sacrifices until the reinforcement came through. Far greater complications arise, of course, when one takes into account the co-ordination of all the herders in the Saameby necessary for the complete transition.

Inability to change when pressure for change is applied, however, results in the death of a regenerative loop, an organism or a society. Survival demands that the transition required be within the organism's scope of flexibility and/or gradual enough to enable a partial investment in the new circuit to be made (renormalization) without total destruction of the old. The old can be dismantled as reinforcement from the new increases. For many herders, this was the situation with regard to the transition from a milking to a meat-centered, husbandry form.

Not all herders met the pressures of extensivity from the same point of departure, that is, their herd size varied as well as their family needs and labor forces. Consequently, some were able to make the transition before others, and those that did imposed with their extensivity yet greater pressures on those that did not. The result, as usual, was that the smaller herders with the longest reinforcement gaps and the greatest dependences upon the old circuits were forced from the field. This is one of the reasons why so many native, central and southern-Saami herders quit herding in the wake of northern-Saami relocation and of the urgent demands for flexibility which began in the early 1900s.

With the change to extensivity, new circuits came into operation. This change, as was noted earlier, was to a large extent forced upon herders by crowded conditions. Crowding between herders and farmers, a result of Swedish colonialism, imposed problems that were beyond the traditional, Saamish, control mechanisms or the environment's own control mechanisms. Those controls, which the Swedish State imposed (and still does), were constructed so as to maintain a settled, Swedish population, if necessary at the expense of the Saamis and herding. The transition to extensivity greatly altered the critical limits at which a herder can exist. The vicious circle developed whereby crowding in the grazing lands led to new legislation concerning reindeer distribution, leading in turn to pressures on herders to convert wealth on the hoof into cash, which resulted in the linkage to the rising subsistence minimum in reindeer and the need for new types of redistribution (see p. 337). These later forms of redistribution involve not only allocations of reindeer, but also allo-

cations of herding eligibility, other, non-herding, livelihood possibilities and Saameby voting rights.

Moreover, as meat prices do not rise in step with inflation, the critical limits for the herders' subsistence are gradually but continually narrowing. As the number of herders decreases, the work of herding must be done by more mechanized means. These technical aids saddle herders with substantially increased expenses, which in turn increase the ill effects of inflation. This means that, for the same amount of work, the herder gets less in return. Small herders especially will not be able to afford the same work investment, and as a result their herds will suffer the consequences of incomplete marking, poor guarding and gathering, and reduced tameness grade, i.e. over-extensivity. Currently, with the great increase in fuel prices, small herders are finding difficulty in paying for the operation of their snowmobiles, without which they are useless in collective, winter-herding tasks.

In this way, the vicious circle leading to what I have termed the *extensive spiral* is begun, for the more a herder suffers the losses of over-extensivity, the less his herding return and therefore the less his herding work investment. The extensive spiral becomes more and more deadly to the herder's business as the subsistence minimum in reindeer rises and as intensive pressures, such as predation, increase. Herders that can afford to will try to maintain intensivity, despite the poor return for their work, but the more the subsistence minimum rises, the sooner these herders must seek to make a more profitable use of their time. The only way of escaping from the extensive spiral is for the herder to try to reverse the mathematical sign of the spiral, as in the 1978 re-intensification program in Tuorpon. That is, to try to start an *intensive spiral*, in which the more one works, the more one gets in return and the more one is then able to invest in herding work etc. Not all herders can survive what I have here called the reinforcement gap of such a re-intensification. And, in Sweden, taxation policy places a very tight control on the gains to be made from such intensive spirals. When the tax is taken, little may remain of the profits made from increased work investment.

Along with the narrowing of the critical limits for herding follows the reduction of the survival and development possibilities of the Saamish culture. Corrective action on the part of the herders to adjust their herding to narrowing parameters is carried out in relation to more than just the individual herder's living standard. The survival of the individual herder, his group, the Saameby, and the Saamish culture are all involved and on many points even in partial opposition to each other. It is in regard to all these aspects that one must consider the development of and resistance to Swedish rational ideals.

Herding's flexibility is reduced not only by a change in the limit for the unsuccessful herding allowed, but also by a change in the limit for the successful herding allowed. Destruction of the natural environment by

extractive industries means that grazing lands diminish and the rational limit for the number of reindeer in an area is lowered. Thus, not only does it take an increasing number of reindeer to live, but it is less and less possible to sustain the reindeer. As a result, the herder himself becomes the object of the State's homeostatic control of the system. The Swedish rationalization ideal calls for a 30% herder decrease,¹ so that the maximum possible number of reindeer sustainable, divided by the subsistence minimum, will still give those herders remaining a decent living standard. But, as the subsistence minimum continues to rise and the extractive industries continue to cripple herding efforts, an even greater reduction of herders will be deemed necessary. In effect, rather than attempting to preserve the relationships of variables important to a stable herding culture by applying homeostatic controls at the systemic point of runaway (for example, in the accelerating growth of industries), the State imposes controls which demand that herders adapt themselves continually to this runaway. Obviously, if the runaway continues, the flexibility of Saamish herding will be stretched beyond the breaking-point.

In the above three histograms, the hatched area within the rectangles represents the total possible herd size. This figure is a product of the value of the vertical axis, the average number of reindeer per capita, and the horizontal breadth of the base of the rectangle, which represents the number of herders. For the sake of simplicity, the histograms have been

¹ It is important to note that the Swedish Parliament did *not* approve State *enforcement* of the proposed 30% herder reduction, largely due to the efforts of the SSR. Yet what is most rational remains most rational and, as flexibility decreases, the need for rationality increases. As grazing lands diminish and the subsistence minimum in reindeer rises, herders will be forced from the field. The State can easily induce herder reduction indirectly, as by taxation policy and other economic manipulations concerning loans, meat subsidies and insurance demands. The actual weeding out of herders was made a collective Saameby responsibility, in that herders faced by hard economic realities do not withdraw of their "own" accord. What is State-enforced and what is not, therefore, is a complex matter, which must be considered in much greater depth than any single declaration of legal principles might lead one to believe.

drawn so that each herder has the same herd size and the total reindeer population is at the rational limit.

In the histogram labeled "problem", the herders do not meet the current subsistence minimum in reindeer. The Saamis hope to solve this problem by lowering the subsistence minimum and shrinking the herder base as little as possible. Even if the subsistence minimum is not lowered, herders can survive below it by bringing in income from other sources and thus reducing the actual number of reindeer needed. But, as already demonstrated, § 9 and § 11 of the RNL limit such developments. The State has shown itself prepared to aid herders with funds and subsidies in a number of ways, in order to ease the economic difficulties of herders with poor herd sizes (however, herders may have to prove themselves a good investment for the future or otherwise bow to State demands before being able to receive aid). Besides loans for the purchase of new stock, the State has provided some subsidies for snowmobiles. Of course, all help is appreciated, but many herders are frightened at the prospect of their growing dependence upon State aid. Should the State choose to withdraw its helping hand, these herders will have no choice but to stop herding.

The histogram labeled "RNL solution" represents the 1971 Swedish ideal solution to the problem. In this histogram, the herders are no longer below the subsistence minimum, but, whereas the total herd size is the same, the herder base is shortened. The histogram labeled "Possible future I" represents the situation which would result in time if the same controls were exercised to keep herders above the subsistence minimum at the same time as this minimum continued to rise and as the total possible reindeer population continued to fall (the narrowing of critical limits). Each shortening of the herder base threatens the survival chances of the Saamish culture.

In opposition to this extrapolation, one might consider the following histogram, "Possible future II," more in line with Saamish-minority principles.

In this histogram, the herd size has not decreased in total, but, most importantly, the herder base is not shortened—if anything, it will, one hopes, grow wider. This will demand a great decrease in the reindeer subsistence minimum, a minimum which is not only set by the net profit-

ability of reindeer products (market sales minus the herder's expenses) but which in actuality is also dependent upon the availability of other jobs, the profitability of such jobs, and the lifting of legal constraints so as to permit herders to engage in such alternative jobs and remain herders.

The histograms "Possible futures I and II" depict extreme conditions, and, depending upon the larger loops to which these conditions are linked, the actual conditions will lie between the two extremes and fluctuate somewhat, but, on the whole, move in the direction of future I, unless changes are made in the current parameters. Note that, in future II, the broadening of the herder base is linked to the regulation and (desirable) decline of the subsistence minimum in reindeer. The interests of the herders will differ from the interests of the Saamish minority as a whole, depending upon the balance of these two factors. If the number of herders is increased in proportion more than the subsistence minimum is lowered, so that the living standard declines, herders will suffer. But if the subsistence minimum declines and the number of herders sharing this increased flexibility is kept low, so that the living standard becomes luxurious, then Saamish cultural leaders may protest. This same kind of balance operates at present with respect to Saamish rights and the Swedish State.

Herding form, intensive or extensive degree, husbandry form and work organization, besides numerous, other, interrelated variables, as well as the progress of the pan-Saamish movement, are all in part functions of the configurations of these changing histograms. Moreover, it is not simply the breadth of the herder base which is of relevance for the Saamish culture. The changes in herding and husbandry forms, work organization within herding and work distribution amongst other jobs are all related to the configuration of these histograms. Thus, in so far as these aspects of occupational form are part of and influence Saamish culture, the legal constraints which regulate the transactions and communication circuits of herders have a direct bearing upon the Saamish culture, over and above the number of herders that they cause to remain in the field.

A homeostatic device which seeks to maintain a system at a steady state, such as a thermostat, which operates to keep the house-temperature constant, can be seen as having upper and lower critical limits. These limits are raised or lowered, so that the range between them is broadened or narrowed. There is a little separation between these limits in the house-thermostat, even if the dial is set at one particular temperature, for example, 68° F. When the temperature rises to 69° F, it will shut off the heater and, when the temperature drops to 67° F, it will turn the heater on. Such a system can be said to have a flexibility of 2 degrees Fahrenheit. If the flexibility were less, for example, 1 degree Fahrenheit, so that the heat would go on at 67.5° F and off at 68.5° F, then the frequency of the heater's going on and off will increase. What one considers a steady state, a situation in balance, can thus be achieved by a high frequency of fluctuation within narrow limits. The tightrope walker remains balanced with

the help of a long pole, with which he can rapidly shift weight from one side to the other. Of course, heat loss and gain are relatively rapid processes. If they were less rapid (like the rates of food consumption, for example), less frequent fluctuations (shopping trips) would be necessary to maintain equilibrium. Similarly, with the narrowing of the critical limits of herding, the frequency of the spiral-sign change (re-intensivity from over-extensivity, for example) will increase. When the sign changes from over-extensivity to re-intensivity, some herders are in danger of being forced from the field.

It is interesting to note that the herders themselves speak of the cyclic nature of good herding eras. It is not a cycle necessarily caused by reduction of herd size through Malthusian catastrophe, for, as Ingold (1976) has explained, other homeostatic controls may come into operation which limit herd increase before the development of Malthusian catastrophe, controls such as the reduced strength of reindeer to cope with poor winters. This is a condition which, as Ingold points out, causes herders to mistake the harshness of winters, to regard a poor winter as a catastrophic winter when, in fact, the real reason behind the resulting, great, herd loss was over-grazing. The fluctuations which I outline roughly here and which could never proceed so smoothly in fact, form an idealized diagram of changes in herders' management methods, methods of intensivity or extensivity which are related to herd size but not dominated by it.

Reading the above diagram from left to right—intensivity leads to good reinforcement of herding investment, so that investment grows as does herd size. After a certain point, however, further intensivity will have only negative effects, especially as the total reindeer population in the region rises to put a strain on grazing capacity. Increased strain on grazing capacity favors release of herds to greater extensivity. As Pava-Lasse Pavval stated in his 1913 interview with Erik Bergström, the extensivity of the Karesuando Saamis showed the Jokkmokk Saamis how to keep more reindeer on the land. Hultblad (1936:33) makes much the same point, although from a different point of view: "Since an extensive herding is

moreover the only way to utilize the pasture lands rationally, it can probably be considered more advantageous than the intensive from the perspective of the national economy." But extensivity can be the beginning of what has been termed the extensive spiral. Its causes are not simply too big herds, but herd size in relation to decreasing grazing capacity and in relation to market prices versus inflation and herding versus other jobs with maybe better returns for extra time investment. Whatever its complex causation, the extensive spiral brings reduced herding investment and reduced herding profits. Where predator threat or other intensive pressures are high, total herd size will probably diminish. Even if it does not, however, calf-marking will be incomplete, so that each individual herder's herd size will suffer. And with failing skills and herd knowledge, the herder in the extensive spiral is unable to draw maximum benefit from his herd. Such a herder will in time arrive at the lower critical limit dictated by the subsistence minimum in reindeer and will finally have to leave the field or re-intensify.

The increased frequency of such shifts (beyond the seasonal, intensive-extensive, relative shifts) is of great significance for the growth of Saamish herding culture. Whereas, before, one spoke of intensive or extensive eras spanning many generations, a single herder today may experience a number of shifts. Such changes must be regarded in relation to what one might conceive of as the timing of cultural-coding needs. In a culture which is relatively slow to change, certain relationships may be coded as basic cultural elements and come to permeate a wide variety of cultural activities and symbolics. The society adopts certain structures of thought. But, where change occurs at a much faster rate, so that these old structures are themselves set in motion through systemic interaction, the formation of what is often conceived of as cultural institutions, traditions and structure will be altered and may result in "bits" of culture of a different logical type from what went before. In a systemically swirling dance of change, how long must any one relationship survive for it to become a recognized structure (see Wilden, 1972, pp. 204-5)? in the case in which for example, intensivity has continued unbroken for over 100 years, traditions have had time to evolve and stabilize in a way which makes extensive development (sign change) more difficult than if sign changes occurred frequently. Where sign changes are frequent, traditions may evolve which span intensive-extensive differentiation, traditions which rather than reflecting one type or another are instead geared to their very interaction and oscillation. Now, with the benefit of hindsight, we can realize the larger system encompassing the old intensive and extensive models—how the rise of intensive herding, transition to extensive herding and rise of so-called rational herding have all occurred according to the economics of flexibility and the assertive-integrative dialectic generated by runaway systems. This approach provides a valuable addition to the historical-cultural, diffusionistic explanation of herding form.

But, as the critical limits of herding narrow and the frequency of spiral-sign changes between intensivity and extensivity increases, the amplitude of each sign change decreases. This is to say that the herding need not and cannot become so intensive or so extensive as it has been in the past, with regard to those aspects which acquire their characteristics from the amount of time devoted to an intensive or extensive method. If the shifts between herding forms are frequent, then it is understandable that a form practiced for only a few years does not foster the tameness grade in the herd nor the skills in the herders which would follow from longer practice. To speak of these variations, then, as being between two separate herding types becomes increasingly meaningless. The two mix in the requirements to maintain a new steady state of little flexibility. The difference between a move in the one direction and a move in the other direction becomes so slight that it would be far more profitable to conceive of these herding forms as fluidly variable modalities within modern Saamish herding than to try and split hairs in order to catalogue current herding aspects in obsolete categories. Like the house thermostat set at 68° F, herders today must set a very accurate survival course, a course in which cultural considerations and family ties may have little place.

In examining the homeostatic mechanisms at both the upper critical limit (too many head of reindeer) and the lower critical limit (too few head) and noting their effects on herding form, mention must also be made of the way in which these controls affect and are distributed amongst the individual herders. The figure on page 480 fails to depict the various fates of big, medium or small herders, and the figures on page 477 are drawn as if all herders had the same herd size. In this study, the varying strengths and weaknesses of herders relative to both environmental and legal determinants have been discussed.

Obviously, as far as environmental limitations are concerned in the homeostatic control of the reindeer-per-herder relation (controls such as bad winters and predation), the larger a herder's herd, the greater his security. Where competition is involved and all herders are trying to achieve this security, grazing capacity may be hard pressed. Legal constraints are activated in this situation; the Saameby is not to have a reindeer population exceeding its rational reindeer population. Exactly *how* one regulates herd size, however, is another matter. In the past, the State practiced enforced slaughters and in 1944, by an amendment to the Reindeer Grazing Act of 1928, a maximal herd size of 600 head for unmarried herders and 800 head for married herders was established (SOU 1968:16, p. 43). Since the creation of the RNL, which hands this problem of regulation over to the Saameby itself, the need for enforced slaughters has not arisen for reindeer-population control. This is not to say that such measures will not be brought to the fore again in the future, maybe the near future, according to recent reports from Handölsdalens Saameby (*Samefolket*, 1979, 14:10). Currently, however, many Saamebys

are well below their rational reindeer populations, and those that reach higher totals than permitted can always sell their excess stock. With the modernized and efficient, reindeer-meat market, there is as yet absolutely no problem in converting excess stock into cash. The slaughterhouses are not the only buyers. Herders in Saamebys with low reindeer totals frequently buy stock from the Saamebys with high reindeer totals. For the small herder, purchase of reindeer is one of the best methods of helping to bridge an otherwise deadly reinforcement gap for his herding business upon re-intensification. In this way, the small herder will not have to await the normal course of reindeer reproduction before his increased work investment bears substantial fruit and justifies itself.

Let us assume, however, that the total herd size of a Saameby has reached its legal limit. In order to avoid exceeding this limit, herders might sell more head than previously per year. Some herders, however, might find it advantageous to keep as large a herd as possible, while the others decrease their herds proportionately more. Moreover, here taxation policy comes to bear and may make more than normal market transactions less desirable (*Samefolket*, 1979, 14:11).

If the herders of their own accord do not engage sufficiently in enough reindeer capital conversions to maintain the total herd size at or below the limit, then the Saameby as a collective organization must take the responsibility of establishing the principles of herd reduction. If the Saameby does not take the necessary measures for herd reduction, then eventually the government authorities will step in and appoint a temporary Saameby manager, under § 72 of the RNL. If the Board of Agriculture considers that grazing capacity is threatened by over-use, § 15 of the RNL reserves to it the right to limit grazing rights.

When the reindeer/grazing ratio is considered too high, § 35 of the RNL gives the Saameby the right to limit the herd sizes of its members, but the second paragraph of this same § 35 says that such limitations may not be so severe that a Saameby member's continued activity is made impossible or greatly handicapped. If all the herders in the Saamebys with supposedly 30% higher membership than what is considered rational were to attain a herd size just at the subsistence minimum, then the reindeer population for the Saameby as a whole might still be over the rational limit, and it is hard to imagine in this situation how any reduction which put herders below the subsistence minimum could be considered not to handicap their herding activity. Pål Doj puts to the State the following interesting questions: "Why is it not the Saameby collective which decides what reindeer population is to be permitted? And if over-grazing results, is this consequence not a matter *only* for the herders to suffer?" (*Samefolket*, 1979, 14:23.)

If the measures established by the Saameby for herd-size reduction are not successful in containing its growth, then these measures must be made increasingly strict. At first, the Saameby may vote to reduce the number

of contract reindeer. Later, big herders may have to put pressure on the smallest herders to vacate the field or reduce their holdings in reindeer. If the total herd size is still too large, pressure will be applied to bigger and bigger herders to reduce their stock. It is to be hoped that this situation will not arise, but, should it arise, the Saameby will, one hopes, take into consideration all of its herders as much as possible and not permit the big herders to exert an unequal squeeze on the small. Should this occur, the small herders can turn to the government authorities for protection, but there is no precedent as to just what is necessary and what is excessive in herd-reduction principles. Obviously, such principles can never be set once and for all, for the balance of survival needs and selfish demands as between big and small herders will alter, depending upon herd distribution and the extent to which herd reduction is necessary.

It is even quite possible today for the biggest herder in a Saameby which has a total reindeer population exceeding the rational limit to have a personal herd size below the subsistence minimum. The current subsistence minimum is calculated by the herding authorities to be about 350 head (although I have seen much higher figures suggested, depending upon what standard one considers minimal for subsistence). In such a Saameby, the need for herd reduction will not only be very unpopular but downright threatening to each herder's economy. If, for example, the rational limit for Tuorpon, 9,000 head, is divided by 350 head, the result shows that Tuorpon can sustain no more than about 26 herding families, when herding alone affords almost their entire source of livelihood, as the authorities desire. This is close to the number of herding families in Tuorpon today, although Tuorpon's current reindeer population is less than or little more than half of its rational limit. If one divides Tuorpon's reindeer population (4,091 head, according to the 1978 count) by the number of Tuorpon herders (about 40), each herder will have, on the average, only 102 head, a figure far below the subsistence minimum (*Samefolket*, 1979, 14:10). Lack of reindeer income must be compensated by income from other jobs.

In a competitive system, especially one in which voting power is often based on herd size, a reduction of one herder's herd can be of considerable advantage to other herders. The point to be made here is that the way in which the hatchet of enforced reindeer reduction falls depends upon the reindeer distribution and thus the distribution of Saameby voting power. Once the hatchet has fallen, voting power is re-arranged, as it is based on herd size. Were all herders to have herds of equal sizes as the total herd size passed the rational limit, any reduction would probably be made to affect all herders equally. When the rational reindeer limit is attained with great imbalance of reindeer distribution amongst different herders, however, the Saameby may decide upon a method of reduction which strikes the different herders with unequal force.

Were the total Tuorpon reindeer population to pass the rational limit

once again, as in the 1930s, so that a great herd reduction was demanded, it is quite likely that political aggregates within the Saameby would form in an attempt to weed out smaller and/or inactive herders, thus easing the pressure for the reduction of the big herders' herds. Should excessive reindeer population continue, political loyalties would re-form, if possible, in an attempt to weed out even more herders. Herders with medium-sized herds who had joined with the big herders to drive out the small herders might find themselves the victims of the same procedures at the hands of their old allies. In short, what is of great importance here is *relative* herd size. The kinds of political blocs forming within the Saameby for the purpose of this self-rationalization will depend upon the herd-size differences and upon the numerical strength of the herders in each general, herd-size category.

As noted, strict economic interests will be tempered by such motives as family loyalty and cultural-identity considerations. The composition of interest groups will vary a good deal, according to the issue at stake, and it would be very naive to ignore the effects of interest-group composition in one realm upon interest-group composition in another.

These other, non-materialistic considerations, however, become less significant, the greater the pressure of reindeer crowding in the grazing land becomes or, in more general terms, the more the ratio Saameby resources/Saameby members $\times$ consumption (R/SC) decreases. Pressures to expel small herders can arise from such things as Saameby collective-insurance expenses or hard-pressed, fishing resources and not just crowding in the grazing lands. The law is explicit in its view that the rights granted to Saameby members for the utilization of Saameby resources are based on the needs of *herders* and not on the minority rights of Saamis (excepting, of course, the limited § 1 right of eligibility for these other herding rights, which is based on Saamish ancestry but subsumes such ancestry under a past commitment to *herding* for two generations). § 11 of the RNL establishes Saameby-membership categories based on economic status, and the system of Saameby voting rights gives clear preference to those members who are strongest in their herding commitment and have most reindeer.

In the case of overcrowding, while small herders may be left alone and actually make gains through the reduction of the herds of bigger herders if they possess enough total voting power, they can be seriously threatened, should their vote be weak. As herd size is reduced for some herders but allowed to grow for others, voting power, which is largely based on herd size, changes in proportion amongst the interest groups. Thus, the matter becomes extremely complex, for, with time and successive, enforced, herd reductions, some medium herders will attain big-herder status and change political interest, maybe from the preservation of the small or inactive herder to his expulsion. The speed of herd growth is a vital statistic for a herder, as is the speed of growth of his fellows' herds and the

accompanying changes in the formations and strengths of Saameby interest groups. Thus, in a situation of resource stress, husbandry decisions will probably turn more and more away from the consideration of annual meat maximization per regenerative grazing unit to the consideration of long-term policies. The reindeer's significance as a source of voting strength will gain in relative importance, which is all the more reason for the small herder to resist any unequal-herd-reduction policy. One year's reduction will make him all the more vulnerable to next year's reduction, and the smaller his herd becomes, the less the herding authorities will feel inclined to take his part.

In discussing the upper critical limit for herding, it has been impossible to avoid consideration of the lower critical limit, for the simple reason that, on account of the homeostatic controls prescribed by herding law, pressure on the former results in pressure on the latter. And thus certainly a lowering of the upper limit, due to the reduction of grazing lands on account of the effects of competitive, extractive industries will also bring about a raising of the lower limit, i.e. a raising of the subsistence minimum in reindeer. The raising of the subsistence minimum in this instance will not merely be due to the rising inflation and the regular cost of production increases, but due also to a *self-stimulated* increase in production costs for the small herders through manipulation of the wage system.

As the upper limit falls, so that herd size comes near this limit, the bigger herders will use their voting powers in accordance with the homeostatic controls of herding law to trim the Saameby of small herders. As the total herd size converges with the upper limit, the wage system can be manipulated by the big herders to ease their situation by expelling the small herders. In effect, the subsistence minimum for the small herders will be raised, so that they must drop out. Should the flexibility gained by the big herders by expelling the small herders be consumed in time, so that the total reindeer population again presses against the upper limit, and should more-than-normal, herd reduction be equally difficult, big herders will be forced to battle with each other.

This manner of Saameby self-rationalization has, as yet, not become a topical question in Tuorpon, and probably not in any other Saameby either. Should the R/SC ratio never give cause for it, self-rationalization will most likely not take place. Nonetheless, it is important for an understanding of the systemic processes of herding to grasp its homeostatic restraints, even if these are dormant. For it is also the *logical principles* involved that are at stake, not just particular instances *per se*.

Cybernetics . . . takes as its subject-matter the domain of "all possible machines", and is only secondarily interested, if informed that some of them have not yet been made, either by Man or by Nature. What cybernetics offers is the framework on which all individual machines may be ordered, related and understood.

. . . cybernetics marks out certain types of mechanism as being of particular importance in the general theory; and it does this with no regard for whether

terrestrial machines happen to make this form common. Only after the study has surveyed adequately the *possible* relations between machine and machine does it turn to consider the forms actually found in some particular branch of science. (Ashby, 1956:2-3.)

Similarly, Tuorpon herding must be seen against the background of the relationships within which it operates (its possibilities), even if these possibilities have not or will not be realized. Such an analysis is a natural consequence of and indeed a sufficient reason for a diachronic study. I may add that the awareness in the herders' minds of this dormant possibility is itself a force in the dialectic of herding changes. I believe that this is one of the main reasons why Saamebys so rarely choose to admit a new member. Every member is a potential threat to the others.

Barth (1964) describes the situation in which Basseri herdsmen whose herding has been successful convert some of their herd property into land property, a conversion which in time causes some to give up herding for a settled life. This is an example of a herding system being maintained in part by homeostatic control of herder numbers at both the upper and lower ends of the scale of herding success. Although it is possible and may in the past have been less unusual (Campbell, 1948:260), today it is certainly not the case that big herders in Lapland tend to leave the field. On the contrary, it is these herders who maintain the most tenacious hold on herding. In Lapland, the way out is down.

Many reasons can be found for this. The risk factor in reindeer-herding is often so high that conversion of reindeer stock into other forms of capital investment unrelated to herding may threaten herding security. Thus, where herding is not yet fully given up but is reduced, gradual transitions may be risky. The smaller the herd, the more its regenerative capacity is vulnerable to predators or bad winters. Moreover, as I have discussed earlier (see p. 382), according to the law concerning class membership, a herder who earns more non-herding income than herding income must rely on participation in herding work to secure Saameby membership. If the herding return is small, so must be the work investment. The resulting extensive spiral may drive the formerly big herder from his remaining herding commitment before he is ready to leave. There are few forms of conversion open to the Saamish herder which, as in the Basseri case, complement herding efforts in such a way that a gradual transition from the herding-based economy to another form of economy can be made.

A change to another form of economic support frequently means a move to the south into a foreign cultural milieu. And, most importantly, because of the increased dependence on a cash economy, an increase in herd size will never reach the threshold of superfluity. A big herder does not have to leave herding in order to have a "better" life. Reindeer wealth can be easily converted into money, with the result that the life of the modern big herder is comfortable and, with the help of the Swedish

welfare system, of a high standard. Thus, herding has become more and more a job and less and less a total way of life. The Basseri herder and the Saami herder are in very different situations, and a change from herding by the successful Basseri herder has motivations and consequences which the big herder in Sweden does not share.

In the Swedish Saami herding situation, virtually all homeostatic control of herder numbers is effected at the lower critical limit; herders leave the field because they are not successful or have too few reindeer in relation to the subsistence minimum. As described above, pressure at the upper limit, from crowding, for example, will result in a situation in which the smaller herders are forced out by the lower limit. In effect, the requirements of success are raised. This is, however, a discriminatory raising of the subsistence minimum, designed to bring pressure to bear on inactive herders alone. As the number of herders decreases, those remaining will grow increasingly dependent upon mechanized work methods to help to compensate the reduction in labor force. Such dependence will cause a non-discriminatory raising of the subsistence minimum of all herders. Another regulatory mechanism of herder population which may become so important that it predominates over all others is the relationship of herder mortality and herder fertility. The proportion of married herders in various age categories is significantly lower than in the Swedish population in general. The birth rate within the herder population is very low (for demographic data, see H. Johansson, 1974).

In Tuorpon, crowding has not arisen under the RNL, but, as already mentioned, there are other powerful factors which cause the narrowing of the lower critical limit for all herders. As meat prices do not keep pace with inflation, the subsistence minimum in reindeer rises continually. In Norway, the government guarantees the herders a meat-price subsidy in keeping with inflation, by linking the minimum price for reindeer meat to that of first-class beef, which in turn is already index-regulated (see *Reindrifftsavtale*, 1. januar 1977 til desember 1978). While in Sweden other types of meat enjoy index-regulated price guarantees, reindeer meat does not.

The only way for a herder to achieve a steady state in active herding is to have a big herd, preferably close to or above the subsistence minimum, and to keep up a good degree of intensive management, conditions well illustrated by the Viri Group. Otherwise, the extensive spiral sets in and, depending upon the rate of herd loss (which in Tuorpon is very high, due to predators) and the relation of the herd size to the subsistence minimum, there will be a limited time span after which re-intensification is no longer possible for a herder. In the past, a herder might ride the extensive spiral of his herd for many years and still be able to make a strong, herding come-back. Or, more commonly, a descendant could take over the herd of an old, inactive herder and build it up again. The more the subsistence minimum rises, however, the wider becomes the gap of reinforcement for

a re-intensified, work investment (see p. 474). Thus, the herder riding the extensive spiral reaches the point of no return so much earlier. Those whose herd sizes have decreased past the point of no return, that is, herders who cannot bridge the reinforcement gap demanded for re-intensification, have no choice but to enjoy their last, herding, "sunset years" and to cling, for the sake of the accompanying herding-right privileges, as long as possible to Saameby membership.

The following diagram can be seen as an enlargement and expansion of a part of the diagram on page 480. Here, a closer look is given to the lower point of sign change of the extensive spiral, the need for re-intensification, with the inclusion of the routes by which some herders leave the field, make come-backs or stick in intermediate categories.

It is worth noting that the above diagram treats reindeer-herd size as a variable state derived from a closed series of transformations. Such transformations include the effects of food supply, predation, ownership identification (failure to mark), slaughter, reproduction, etc. But, in each case, any state of herd size S_2 is conceived of as being exclusively related to its own condition at an earlier state S_1 . That is, no account is here taken of the possibility for a herder, for example, simply to buy in 500 new head with money made in dam-construction work. This would, of course, invalidate any definite point of no return. While theoretically there may never be a completely final point of no return, empirical observation shows that in most cases it is a reality.

In order to buy reindeer with profits made outside of the herding occupation, a herder must spend time earning it away from herding work. This, in turn, means loss of herd knowledge and a clear path down the extensive spiral. If other herding-family members help to prevent this spiral, if the rate of pay in dam-construction work is high and if the price of reindeer is low, then indeed this method of come-back can be successful

and has in a few instances proven to be so. A herder may also conceivably win a fortune in a lottery. Such events are, however, out of the ordinary, and in most Saamebys today the possibilities of making a successful herding come-back by the massive purchasing of reindeer are slim. Work is scarce; reindeer are expensive; loans are hard to get; and in the case of a total newcomer, the Saameby might well refuse to grant him entrance. In Tuorpon, most importantly, the predator problem is so great that many herders feel (and a few have bitterly experienced) that to buy more reindeer is simply to feed the wolverine.

The diagram on p. 489 has been sketched for purposes of simplification, as if the various limits were all *linear* progressions. In actuality, however, the situation is far more complex. A helpful way to regard this figure is to imagine it drawn on a rubber sheet, which can be stretched *unevenly* in all directions. The distances between the various limits of the figure can be made to change in all manner of ways. Should herd reproduction rate be very high and unhampered by predators or other major reasons for loss, the line of no return might descend (indicating a *less* demanding, herding rehabilitation) and come very close to the line representing loss of Saameby membership. Under such conditions, the only activity required of a herder to secure continued herd-growth increase is to see to it that his calves are marked. If conditions were favorable, the extensive spiral would be reversed, with only the minimal bit of (re)-intensivity (calf-marking), and (although it would still be there) one could hardly speak of a reinforcement gap under those circumstances.

Actually the lines of the figure are in motion all the time. Herders for whom re-intensivity may have been pointless one year might have a good chance of successfully bridging the reinforcement gap the next year, if, for example, the numbers of predators were reduced. It is even possible that lines defining the various herding positions might cross, temporarily eliminating certain categories altogether. On the whole, however, the basic categories of the diagram—those above the subsistence minimum, those below it but above the point of no return, and those below the point of no return—remain, despite their interdependent shifts in size.

The shifts in the realm of flexibility of herding as a whole, as well as the shifts in the realms of flexibility of the various categories within herding demonstrated by the diagram, are due to an economics of flexibility. Each individual or “mind”, a reindeer, for example, is both composed of sub-systems related by this economics and is itself a sub-system (and component of many sub-systems) to a more inclusive system related by the same economics. Changes at lower levels of the hierarchy can be absorbed without requiring major changes in the larger system only to the extent that flexibility allows. But where the critical limits of any component are very narrow (stressed flexibility), a change in this component will certainly have repercussions which will radiate into higher systems until they are absorbed by yet greater flexibility.

Within this economics of interlocking realms of flexibility, some kinds of change in one component may fractionate the overlap with the ranges of other components and thus reduce the range of flexibility for the larger, inclusive system. There are other types of change in component variables, however, which, rather than reducing the adjustment range of the total system multiplicatively, enhance it multiplicatively. The use of artificial fodder, for example, can inject into the herding system greatly increased powers of flexibility. Should a type of fodder ever be perfected which could be used successfully all of the time (at present it is used in Sweden mainly as an emergency measure), winter-grazing capacity would no longer be the bottleneck in fixing a rational reindeer-population limit. In fact, grazing needs and regenerative capacity would no longer be the basis on which to consider rational herd calculations. Those changes which are most important and most readily adopted are those which multiplicatively enhance the system's flexibility.

It is important to note, in this example, that the flexibility of a herding system is not necessarily increased by widening the range of flexibility of *any* of its component variables. Doubling the amount of water made available to reindeer will not have the same effect as doubling the amount of grazing—precisely because it is grazing capacity and not water capacity which is a bottleneck in the system.

When, under stress, a variable must take a value close to its upper or lower limit of tolerance, we shall say, borrowing a phrase from the youth culture, that the system is “up tight” in respect to this variable, or lacks “flexibility” in this respect.

But, because the variables are interlinked, to be up tight in respect to one variable commonly means that other variables cannot be changed without pushing the up-tight variable. The loss of flexibility thus spreads through the system. In extreme cases, the system will only accept those changes which *change the tolerance limits* for the up-tight variable. For example, an overpopulated society looks for those changes (increased food, new roads, more houses, etc.) which will make the pathological and pathogenic conditions of overpopulation more comfortable. But these *ad hoc* changes are precisely those which in longer time can lead to more fundamental ecological pathology. (Bateson, 1972:496–497.)

When people are faced with stressed flexibility, *ad hoc* measures are taken to increase flexibility, but what usually follows is an expansion into new flexibility until the system is “up-tight” again. The consumption of flexibility is due to the runaway sub-systems within the larger system and, as Bateson has pointed out (1972:497), it is these runaways which in the end must be controlled if the system is to maintain a positive budget of flexibility (that is, avoid the commons dilemma).

In a paper analyzing herding developments in a Norwegian grazing district, Kosmo (1970) makes the general point that there has occurred a shift in production emphasis toward specialization in one out of numerous original sources of livelihood, that production in this one source is increased, and that even within this single source there is a change from many products to fewer, which in turn are increased. This is, of course,

exactly what has happened to the Saamis' traditional forms of livelihood—only herding remains recognized as a Saamish livelihood with a recourse to special rights over resources. Within the herding occupation itself, the diversity of husbandry forms has been reduced and the reindeer is basically now a mere meat producer. A major part of the rationalization program is an effort to maximize meat production, the epitome of short-sighted solutions which consume flexibility rather than seek to control the escalating sub-systems—human population and exploitive, industrial growth, among others — which cause the herding problem of poor profitability.

These developments can be directly related to what Bateson has called “expanding into flexibility”. I believe that the driving force behind herding-form transitions follows from the following sequence: reduced flexibility due to expansion into flexibility, *ad hoc* attempts to create more flexibility, expansion into this new flexibility by uncontrolled, runaway systems, reduced flexibility, etc. This study has therefore tried to explain herding changes always as the result of some problem, “up-tight” variables, and not simply as the result of innovation alone or of diffusion, which begs the question as to *why* certain traits from one group are adopted by another but other traits are not. Thus, the change to an intensive, herding-and-milking, management form can be seen as stemming from the same kinds of pressures which later called for extensive herding and still later for modern, rational, herd management. Each constitutes a different stage of reaction to the same expansion into the flexibility process. The development of herding law demonstrates most clearly this step-by-step crowding or advance into flexibility. Indeed, this is the essential import of exploitation and colonization.

Courses which offered short-term advantage have been adopted, have become rigidly programmed, and have begun to prove disastrous over longer time. This is the paradigm for extinction by way of loss of flexibility. And this paradigm is more surely lethal when the courses of action are chosen in order to maximize single variables. (Bateson, 1972:501.)

... if a given variable remains too long at some middle value, other variables will encroach upon its freedom, narrowing the tolerance limits until its freedom to move is zero, or more precisely, until any future movement can only be achieved at the price of disturbing the encroaching variables. (Ibid.:503.)

Over a long period of time, the runaway organism of Swedish society and industry has needed to ensure its own flexibility by eating into the capital reserves of the natural environment and thereby lowering the flexibility of Saamish forms of livelihood. The flexibility within herding itself has been pushed into a cul-de-sac through the repeated application of *ad hoc* rationality programs, which have succeeded in making the old, herding, nomadic way of life and the remaining, Saamish-minority rights dependent upon the maximization of a single variable, meat production. Unfor-

unately, the freedom to move of both the reindeer-management industry and the Saamish minority is rapidly approaching zero.

It is remarkable to find, therefore, frequent total blindness to the dynamics of herding and its dependence upon State policy.

Let us not in our mind's eye populate our Swedish Lappmarks with tragic figures in the style of Sitting Bull or the last Mohican. Just as the Swedish Crown in its time dealt humanely and Christianly toward the Indians in New Sweden, so has it also in all times treated the Saamis in old Sweden equally with a Christian and humane spirit, as it has treated its Swedish-speaking citizens, neither more nor less. Even now there is room for herding in the Lappmarks. The future of reindeer-herding depends firstly and lastly on the nomads themselves. (Collinder, 1937:245.)

Collinder seems concerned with denying that the Swedish Crown is in any way to blame for the difficulties facing reindeer-herding. In so doing, he places all responsibility solely on the shoulders of the herders. Because of his failure to understand the consequences of the commons dilemma brought about by runaway systems and reduced flexibility, Collinder undertakes the frustrating task of locating the cause of the problems of the Saamis and their herding. He considers and dismisses malicious intent and ends by refusing to recognize that there are any real problems. Saamish herding has had hundreds of prophets of doomsday. Of course, he is correct in his belief that *all* of the problems affecting herding were not the intended result of any conscious State policy or any State policy at all (although the State is certainly not free from the guilt of being ruled by more self-assertion than is always demanded by its needs), but, in the long run, the greatest problems must be attributed to a *lack* of consciousness, the inability or ignorance of the need to control runaway systems. Similarly, the Swedish State has had to integrate itself in a larger world, which has only just begun to co-ordinate policies of resource management. Yet, on whatever levels of hierarchical consciousness one may choose to find the "real intentions" behind any specific act, the truth of the matter is that everything is co-determinant in every act. Some things are far more determinant than others and, with respect to the future of Saamish reindeer-herd management in Sweden, few things are more predominantly determinant than the Swedish State.

It is true that the herding occupation has survived decades of predicted abandonment and death. It may continue much longer; it may not. The most interesting question for the anthropologist and the vital question for the Saamis themselves, however, is not concerned with the survival of the herding occupation only. It is concerned with the survival and development of Saamish herd management and Saamish culture. On this point, Hultblad's optimism over the return of Saamish forms of transaction in the modern Villages (see p. 392) must give way to an overwhelming pessimism, unless (1) the Swedish State is willing to make greater sacrifices in resource allocation than its current stance allows (for example, through a

loosening, though not necessarily an elimination, of the restraints in § 9 of the RNL), (2) in the respite that this will give them, the Saamis hasten to consolidate a strong cultural identity with a broad base (renormalize), and (3) steps are taken to control the expansion of needs.

It is very understandable that, with the increasing threat to the survival of the herder and his Saameby, the herder should seek to consolidate those aspects of Saamish culture which may protect him. Other aspects of the pan-Saamish movement which are injurious to him are shunned by the herder. Should the herder favor his own herding survival at the expense of his fellows, i.e., of his larger social environment, however, he may soon find himself alone and helpless against the exploitive consumption necessary to maintain Swedish industrial society.

There are some important lessons to be drawn from the Saamish experience which apply, *mutatis mutandis*, to the Swedes and even to mankind in general. For example, should Swedish industrial society punctuate itself as separate from its environment and its fellow-men of all races and cultures and nations, so that it seeks homeostasis at the expense of these *others*, then in time (even if the Saamish culture were dissolved, while being fairly favorable to man and the planet in general), its short-term gains will reinforce its own sub-centrism, which in time will return to punish it. It must be realized that the "self" is not separate from the Saamis and the planet as a whole, now.

Punishment can be delayed, and delayed by consuming flexibility, but never erased. Sooner or later, the toxins of over-assertiveness will build up past all the various levels of homeostatic screening, until man is left unprotected from the pathologic environment he has created. The world will simply be correcting its system circuitry, but, from the human viewpoint, the world may over-correct man out of the system. Like the herder whose herd size is below the point of no return, mankind may well already have embarked upon its sunset years before it reaches its critical limit. The analogies between current herding circuitry and current world ecology are *not* coincidental. The problems of both are spawned by the same human hubris which separates man from the environment and the technology which helps him do so and reinforces his power craze. Bateson (1972:432) identifies this human hubris with the evolution of the consciousness of *purpose*, the very *felix culpa* which enables us to be conscious of our error. Wilden (1972) makes the same point when he claims that the same epistemological error of dividing the part from the whole is necessary for communication.

... epistemologically, it is an arbitrary punctuation of the discourse between sender and receiver, whose supposedly real status in the world is itself defined, not by "reality", but by the original epistemological error. Some epistemological boundary is necessary (boundaries are the conditions of communication), but it is always arbitrary in the sense of being methodological rather than real. (Wilden, 1972:219.)

All boundaries in this sense involve paradox, for they correspond to the digitalization of an analog continuum, and the distinctions between the various components thus created can never be completely maintained. . . (Wilden, 1972:219.)

I maintain, therefore, that to draw up battle lines over the "Saami problem" along the minority-majority axis automatically rules out any hope of a real solution. Instead, it will probably add another source of disease to the world. The world system, man plus environment, will make no gains from the decision concerning who is to be given the right to consume its flexibility, *unless* the winner is equipped with a higher degree of ecological wisdom and love. If the entire northern part of Scandinavia were turned over to the Saamis alone, environmental exploitation might diminish. But, unless the new administrators learned to control the run-away circles and spirals of its organism without having simple recourse to *ad hoc* sacrifices of flexibility, the very same predicament would arise. While one must applaud the environmental consciousness and sensitivity of many minorities today, it is important to ask where the controls of population and industrial expansion are, in order to ensure minimum flexibility to survive tomorrow.

Obviously a minority, weak on account of low membership and often weak in access to industrial power, cannot afford such controls in its current power struggle. What is needed is not a Saamish solution or a Swedish solution, but a combined effort at what Bateson has termed the "ecology of mind". The word "mind" is used here in its broadest sense, so that an "ecology of mind" implies a knowledge and control of the economics of flexibility within all organisms and systems up to the final, all-encompassing system of total mind.

Few minorities today live in protected enclaves enjoying stable traditions. They are rarely isolated from the larger world any more, so that rationality conflicts are bound to arise. While economic-security considerations favor a multi-faceted, economic base, in case of the failure of any one facet, rationality considerations generally favor single-product investments and mass production, in order to cut costs. As smaller, minority or national sub-systems become increasingly incorporated into the larger world system, the survival entity with the policy-making power to regulate the balance between security and rationality is enlarged. Thus, the country as a whole may produce many crops, while each farmer in the country may raise only one crop. The State can securely survive a pea blight, while pea-farmers may not. It may not even be rational for the State to allow much pea-farming or reindeer-herding at all.

Plurality, the goal espoused in many minority struggles, must not come to mean the maintenance of different and isolationist cultures, for such a stance is doomed to failure, and in that case no evolution of higher systemic consciousness will have occurred. Where a minority does not share responsibility for the whole, it lies open to similar, inconsiderate

mistreatment from the whole. Should a minority movement so dogmatically assert its rights against the majority "foe" that it fails to show a genuine concern for a just balance and re-evaluation of priorities in the light of the world's reduced flexibility and should the minority persist in conceiving of the majority as greed personified and claim that before their encounter the minority had no systemic bonds with the larger whole and all its troubles, then it has made a fatal mistake, the very mistake that brought about the problem in the first place. If pluralism is to be a viable goal, it must be based on difference within an interdependent whole. The goal must be a larger system, in which each different part contributes to the larger system. And, equally important, the larger system must in turn concern itself with the survival of each part. Pluralism must strive for a working system analogous to that of the human body, which is composed of many different but complementary organs—and this presents a great challenge to the Saamis, the Swedish nation and the world.

A minority people with a knife at its throat and with little left to lose should be among the first to recognize the need for such policies of systemic love and wisdom, but they are also usually the last who can single-handedly afford their implementation. While the dictum "Practice what you preach" is usually invoked to silence people, preaching only what is already practiced may reinforce disaster. Only when enough people have gained a proper insight into the problem can something constructive be done about the solution.

Some of the kinds of power invested in the modern Saameby make possible moves in a proper, ecological direction. Should reindeer-fodder development increase the flexibility of herding, so that the rational reindeer limit for a Saameby is doubled, the Saameby could seek to keep this flexibility within bounds for the current herding population rather than let it be eaten up by a doubling of the herder population. A balance must be struck, for, if the Saameby keeps all new herders out, it may be preventing the Saamish culture from making a come-back from below *its* subsistence minimum. While many of the rational ideals are quite sane—control of reindeer numbers, herder numbers, grazing consumption to allow for maximum profits without endangering the regenerative capacity of the natural resources, etc.—the world in which these sane measures are applied is, up to that point, allowed to run ecologically mad, so much so that, for the Saamis, the rational herding program may contain little more than instructions on how to make the best of inevitable, cultural demise.

It is often argued that, despite the Saamis' old rights and fine culture, each Saami should have no more rights than any Swede and that Saami-minority claims should not exceed their numerical strength. Yet the Saami privileges, which many find so unjust and seek to eradicate, help to defend the environment, albeit weakly, against exploitation. But even this argument is not enough. "Minority rights" should not mean just preservation of the environment for majority benefit. This dichotomy must itself be

transcended. In so doing, cultural difference need not be destroyed. The process of cultural leveling, which is occurring today at a rapid rate and of which the enforced assimilation of reindeer-herders and changed herding context is but one patent example, stems largely from the consumption of flexibility necessitated by runaway over-population. The result is a narrowing of the critical limits for the survival of different cultures, similar to that diagrammed on page 480 for the herding situation.

There are those that say that the amount of control over runaway systems necessary to grant the human species a respite from sure catastrophe in the near future is beyond our power to achieve or that even greatly increased control would still come too late. The flexibility required to allow even a modicum of cultural plurality with regard to resource utilization must, of necessity, be even greater than that required for the mere survival of any human population alone. Given any particular, concrete situation, there is only one of all the possible methods of resource utilization which is *most* rational. As flexibility diminishes, resource utilization will be pressed more and more completely into this rational mold. In so far as cultures are influenced by and composed of economic systems, they will also be pressed into the same mold. Moreover, the frequency of cultural change will increase.

It seems to be true, as Philip Wylie has suggested, that, because of the irreversible effects of technological innovation on the biosocial ecosystem, the life-span of any culture is in inverse ratio to its per capita "technological index". In distinction from other cultures lasting thousands of years, the advanced industrial culture of modern man seems to be up against the wall after only three hundred. (Wilden, 1972, p. 207.)

With increased flexibility, several different systems of resource utilization may establish steady states with rationality *enough*.

Minority cultures and their disappearing ways of life have a story to tell which we would do well to listen to—unless in turn we would tell it ourselves with no one to listen.

Appendix

This appendix is included so that some of the most difficult and persistent problems encountered in the terminology of reindeer management may be confronted. More specifically, I present here further arguments to justify my use of the terms “intensive” and “extensive”, as defined in Chapter 5, arguments which would have been too distracting to have been contained in the main text.

While some of my readers may think that I am merely flogging a dead horse, I have found that problems of terminology reflect deep-going, conceptual differences and that, even if people come to an agreement about terminology, they do so often without changing their basic concepts. The result is that the same words acquire different connotations. The logical consequences of certain definitions go unquestioned. I have tried here to bring out the implications of the use of certain terms and to demonstrate the flaws which result. I do so with the purpose of inspiring a much-needed debate.

Mobility, control and land utilization

At first glance, the categories “intensive” and “extensive” appear to be clear and distinct. “Extensive” refers to something that has great extent or is far-reaching; “intensive” characterizes something of great energy or thoroughness. It can designate attentiveness. When applied to herding and husbandry, the two terms have been used in opposition to each other, and complications have immediately arisen.

When these terms are placed in opposition to each other, extensive herding, which may simply refer to the use of grazing lands over a wide extent, takes on the added meaning of non-intensive or lacking in thoroughness and attentiveness. Intensive herding, which by definition implies a method by which animals are kept under tight control, acquires the added layer of meaning “non-extensive or confined in movement”. Normally, there are many cases in which no cleavage occurs between the double elements of each term. A very loose control of reindeer (lack of attentiveness) allows them to spread over a wide extent of grazing land. Whitaker classifies the extreme form of intensive herding as that practiced

by forest Saamis. Along with the greater docility resulting from milking and continuous observation, the reindeer of the forest Saamis are characterized by Whitaker as not feeling the need to migrate and are "... consequently always kept within a limited area, generally around a fixed point" (Whitaker, 1955:26). In this case, tight control and limited range go hand in hand. But is it always so? Obviously not.

The "classic, intensive" herding practiced in the Jokkmokk district by the mountain Saamis was characterized by both tight control of reindeer and a fully developed nomadism which took both herd and herder over an extensive range of land. As might be expected, some have termed this form of livelihood "extensive" and others "intensive", depending upon the context. Referring to an ecclesiastical report of 1747, at a time which was later regarded as the golden age of the classic, intensive-herding form, Campbell writes: "Amongst other things, one was to investigate to what extent reindeer herding actually demanded migrations, as well as if the Saamis could compensate their extensive livelihood by farming like the settlers..." (Campbell, 1948:64-5). It appears that Campbell's choice of words reflects not simply his own views, but the views which were common during the 17th and 18th centuries. Obviously, migratory herding, when compared with farming, focused on the differences in land utilization. Herding requires a far more extensive use of land than farming. It was only later, in the early 1900s, when the two forms of herding clashed, that the comparison between herding and farming faded into the background and the main task of the times was to compare the two different forms of herding.

As both herding forms—that of the Jokkmokk Saamis and that of the Karesuando Saamis—made use of extensive grazing ranges, the comparison came to focus instead upon *how* the lands were used. Attention was given primarily to herd control. The pressing issue of the times was no longer that of merely turning migratory herders into farmers, but of controlling the damage inflicted on the settlers' crops by loosely attended reindeer. By the criteria of herd control, the different herding forms were easily divided and classed. Since, in the herding form introduced by the Karesuando Saamis the reindeer were less intensely controlled during the summer than in the Jokkmokk form, it was plain that the Jokkmokk form was intensive and the Karesuando form was extensive. Moreover, the reindeer of the Karesuando herders spread out more than the Jokkmokk reindeer as a result of the looser form of "edge guarding", in which the edge of the herd's spreading was guarded and contained.

The Karesuando Saamis differed from the Jokkmokk Saamis in many other respects than in the herding method they practiced. The Karesuando Saamis, for example, dressed differently, spoke a different dialect and built characteristic turf *kátas* at seasonally permanent camps. The intensive-extensive opposition easily passed over into the well-demarcated opposition between the Jokkmokk and the Karesuando Saamis. This was

not simply an opposition highlighted for the purpose of classification. The Jokkmokk-Karesuando Saami opposition expressed itself in real and open conflict between the two groups. The matter of herd control was viewed as an issue based on their opposition. Because the meaning of the terms has never been clarified and fixed concretely as to the duality of land utilization and reindeer control, confusion is still widespread.

Obviously, herd mobility is very much a function of the control a herder exercises over his reindeer. This accounts for the merging and blurring of these elements under the same terms. The vital point is, *how* are mobility and control related?

Are mobility and control simply inversely proportional? That is, does tight control mean low mobility and does loose control mean high mobility? The simplicity of this approach has attracted many, and indeed in many cases it appears to hold true.

Besides the relative proportions of the two elements, it is important to consider their causal connections. If loose control leads to high mobility of the reindeer, is it necessarily correct to claim that high mobility implies loose control?

The very concept of "control" is not at all simple. Some prefer to view control in herding as a matter of *restraint*. Others see control as having a number of different aspects: besides restraint (stopping the reindeer from doing something), there is also control in order to make them do something, and there is even a type of control which consists in removing hindrances or determinants which make it possible for the reindeer to do something they could not or would not do before.

When it comes to explaining reindeer migrations, for instance, the different attitudes show great contrast:

As to the reason for these migrations, viewpoints are divided. While some are of the opinion that an inherited wanderlust of the reindeer causes them, others claim that the reindeer was originally passive and acquired its wandering habits from the Saamis. (Hultblad, 1936:15.)

Hultblad lists Lönnberg and Wiklund as proponents of the former idea and Högström, von Düben and Tanner as proponents of the latter (*ibid.*, pp. 15-16). It is plain that, when such totally opposed views are given in explanation of the reindeer's migrations, we can expect the same division in considering the matter of control. The one group posits a wandering instinct in the reindeer; if they are allowed to wander with little or no restraint, it demonstrates the *loose* control that the Saamis impose on their herds (extensive herding). The other group rejects the idea of instinct and therefore regards the long migrations of the fully nomadic Saamis as demonstrating great and forceful control of the reindeer (intensive herding).

These two contrasting viewpoints represent extremes. Between them, there is a wide, gray area, occupied by many variations. In order to justify

his standard use of terms, however, each student of reindeer-herding is drawn toward one pole or the other. The contradictions which arise and in which the key to a more refined, explanatory model is to be found are frequently ignored. Few attempts have been made to clear up these contradictions, simply because the explanation of a herding form has not been considered as important as the need to classify it.

Those who lean toward the instinct-and-restraint school have the advantage of being able to maintain the simple, inverse relationship between mobility and control. High mobility means loose herd control or extensive herding. Low mobility means tight herd control or intensive herding. The distinction between cause and effect becomes non-essential to their definitions of extensive and intensive herding. Mobility and control are seen to be variables whose proportions are always dependent upon each other. Sometimes the one and sometimes the other is cited as the reason for the definition.

Whitaker (1955) provides a good illustration of the reasons behind these concepts and the problems they encounter. I have a sincere respect for Whitaker's work and criticize the explanations that he gives for herding form and term usage not because I believe him to be the most easily faulted but because his work presents most clearly the premises behind the statements that he makes. According to Whitaker:

Under the intensive system the animals are under continuous observation, and in the summer they are brought daily into corrals for the cows to be milked. At any one time the intensive herder knows the approximate position of his herd, and the continued contact with human beings leads to a greater docility . . . (Whitaker, 1955:26.)

The only concrete, intensive-herding case Whitaker mentions is that of the forest Saamis, whose lack of mobility suits his system. Nowhere does he mention the great migrations of other intensive herders, migrations which could stretch from the eastern, evergreen forests to the Norwegian coast. He never discusses, but only alludes to, the kind of herding form exemplified by the early Jokkmokk Saamis, that of tight herd control and high mobility. He considers mobility only when he begins to discuss extensive herding.

Under the extensive system, of which there are several gradations, the herders follow the reindeer, and have a much more limited control of the herd. The Karesuando nomads, it would appear, have never in recent generations had any reindeer which did not migrate. It seems however that during the 16th and 17th centuries there was an increasing development towards extensive reindeer husbandry in the northern Lappish areas, and this in turn resulted in longer migrations. (Whitaker, 1955:26.)

Does Whitaker mean that the intensive herders did not move with their reindeer? Or does he mean that the intensive herders forced their herds on migrations rather than follow them? Do Saamis simply *have* reindeer

which migrate or not, and do they pattern their entire form of nomadism and utilization of grazing lands on their reindeer's drives? Did the development of longer migrations necessarily come from giving the reindeer more freedom? Whitaker is unclear on many points.

It is significant that those who lean toward the instinct-and-restraint school have largely dealt with herding forms in northern Lapland, while their opponents have often concerned themselves with the forms in the central Lappmark, especially the Jokkmokk-Karesuando opposition. Whitaker's work, for example, does not concern the situation in which a highly mobile, intensive form met a highly mobile, extensive form. The Lainiovuoma district was not the scene of intensive-extensive opposition. A similar transition to that which occurred in Jokkmokk from intensive to extensive form had already taken place in Lainiovuoma long ago, with the invasion of Saamis from Kautokeino. Recent research in the northernmost parts of Sweden has therefore concerned extensive developments, such changes as caused Whitaker to create the new term "hyper-extensive", similar to my use of "over-extensive". Intensive herding, to him, is of an entirely different type and is therefore removed from his discussion.

Although many researchers express reservations on the use of the word "instinct" to account for the reindeer's migrations, they seem unable to free themselves fully from the instinct concept. It is a most alluring concept to those who view control essentially as restraint. It explains why it is that giving the reindeer more freedom and following them will lead to longer migrations. Such observations may be correct in certain cases. The instinct-and-restraint model works admirably to a limited extent, but, as usual, difficulties arise when the same concepts are applied to other cases. When confronted with the large, almost free-roaming, Lainiovuoma herds, Whitaker has no problem with his migratory model until he considers the case of the forest Saamis.

... the reindeer of the Mountain Lapps move from the forest area, where they have spent the winter, across the sub-alpine region and over the Kjölen mountains dividing Sweden and Norway, down into the Norwegian valleys. But the movement cannot be described as instinctive, since the reindeer of the Forest Lapps do not migrate in this way ... (Whitaker, 1955:25.)

On the next page, Whitaker states:

The intensive method, as practised in its extreme form by the Forest Lapps, would seem to have resulted in a strain of deer somewhat more heavily built, which do not feel the need to migrate; they are consequently always kept within a limited area, generally around a fixed point. (*Ibid.*, p. 26.)

One is led to expect a constant battle between the herd's need to migrate and the herder's wish to keep it stationary. This does not fit the observable facts, however. The forest Saamis' reindeer seem to accept their restrained mobility without much conflict. They show no great desire to migrate to

the mountains, even when given the chance. The forest Saamis need not be constantly on the alert to stop them.

The champions of instinct are in a bind. They wish to cling to the inverse relationship of mobility and herd control (restraint). They do not want to acknowledge the possibility that the two elements may vary separately and independently. Otherwise, the concept that the extensive herders simply follow their reindeer and that increasing extensivity, giving the reindeer more freedom, results in longer migrations falls apart.

Whitaker is not so interested in seeing how the forest reindeer make do without migrations; he is more concerned with the fact that they do not migrate. He would like to view their settled life as being due to restraint only, and he goes to great lengths to avoid the idea that this form of herding may come about partially by the removal of migratory pressures. To acknowledge this would refute the instinct concept and this in turn would imply that migrations may very well be largely the *result of human control*. For purposes of definition, he thinks it simpler to side with those who see reindeer instinct as the driving force (although he denies instinct) and human intervention as the restraining influence.

He tries to resolve the problem by positing, as others have done before him (and still do), a different reindeer strain. He has in effect said that the word "instinct" cannot be used, because it is not universal for all reindeer, but then he goes on to divide off the category of reindeer to which the word did not apply to form a new strain. The mountain strain of reindeer, we are led to believe, do indeed "feel the need to migrate" (as opposed to having cause to migrate), and this is somehow genetically determined (instinct?). Moreover, a very suspect form of evolution is suggested to account for this different strain. After what must have been centuries of combating the reindeer's need to migrate, these efforts "would seem to have resulted" in a new strain.

One might argue that Whitaker is using the term "strain" very loosely, to indicate a group of reindeer who have no genetic differences but who have simply no need to migrate and have lost the habit. He assumes, however, that all reindeer originally had the need to migrate and so, whether there has been a change of habit or a change of genes, he must resort to *human influence* to account for the difference. Even this is enough to endanger his system of terminology, for the forest reindeer do not need to be constantly restrained. Thus, herders not only restrain natural needs or habits but actually alter them, and, in that case, migrations may indeed be *motivated* by human control.

Whitaker, however, deftly attributes this difference in habit to the reindeer themselves and patterns the forest-Saami herding form according to the habits of the new strain: "... they are *consequently* always kept within a limited area..." (my italics). He has come full circle. The reindeer are kept in a limited area, which seems to have resulted in a new strain of reindeer which do not need to migrate and so they are conse-

quently kept in a limited area. This circular explanation may not all be wrong, but somehow or other it must have had a beginning. It is impossible to avoid the idea that control is more than just restraint.

We can think of the instinct-(need)-and-restraint system as a rudimentary model of migration formation which does not stand up under the comparative test. It must be refined, not totally abandoned, but reworked and broadened.

What is to prevent one from positing a new reindeer strain whenever convenient, in order to account for differences in herding form? I would argue, as have many others, that the reason why the forest reindeer seem to lack the migratory urge is because the herders have habitually alleviated many of their migratory determinants. For example, the forest Saamis place smudge pots in their reindeer enclosures to drive away insect pests with smoke. As with all animals, it is important to the reindeer to know his stamping grounds, to know where he can find food and relief from insects. To put it simply, a reindeer which has been born and raised in the woodlands will feel at home there, and a reindeer taken (not necessarily followed) on migrations yearly to and from the high mountains will form that habit and feel secure with it. There is no need to posit either a mysterious migratory need or a new strain when this need is found to be lacking.

Between the named types (of migration patterns) there were so many transition forms that the typology can be seen as arbitrary . . . The suggested typology does at least give an idea of reindeer nomadism's unruly growth in old times, before it had been influenced by the Norwegian and Swedish settlements' encroachment and by the Saami administration's ruling hand. That such boundless variation should have originated from adaptation to two sharply distinct races of tame reindeer is hardly plausible. (Hultblad, 1968:135.)

I wish to make it clear that, in a study of reindeer-herding determinants, vague concepts like migratory need can be accepted only if the data evade all logical and natural explanations, such as the need to search for food and the need to avoid insects. In a similar manner, there is no place for the easy assumption of different reindeer strains or, more specifically, that the existence of different strains, if this is indeed true, involves behavioral differences of this kind. One might just as well claim that the forest Saamis themselves represent a different strain of Saamis who do not feel the need to migrate. Such assumptions are not only unjustified, but also side-step the theoretical implications of a model of herding form based on determining factors, and the researcher easily falls into the trap of analyzing herding types based overly much on reindeer types. As I mentioned in the epistemological section of this study, it can be quite difficult to distinguish between an adaptation within a species' given flexibility, determined largely by its genetic structure, and an adaptation which is the result of a change in the species' genetic structure, a renormalization.

Not only must one be cautious in positing different strains of "domes-

tic" reindeer, but one might even go farther, as does Ingold, and question the validity of dividing the reindeer into wild and domestic strains:

The reindeer confounds any attempt to draw a definite dividing line between the categories of wild and domestic animals . . . there are few inherited morphological or behavioural characteristics to distinguish the reindeer under contemporary pastoralism from its wild predecessor, and, where the two populations still exist side by side, they easily intermix and interbreed. Human controls may have been applied in order to maintain or enlarge the deer populations, but not to alter its characteristics from those for which it was originally valued. (Ingold, 1976:17.)

There are many historical cases in which forest Saamis have changed to mountain Saamis or mountain Saamis to forest Saamis. In time, their herds adjusted themselves and became typical of whatever region they occupied. Karesuando Saamis relocated to Jokkmokk have told me that it generally took their reindeer only three years to get used to the new migration pattern, which made the Norwegian coast off limits. Of course, there are indeed different strains of reindeer throughout the circumpolar region with readily observable biological distinctions, distinctions which are genetically determined. My point is simply that one should not explain behavioral differences unnecessarily as being caused by genetic differences.

I do not mean to imply that reindeer do not move of their own accord, only that this is not always the only reason. Nor do I mean to say that the Saamis always guide and never follow their herds, only that numerous combinations of degrees of these elements exist. Lönnberg (1909) actually gives a good account of both the reindeer's and the herder's combined influences on migration determination, and Pehrson (1957) quotes him at length in making the same point. Most importantly, I want to point out that the pattern of the reindeer's migrations and the extent of these migrations do not automatically signify a specific amount of control or lack of control over the herd by the herder. The herding today in Tuorpon, when compared with the herding in Tuorpon a hundred years ago, gives an excellent example. The reindeer of both periods travel(ed) largely the same migratory route. The amount of control exercised over them during the two periods differs enormously.

Whitaker need not have posited a vague (genetic?), primary, migratory need for any reindeer, mountain reindeer or forest reindeer. One might argue instead that the reindeer of a given genetic structure possess a certain amount of environmental flexibility, which encompasses both the mountains and the forests of the north. An individual reindeer may come to be a mountain reindeer or a forest reindeer largely due to circumstance, circumstance which may or may not involve human intervention. Once a life as either a mountain or a forest reindeer is begun, however, it will be reinforced and become habit. The reindeer's body will adjust itself to its niche, just as the human being can adjust himself to life at both high and low altitudes, though a sudden shift can be very painful or even fatal.

Our fragmentary knowledge of the behavior of the wild Scandinavian reindeer makes it often very difficult to discern the effects of control on the domesticated reindeer—what is natural to the reindeer, as opposed to what is dictated by the herder. We may even go so far as to question the meaning of the term “herd”. Is the formation of the reindeer herd in the natural state the same as that of the herd under the herder’s watchful control? Sometimes the herder exercises tight control, keeping his herd together in a compact mass. At other times, he lets his herd spread out. Which herd is it that the herder simply follows?

Once a yearly pattern has been established that is agreeable to both herd and herder, its constant repetition becomes habit to the reindeer as well as to the herder. It is this mutual adaptation of habits between reindeer and herder which makes the matter of control so deceptive. As Paine (personal communication) has stated: “Man lays down the rules for the reindeer to follow, and then he follows the reindeer to the best of his ability, as the reindeer follow his rules to the best of their ability.” Actually, neither of them, man or reindeer, lays down any rules alone. The sequence can be extended indefinitely backwards. In short, one can have a very loose control over one’s herd (extensive herding) or a very tight control (intensive herding) (within bounds), regardless of whether one is nomadic or stationary, depending upon the rules one helps to lay down and maintain. Moreover, just as the man–reindeer relationship alters, so does this relationship itself change its relation to the other surrounding linkages. Extensive herding is vulnerable to predators in a way different from intensive herding. Thus, numerous relations are involved in arranging the rules.

The above discussion has surely shown that, without a detailed knowledge of the way each author uses his terms and the reasoning behind his usage, comparison of texts invites total confusion. When Whitaker terms the Karesuando Saamis “extensive herders”, we are led to believe in a vague way that he does so largely on account of their long migrations, reflecting a large degree of freedom for the reindeer. When Ruong, Hultblad or Manker term the Karesuando Saamis “extensive herders”, it is because they exercised less control of their herds in the summer lands than did the central Saamis. The Karesuando Saamis practiced a more mixed, collective, summer herding without milking. The reasoning behind Ruong’s terminology is clear when he defines the Karesuando Saamis’ herding as “summer extensive” (1975:83) (cf. Hultblad, 1936:30 ff.). Aside from their summer methods, the Karesuando herders were, according to Manker (1947), every bit as intensive as the Jokkmokk Saamis.

... and in the Karesuando district, where the topography is different, reindeer-herding has developed in another way. Both spring and summer pastures lie mainly on the Atlantic coast, and, between the deep fjords, which build natural boundaries, or earlier out on various large islands, the reindeer have been able to move more freely than the reindeer to the south. Here, since olden times, a freer,

more extensive, summer herding has developed, while, on the other hand, these northern Saamis' winter herding has been just as regulated and intensive as the southern Saamis'. (Manker, 1947:84.)

All the researchers may agree on the terms, but the emphasis they give their criteria may be somewhat different. All too often, the herding form is labeled according to its more minor distinctions. Thus, when the Karesuando herding form of the early 1900s was brought to Jokkmokk, it was termed "extensive", whereas it was actually quite intensive most of the year.

As my intention in this study has been to explain rather than to classify, it has been necessary to look beyond the simple, distinctive criteria of definition in an attempt to understand the entire herding form, with its shifting determinants and methods.

Confusion of historical and logical criteria

Another major problem with herding terminology is the confusion of the historical and logical criteria for definition. Why did the Karesuando herding form differ from the Jokkmokk herding form? Why did a meeting of the two result in the dominance of the Karesuando extensive form? A number of reasons have already been given, most notably that extensive herding tends to swamp intensive herding and intensive herders have little means of preventing the disruption of their control. As noted, however, Eidlitz presents an interesting counter-example, in which, in an intensive-extensive confrontation, extensive herders were forced to intensify their herding methods (see p. 286). Apparently, the "swamping" hypotheses is not sufficient. Snell and Snell (1975:171) suggest the following clue: "The transition from intensive to extensive breeding coincided with the transition from subsistence to cash economy with increasing emphasis on meat production". Such statements reveal nothing of the connections between such coincidences. They fail to explain anything. It is very difficult, if not impossible, to draw a single boundary or to make any definition without ignoring linkages of some sort. This may be necessary, but one should not then turn around and employ a term to explain something it was designed to exclude. Bateson liked to illustrate this point with reference to a play by Molière. The learned professors ask the young student why opium puts people to sleep and, to the delight of all, the student replies, after some reflection, "because it has a dormative principle." This kind of approach is born of the desire to classify things rather than to explain them. In this study, numerous explanations have been presented for the development and spread of extensive-herding methods.

The transition to a cash economy was significantly influenced by crowding in the grazing lands between herders' and settlers' reindeer, which was in turn a result of a high reindeer/grazing ratio conducive to extensivity, etc. Unfortunately, classification has generally been the primary aim.

In attempting to explain the transition from Jokkmokk's intensive-herding to Karesuando's extensive-herding form, one finds oneself suddenly stuck with terms totally unsuited for the task, unsuited even for the proper formulation of the problem. While part of the explanation does indeed lie in the relocation of Karesuando Saamis to Jokkmokk, this observation is only an introduction to the subject of herding determinism.

If the arrival of the Karesuando Saamis explains the change to extensive-herding methods in Jokkmokk, what explains the continued extensification of herding far beyond anything brought by the Karesuando Saamis? Obviously, an explanation of herding-form changes using terms derived for classificatory purposes is futile. To regard Jokkmokk intensive herding and Karesuando extensive herding as two distinct types is certainly not wrong, but rather totally insufficient for an analysis of change. Indeed, historically and geographically, the distinction is quite apparent. Historical divisions, however, can all too easily come to dominate logical criteria. Should the terms become too closely attached to their historical labels, their use as comparative tools is destroyed. Because the terms "intensive" and "extensive" are used to label historical and geographical herding forms, they are very prone to acquire secondary overtones:

In Sweden, there are—or were until very recently—two markedly different types of Mountain-Lapp reindeer-breeding, corresponding roughly to the geographical division of Lapland into its Northern and Central-Southern parts. There is the *extensive* or North Lapp type of reindeer-breeding, characterized by relatively large and wild herds, much freedom for the reindeer in the summer months and no summer milking. *Intensive* or Central-Southern Lapp reindeer-breeding is characterized by relatively small and tame herds, continuous tending during the summer and regular summer milking of reindeer cows. (Pehrson, 1957:4.)

Milking, for example, is a most prominent factor in the determination of herding control. Milking necessitates tight control (intensive herding), but milking should not be confused with the definition of intensive herding if we are to use the term in other historical contexts.

In a similar way, it is not always correct to merge control of the reindeer with the herders' pattern of mobility. With the rise of modern means of transportation, the snowmobile, to name a prime example, it is possible for a herder to attend to his herd all winter with great intensivity from one single base-camp, despite frequent moves on the part of the herd.

The modern form of herding in the Soviet Union today provides a concrete case in which intensivity of herd care and control is not linked with either milking or a traditional settlement pattern. The point to be made here is that, if the terms "intensive" and "extensive" are to be useful at all in the study of herding determinism, they must be stripped of their

non-essential elements, those elements which have come to be attached to the terms through their application to concrete, historical cases.

Great confusion in intensive-extensive terminology stems also from the double usage of the terms. They are used both as historical labels and as relative abstractions. Thus, the modern, extensive-herding form of the Virihaure Group in Tuorpon is said to be intensive, when compared with the Nuortvalle Group's form of herding. Now that the geographical distinctions mentioned by Pehrson no longer hold as demarkations of herding form, and now that the diverse, descriptive elements which were lumped together under a certain herding label no longer display the age-old combinations, the value of the terms as mere labels has depreciated. The extensive herding in Tuorpon today is quite different from the extensive herding of fifty years ago. We can either seek new typologies or try to explain the situation.

Ruong was one of the first to propose an explanatory, determinant model for reindeer-herding form. He proposed the simple, triangular function: herding form is a product of the interrelationships of reindeer, land (or environment) and man (1964:46). These factors may seem so obvious and broad as to make his model platitudinous. It is, nonetheless, of great theoretical importance. It signifies a new approach to the comparative analysis of herding forms and provides a start from which to organize and to derive further, more specific determinants.

The purpose of Chapter 6 was to pinpoint some of the basic components or herd-management determinants, within such broad categories as reindeer, land and man. Ruong states:

According to the degree of tameness, the forms of reindeer-breeding can be placed in a series, in which the most efficient degrees approach cattle-breeding and the least efficient the hunting of wild reindeer. But this is not all. Sliding and abrupt gradations occur in the scale in the same area and at relatively short periods. (Ruong, 1968:296.)

Ruong describes here what can be referred to as the intensive-extensive continuum and, in so doing, he has taken a major step towards overcoming, as Vansina so aptly put it, "the tyranny inherent in the very notion of units derived from synchronic analysis" (1970:175).

Bibliography

- Ahnlund, N. (1928), *Olof Tresk. Kartor över Kemi & Torne Lappmarker*, 1642 and 1643. Stockholm
- Åhrén, I. (1979a), Tvångsförflyttning eller dislokation: Nordsamernas förflyttning till södra Lappland, in *Norrbottnen 1976-77, Migration*. Luleå.
- (1979b), Vattenkraften och rennäringen, in *Älvarnas Bok: om vattenkraften, miljön och kampen i älvdalarna*. Älvräddarnas Samorganisation.
- Åhrén, O. (1975), Debatten om Brattli klagade kommunens inställning till samerna, in *Samefolket*, 1975, nos. 6-7.
- (1976), Spelet om Brattli: Så hotades en liten sameby att suddas ut, in *Samefolket*, 1976, no. 4.
- Almquist, J. (1919), Den civila lokalförvaltningen i Sverige 1523-1630. *Medd. från Svenska riksarkivet*, Ny följd II:6. Stockholm.
- Anderson, H. (1978), *Tuorpon*. Stockholm.
- Anderson, M. (1978), Mobility and Bilingualism in North Norway, *Ethnos* 3-4. Stockholm.
- Andersson, O. (1976), Nej, nu har ni missuppfattat mej, in *Samefolket*, 1976, no. 2.
- Arell, N. (1979), *Kolonisationen i Lappmarken*. Lund.
- Ashby, W. (1976 ed.), *An Introduction to Cybernetics*. London.
- Asp, E. (1966), The Finnicization of the Lapps: A Case of Acculturation. *Turun Yliopiston Julkaisuja* B, 100. Turku/Forssa.
- Asplund (1928), I K Protokoll no. 32. Swedish Government publication. Lagförslag om rätten till renbete in Sverige m.m. Wednesday, 16 May, PM.
- Bäärnhelm, G. (1976), *I Norrland Hava Vi ett Indien*. Stockholm.
- Bäckman, L. (1975), *Sájva. Acta Universitatis Stockholmiensis. Stockholm Studies in Comparative Religion* 13. Stockholm.
- Baer, L. (1976), ČSV: Strategi för att överleva, in *Samefolket*, 1976, no. 2.
- (1979), Vem är Abnorm? *Samefolket*, no. 2. Östersund.
- (1979), *Dagens Nyheter*, 8 May. Stockholm.
- Barth, F. (1964), Capital, Investment and the Social Structure of a Pastoral Nomad Group in South Persia, in *Capital, Saving and Credit in Peasant Societies*. Raymond Firth & B. S. Yamey (eds.). London.

- Bateson, G. (1965 ed.), *Naven: A Survey of the Problems Suggested by a Composite Picture of the Culture of a New Guinea Tribe Drawn from Three Points of View*. Cambridge Univ. Press, 1936. 2nd ed., with "Epilogue 1958." Stanford Univ. Press.
- (1972), *Steps to an Ecology of Mind*. New York.
- (1979), *Mind and Nature; A Necessary Unity*. New York.
- Bateson, M. C. (1972), *Our Own Metaphor: A Personal Account of a Conference on the Effects of Conscious Purpose on Human Adaptation*. New York.
- BD80 (1968). Länsutredning för Norrbottens Län. Luleå.
- Beach, H. (1979), The Legal Pattern behind the Rationalization of Herding, in *Samiska Domstolar, Samiska Rättsfall. Samernas Vita Bok VI:5*. Stockholm.
- Beckman, L. (1959), *A Contribution to the Physical Anthropology and Population Genetics of Sweden*. Lund.
- (1964), On the Anthropology of the Swedish Lapps. *Studia Ethnographica Upsaliensia XXI*. Lund.
- Bergsland, K. (1975), Utredning för Skattefjällsmålet om de sydlige sameområders historie til omkring 1751. *Fyra Utlåtanden i Hovrätten i Skattefjällsmålet. Samernas Vita Bok III*.
- Bergström, E. (1913a), Protokoll över förhör angående renskötsel förhållanden med Lappar inom Pite och Lule Lappmarker, hållna sommaren och vintern 1913 av A. Montell, E. von Sydow, O. Olofsson, E. Lindström och E. Bergström. Unpublished material in Norrbottens Museum archives, Luleå.
- (1913b), Summarisk föredragning av vissa resultat från resa i lappfrågan sommaren 1913 inom Gällivare, Jokkmokks, Arjeplogs, Arvidsjaur med flera socknar av Norrbottens län. Unpublished report in the archives of Nordiska Museet, Stockholm.
- Birket-Smith, K. (1959 ed.), *Fjärran Folk: Levnadsvillkor och Kultur i sex Primitiva Samhällen*. Falun.
- Björvall, A., Nilsson, E., & Österdahl, L. (1978), Järvstammen ökar: Totalt skydd eller avskjutning? *Forskning och Framsteg*, no. 1. Solna.
- Borenus, G. (1979), Hur kampen började, in *Älvarnas Bok: om vattenkraften, miljön och kampen i älvdalarna*. Älvräddarnas Samorganisation.
- Brox, O. (1970), Om Attraktiviteten av Boregioner: Kritisk blick på BD80. *Sociologisk Forskning*, no. 1/70, årgång VII. Göteborg.
- (1972), Sameproblemet som glesbygdsproblem, in *Strukturfascismen och andra essäer*. Verdandi Debatt no. 65. Lund.
- Byaordning för Tuorpuns Lappby (1927). Luleå.
- Byordningar för Lappbyarna i Norrbottens Södra Distrikt (1946). First published in 1948. Luleå.
- Cajanus, A. (1870), *Våra Nomader: Framställning med en blick på nybyggesväsendet i Lappmarken*. Stockholm.

- Campbell, Å. (1948), *Från Vildmark till Bygd*: En etnologisk undersökning av nybyggarkulturen i Lappland före industrialismens genombrott. Skrifter utgivna genom Landsmåls- och Folkminnesarkivet i Uppsala. Copenhagen.
- Codicil 1751, Första Bihang eller Codecill till Gränsse Tractaten emellan Konunga Rikerna Sverige och Norge, Lappmännen beträffande. Reprinted in Prawitz & Cramér, 1970, *Studier i Renbeteslagstifning*. Stockholm.
- Collinder, B. (1937), Lappväsendet, in *Svenska Turistföreningens Årsskrift* 1937. Stockholm.
- (1949), *The Lapps*. New York.
- (1964), *Ordbok till Sveriges Lapska Ortnamn*. Uppsala.
- Cramér, T. (1978), Samernas Historia Vantolkad, from *Invandrare och Minoriteter*, no. 3–4, 1978. *Samerna och Omvärlden. Samernas Vita Bok* V:1. Stockholm.
- (1979a), Samekodicillen 1751: En produkt av upplysningstidens högsta idéer. *Samiska Domstolar, Samiska Rättsfall. Samernas Vita Bok* VI:3. Stockholm.
- (1979b), Skattefjällsmålet. *Samefolket*, no. 6, bilaga. Östersund.
- Dagens Nyheter*. Sweden's largest daily newspaper. Stockholm.
- Dahlström, E. (1970), Samerna och den svenska kolonialismen, in *Same-makt! Välfärd till döds eller kulturellt folk mord?* En debattbok redigerad av Andres Küng. Stockholm.
- Domböcker (unpublished court records). Original records through 1860 are in Landsarkivet in Härnösand. Renovated versions can be found in Riksarkivet. Stockholm.
- Drake, S. (1918), *Västerbottenslapparna under förra hälften av 1800-talet*. Vol. VII of Hjalmar Lundbom's series *Lapparna och deras land*. Uppsala.
- DsH 1966:2, 1964 års turisttrafikutredning. *Turisttrafiken i Sverige*. Departementskrivelse, Handelsdepartement.
- DsJo 1975:1, 1973 års skogsutredning. *Virkesbehov och virkestillgång*. Departementskrivelse, Jordbruksdepartement.
- Düben, G. von (1873), *Om Lappland och lapparne, företrädesvis de svenske*. Stockholm.
- Edney, J. (1979), Free Riders en route to Disaster, in *Psychology Today*, vol. 13, August. New York.
- Eidheim, H. (1971), *Aspects of the Lappish Minority Situation*. Oslo.
- Eidlitz, K. (1971), *Föda och Nödföda*. Stockholm.
- (1974), De Ryska Samerna, in *Samerna, Ett Folk i Fyra Länder*. Lars Svonni, ed. Falköping.
- (1979), *Revolutionen i Norr. Uppsala Research Reports in Cultural Anthropology* 1. Uppsala.
- Ekonomisk Renskötsel* (1966), approved by Kungl. Lantbruksstyrelsen. A course book. LTs Förlag. Borås.

- Elbo, J. (1952), Lapp Reindeer Movements across the Frontiers of Northern Scandinavia. Scott Polar Research Institute: *The Polar Record*, vol. 6:43. Cambridge.
- Eliade, M. (1974), *Shamanism. Bollingen Series LXXVI*. Princeton.
- Engström, J. (1834), *Resa genom Norrland och Lappland till Sulitelma och Gellivare*. Stockholm.
- Erikson, M. (1974), *Flyktingar i Fjällen*. Uddevalla.
- Eriksson, A., Fellman, J., Forsius, H., Harris, H., Hopkins, D., Lehman, W., Mäkelä, O., Nevanlinna, H., Robson, E., & Tiilikainen, A. (1967), Population Genetic Studies on the Skolt Lapps. *Scand. Journal of Clinical and Laboratory Investigation*, vol. 19, suppl. 73, 95. Oslo.
8. Eriksson, A. (1968), Serologisk populationsgenetik. *Nordisk Medicin* 28, III, bd. 79.13. Hälsingborg.
- Eriksson, O. (1979), Effects of Forest Fertilization on the Cratering Intensity of Reindeer. A paper presented at the Second International Reindeer/Caribou Symposium, Røros, Norway. To be published in 1980.
- Ersson, B. & Hedin, B. (1977), *Sa'mit: Samerna—Nordkalottens Folk*. Osakeyhtiö, Jyväskylä, Finland.
- Fellman, I. (1910–15), Handlingar och uppsatser angående Finska Lappmarken och lapparne. I–IV. Helsingfors.
- Forestry Conservation Act* (1979:429), Skogsvårdslag 1979, SFS no. 429; utfärdad den 7 juni 1979.
- Förslag till Förordning angående de Svenska Lapparne och de bofaste i Sverige* (1883), afgifna af den dertill utaf Kongl. Maj:t förordnade komité. H. A. Widmark, L. Annerstedt, Will. Farup, P. O. Hörnfeldt, Fr. Tigerhielm. Stockholm.
- Frank, A. G. (1969), *Capitalism and Under-development in Latin America*. New York.
- Graan, O. (1899 ed.), *Relation eller En Fullkomlig Beskrifning om Lapparnas Ursprung, så wähl som om heela dheras Lefwernes Förehållande*. Uppsala. Original manuscript dated 1672.
- Grazing Act* 1886, Lag angående de svenska Lapparnes rätt till renbete i Sverige. Reprinted in Prawitz & Cramér, 1970, *Studier i Renbeteslagstiftning*. Stockholm.
- Grazing Act* 1898, Lag om de svenska lapparnes rätt till renbete i Sverige. Reprinted in Prawitz & Cramér, 1970, *Studier i Renbeteslagstiftning*. Stockholm.
- Grazing Act* 1928, Lag om de svenska Lapparnas rätt till renbete i Sverige. Reprinted in Prawitz & Cramér, 1970, *Studier i Renbeteslagstiftning*. Stockholm.
- Grundström, H. (1931), Sägner och Folktrö bland Lappar och Nybyggare i Jokkmokk, in *Norrbotten: Norrbottens Läns Hembygdsförenings Tidsskrift*. Luleå.
- Gustavsson, K. (1978), PM angående vissa oklarheter beträffande rennäringens tillämpning, in *Översyn av vissa frågor inom rennäringen*,

- Lantbruksstyrelsen, Rennäringsgruppen, bilaga 17. Jönköping.
- Handlingsprogram Rennäring* 1979:18. See Länsstyrelsen i Norrbottens Län, Handlingsprogram för Tuorpons sameby, Bilaga A.
- Haraldson, S. (1962), Levnads- och dödlighetsförhållanden i de nordligaste svenska lappbyarna. *Svenska Läkartidningen*, 59th year, no. 40, p. 2829.
- Härma, J. (1980), Polarvargen. *Jaktjournalen*, February. Kungsbacka.
- Hatt, G. (1918), Rendyrnomadismens Elementer. *Geogr. Tidsskrift*. Copenhagen.
- (1919), Notes on Reindeer Nomadism. *Memoirs of the American Anthropological Association* 6, 2:75-133.
- Hedbäck, E. (1928), Diverse anteckningar om renen och renskötseln från Arjeplogs socken. Unpublished report in Dialekt- och Folkminnesarkivet, ULMA 2139:1. Uppsala.
- Herdning Act* 1971, Rennäringslagen; given Sofiero den 18 juni 1971. SFS 1971: 437.
- Hjort (1606), Unpublished report dated 13 February 1606, Jokkmokk, in *Norrlands lappmarker*, 1600:6. Kammarark.
- Holmbäck, Å. (1922), *Om Lapps kattelandsinstitutet och dess historiska utveckling*. SOU 1922:10. Uppsala.
- Hoppe, G. (1943), En gammal marknadsplats i lappmarken. *Norrbotten*. Luleå.
- Hülphers, A. (1922), *Samlingar till en Beskrifning öfwer Norrland*. Saml. 5, Bd 3, Om lappmarken. G. Kallstenius. Stockholm.
- Hultblad, F. (1936) *Flyttlapparna i Gällivare Socken*. Geographica, Uppsala.
- (1968), *Övergång från Nomadism till Agrar Bosättning i Jokkmokks Socken*. Nordiska Museet: *Acta Lapponica* XIV. Lund.
- Hutton, C. & Cohen, R. (1975), African peasants and resistance to change: A reconsideration of sociological approaches, in *Beyond the Sociology of Development*. Oxeal, I., Barnett, T. & Both, D., editors. International Library of Sociology.
- Idivuoma, P. (1976), P. M. Utsi Visar Prov på Akademiskt Översitteri, in *Samefolket*, 1976, no. 4.
- Ingold, T. (1976), *The Skolt Lapps Today*. Changing Cultures. General editor Jack Goody. Cambridge.
- (1978a), The Rationalization of Reindeer Management among Finnish Lapps. *Development and Change* (SAGE, London and Beverly Hills), vol. 9, pp. 103—132.
- (1978b), The Transformation of the Siida. *Ethnos* 3-4. Stockholm.
- Invandrare och Minoriteter*: Tidskrift för kultur, politik, forskning och debatt. David Schwarz, ed. Stockholm.
- Itkonen, T. I. (1966), *Suomalais-ugrilaisen seuran aikakauskirja* 67. Helsinki.
- Jannes, E. (1943), *Renarna Visar Vägen*. Stockholm.

- Johansson, C. (1976), Om ofärdsår under den gamla renkonstens tid. *Svenska Landsmål och Svenskt Folkliiv*, 99th year. Dialekt- och folkminnesarkivet, Uppsala.
- Johansson, H. (1974), *De Renskötande Samerna i Sverige 1958–1972: En Befolkningsstudie*. Delrapport till Sameutredningen. Pedagogiska Institutionen, Umeå Universitet. This report composed the first *bilaga* in SOU 1975:100.
- JoU (1971:37), Jordbruksutskottets betänkande no. 37, year 1971. Jordbruksutskottets betänkande i anledning av Kungl. Maj:ts proposition 1971:51 med förslag till rennäringslag m.m., jämte motioner.
- JoU (1978/79:30), Jordbruksutskottets betänkande: med anledning av proposition 1978/79:110 om riktlinjer för skogspolitiken m.m., jämte motioner.
- Justitieombudsmannens och Militieombudsmannens ämbetsberättelser (1967), 2 saml. C. Framställningar och utlåtanden. 1. Framställning om åtgärder i syfte att giva de renskötande samerna bättre möjligheter att själva tillvarataga sina av lagen erkända rättigheter och att hindra att intrång däri göres utan tillräckliga skäl och utan rimlig ersättning. This report was presented to the King on 24 January 1966.
- Karlstad, J., Stien, L. & Storm, D. (1974), *Housenjarga som samisk bruks- og bosetningsområde*. Undersökelse i Laksågavasdraget. An unpublished report in Tromsø Museum, Tromsø, Norway.
- Kihlstedt, L. (1920), På vandringsstråt med Kvikkjokkslappar. *Luleå stifts julbok*. Stockholm.
- Klien, D. (1968), The Introduction, Increase, and Crash of Reindeer on St. Matthew Island. *Journal of Wildlife Management*, vol. 32, no. 2, April.
- Klockhoff, A. (1979), Uppkomsten av det svenska anspråket på flyttningsfrihet för lapparna. *Samernas Vita Bok V:2*. Stockholm.
- Koestler, A. (1979 ed.), *Janus: A Summing Up*. London.
- Korhonen, O. (1976), Linguistic and Cultural Diversity among the Saamis and the Development of Standard Saamish. *The International Journal of the Sociology of Language*, no. 10.
- Kosmo, A. (1970). Reindriftens Utvikling og Tilpasning i Storskog og Sjunkfjell Reinbetedistrikter. Hovedoppgave ved Norges Landbruks-høgskole.
- Labba, P. (1978), Så Har Samerna Blivit Beskattade, *Samefolket*, no. 2, p. 17. Östersund.
- Laestadius, P. (1928 ed.), *Journal för första året af hans tjenstgöring såsom missionary i Lappmarken*, vols. I & II. Concerning his experiences and reflections during the year 1827. Stockholm.
- Laevas samebys aktionsgrupp för Kalixälven (1979), Reglering oöverstigit hot mot renskötseln, in *Älvarnas Bok: Om vattenkraften, miljön och kampen i älvdalarna*. Älvräddarnas Samorganisation.
- Lagutskottet (1928:29), Utlåtande i anledning av dels Kungl. Maj:ts pro-

- position med förslag till lag om de svenska lapparnas rätt till renbete i Sverige m.m., dels ock i ämnet väckta motioner. Första lagutskottets utlåtande no. 29.
- Lantbruksstyrelsen Meddelanden (1976:3), *Rennäring-Skogsbruk: En analys av intressekonflikter mellan näringarna*. Liber Förlag.
- Länsstyrelsen i Norrbottens Län (1979), *Handlingsprogram Rennäring* 1978:18. Planeringsavdelningens rapportserie.
- Länsstyrelsen i Norrbottens Län, Planeringsavdelningen (1974), Översiktsplanering BD-län, Fjällområdet, Meddelande no. 10. *Fjällrenskötsel med Binäringar*.
- Länsstyrelsen i Norrbottens Län, Planeringsavdelningen (1975), Översiktsplanering BD-län, Fjällområdet, Meddelande no. 12. *Övergripande planeringsmål och allmänna handlingsprinciper*.
- Lantbruksstyrelsen & Statens Planverk (1978), rapport 44, del 5, *Rennäringen i Kommunernas Planering*.
- Leeds, A. (1965), Reindeer-herding and Chukdhi social institutions. *Man, Culture and Animals*. American Association for the Advancement of Science 78. A. Leeds & A. Vayda, eds. Washington, D.C.
- Lindell, A. (1900), *Bidrag till historien om Norrbottens läns bebyggande och odling*. Doctoral thesis. Malmö.
- Linder, J. (1850–64), Om svenska Lappmarken och dess innewånare. *Läsning för folket*.
- Linnaeus, C. (Carl von Linné) (1811 ed.), *Lachesis Lapponica, or a Tour in Lapland*, vols. I & II. A description of his Lapland trip in 1732, first published in Amsterdam in 1737. 1811 edition published in London and reprinted in 1971 by Arno Press & The New York Times. New York.
- Lönnberg, E. (1909), Om renarne och deras lefnadsvanor. Bilaga till Förhandl. inför skiljedomstolen af 1909 i renbetsfrågan, Afd. I. Svensk inlaga 3. Uppsala.
- Lundmark, L. (1971), *Koloni i Norr*. Weilin & Göös, Finland.
- M 1908, II K, no. 163, Af Herr G. A. E. Kronlund m.fl., om skrifvelse till Kungl. Maj:t angående den nomadiserande lappbefolkningens vidmakt-hållande m.m. Bilaga 4 presented by Elsa Laula from Vilhelmina.
- M 1917, II K, no. 404, Av herr Hellberg i Lycksele m.fl., om avslag å Kungl. Maj:ts proposition, nr. 169, med förslag till lag angående ändring i vissa delar av lagen den 1 juli 1898 om de svenska lapparnas rätt till renbete i Sverige.
- M 1917, II K, no. 405, Av herr Hage m.fl. i anledning av Kungl. Maj:ts proposition, nr 169, med förslag till lag angående ändring i vissa delar av lagen den 1 juli 1898 om de svenska lapparnas rätt till renbete i Sverige.
- M 1928, I K, no. 279, Av herr Asplund, i anledning av Kungl. Maj:ts proposition med förslag till lag om de svenska lapparnas rätt till renbete i Sverige m.m.
- M 1930, I K, no. 211, Av herr Lindhagen, om förhållandet mellan Arje-

- plog- och Karesuandolapparna samt lappförfattningarnas anknytning till det levande livet.
- M 1968 I K, no. 482, Av herr Wikberg och herr Carlsson, Eric, om företagsinteckning vid renskötsel. (Lika lydande med motion nr. 606 i Andra kammaren.)
- M 1971:1370, Av herr Takman m.fl. i anledning av Kungl. Maj:ts proposition nr. 51 med förslag till rennäringslag, m.m.
- Magnusson, N. (1956), Malmreserverna Måste Inventeras, in *Jorden, Skogen, Malmen och Vattenkraften i Morgondagens Norrbotten*. Folke Thunborg (ed.). Stockholm.
- Malmström, E. (1932), Material gathered in Tuorpon, Sirkas and Kaalasvuoma Saamebys in connection with the work for Lapputredning 1930. Unpublished reports found in the archives of Lantbruksnämnden in Luleå under the heading "Lappfogden i Norrbottens norra distrikt konventions- och utredningshandl. 1930-39, FX1:5."
- (1935), Distriktsindelningen i Tuorpons lappby. Unpublished report in Lantbruksnämnden's archives in Luleå. dated 29 January, pp. 7-11.
 - (1938), An unpublished record of a speech given by Malmström at the annual Winter Fair meeting in Jokkmokk between the herders and the authorities. Lantbruksnämnden's archives in Luleå, dated 3 February.
 - (1941), An unpublished letter addressed to the Lapps in Tuorpon's lappby from Lappfogden in Norrbottens Södra Fjälldistrikt, Luleå, dated 27 March.
- Manker, E. (1928), *En Stallo i Jokkmokk*. Stockholm.
- (1947), *De Svenska Fjälllapparna. Svenska Turistföreningens handböcker om det svenska fjället* 4. Stockholm.
 - (1953), *The Nomadism of the Swedish Mountain Lapps: The Siidas and their Migratory Routes in 1945*. Nordiska Museet: *Acta Lapponica* VII. Uppsala.
 - (1950), *Die lappische Zaubertrommel II. Die Trommel als Urkunde geistigen Lebens*. Nordiska Museet: *Acta Lapponica* VI. Uppsala.
 - (1963), *People of Eight Seasons*. Gothenburg.
 - (1957), *Bortom Fjällen, Mark och Människor i Lappland*. Stockholm.
- Märak, J. (1976), Vad Kommer de Renrasiga att Hitta på Nästa Gång? in *Samefolket*, 1976, no. 3.
- Meadows, D. H. & D. L. (1974), *The Limits to Growth*. New York.
- Mebius, H. (1968), *Värro*. Studier i Samernas förkristna offerriter. With an English summary. *Skrifter utgivna av Religionshistoriska Institutionen in Uppsala genom C. M. Edsman* 5. Uppsala.
- Mörner, M. (1979), Urinnevänares landrätt: En jämförande historisk studie mellan svenska samer och spanskamerikanska indianer. *Samiska Domstolar, Samiska Rättsfall. Samernas Vita Bok* VI:3, pp. 637-657. Stockholm.
- Nature Conservancy Act* (1964:822), Naturvårdslag 1964. SFS no. 822; given Stockholms slott den 11 december 1964.

- Nickul, K. (1977), *The Lappish Nation, Citizens of Four Countries*. Indiana University Publications, vol. 122. Bloomington.
- Nielsen, K. (1938), *Lappisk Ordbok*. Harvard University Press. Cambridge, Massachusetts.
- Nelsen, K. & Nesheim, A. (1956), *Lappisk Ordbok IV*. Instituttet for sammenlignende kulturforskning, B XVII:4. Oslo.
- Nilsson, 1928, II K, Protokoll no. 35, Angående lag om de svenska lapparnas rätt till renbete in Sverige m.m. Wednesday, 16 May, PM.
- Nilsson, T. (1972), *Fyra Gånger Suorva*. Utgiven av Statens Vattenfallsverk. Stockholm.
- Nordic Saamis' Cultural and Political Program (1971), adopted at the VIIth Nordic Saami Conference in Gällivare; reprinted in Svensson, 1973.
- Norrbottens Kuriren*. Swedish local newspaper. Luleå.
- Norrlands handlingar, Unpublished material: Landsböcker (länsräkenskaper); Uppbördsböcker, vanligen som verifikationer till landsböckerna; Mantalslängder, to be found in Kammararkivet (KA), Stockholm.
- Norrländska Socialdemokraten*. Swedish local newspaper. Luleå.
- Nylén, H. (1979), Vattenkraft: historia och framtidsplaner, in *Älvarnas Bok: Om vattenkraften, miljön och kampen i älvdalarna*. Älvräddarnas Samorganisation.
- Olofsson, S. (1962), Övre Norrlands Medeltid, in *Övre Norrlands Historia*, Vol. I, ed. G. Westin. Umeå.
- Olsson, A. (1980), De Som Flyttade (an interview with Anna Margareta Labba), in *Jokkmokk Museums Årsbok*. Luleå.
- Omma, H. (1973), Särskilda yttranden no. 3, in SOU 1973:52.
- Östlund, B. (1976), Viktigt det finns en plats där samer får framföra sina åsikter, in *Samefolket*, 1976, no. 3.
- Öström, K. (1978), *Norrbotten, Rapport 5: Regionala Utvecklingsalternativ*. Social Utvecklingsplanering i Norrbottens Län. Skrivarförlaget/Norrbottens Bildningsförbund. Luleå.
- Paine, R. (1964a), Herding and Husbandry: Two Basic Distinctions in the Analysis of Reindeer Management. *Folk* 6:1. Copenhagen.
- (1964b), Cultural Demography and Nomad/Sedentary Relations of Reindeer Groups in Norway and Sweden. Paper presented at the VIIth International Congress of Anthropological and Ethnological Sciences, Moscow.
- (1971), Animals as capital: Comparisons among northern nomadic herders and hunters. *Anthropological Quarterly* 44:157–72.
- (1972), The herd management of Lapp reindeer pastoralists. *Journal of Asian and African Studies* VII:76–87.
- (1978), Spring Herd—Kautokeino, 1961. *Ethnos* 3–4. Stockholm.
- Paterson, S. (1943), Unpublished drafts of material later used by Manker

- for his 1947 and 1953 publications and also by Paterson for his publication in 1956. These rough notes are to be found in the archives of Nordiska Museet, Stockholm. Filed under "Tuorpon".
- (1956), Anthropogeographical Studies among the Jokkmokk Mountain Lapps. *Göteborgs Kungl. Vetenskap- och Vitterhets-Samhälles Handlingar*, sjätte följdén, ser. A, band 6, no. 2.
- Paulston, R. Ethnic Revival and Educational Conflict in Swedish Lapland. *Comparative Education Review*, vol. 20, no. 2. June.
- Pavval, L. (1913), Unpublished interview with Dr. E. Bergström at Staluokta, 18 July. Norrbotten's Museum archives, Luleå. See Bergström 1913a.
- Pehrson, R. (1957), *The Bilateral Network of Social Relations in Könkämä Lapp District*. Indiana University Research Center in Anthropology, Folklore and Linguistics, Publication III. Bloomington.
- Pirak, A. (1913), Unpublished interview with Dr. E. Bergström at Mellät-no, 19 July. Norrbotten's Museum archives, Luleå. See Bergström 1913a.
- (1933), *En Nomad och hans Liv*. Recorded and translated by H. Grundström. Stockholm. Saamish version published in 1937.
- (1937), *Jåhttee Saamee Viessoom*. Kungl. Human. Vetenskaps-Samfundet i Uppsala 31:2. Uppsala. Swedish version published in 1933.
- Pittsa, L. (1980), Markerna Krymper. *Samefolket*, no. 5.
- Prawitz, G. & Cramér, T. (1970), *Studier i Renbeteslagstiftning*. Stockholm.
- Prop. 1917:169, Kungl. Maj:ts nådiga proposition till riksdagen med förslag till lag angående ändring i vissa delar av lagen den 1 juli 1898 om de svenska lapparnas rätt till renbete i Sverige; given Stockholms slott den 23 mars 1917.
- Prop. 1928:43, Kungl. Maj:ts proposition till riksdagen med förslag till lag om de svenska lapparnas rätt till renbete i Sverige m.m.; given Stockholms slott den 17 februari 1928.
- Prop. 1938:40, Kungl. Maj:ts proposition till riksdagen med förslag till gruvlag m.m.; given Stockholms slott den 4 januari 1938.
- Prop. 1962:68, Kungl. Maj:ts proposition till riksdagen angående rennäringens främjande; given Stockholms slott den 23 februari 1962.
- Prop. 1963:164, Kungl. Maj:ts proposition till riksdagen med förslag till allmänna riktlinjer för en malminventering i Norrbottens län och till lag om inskränkning i rätten till inmutning inom Norrbottens län; given Stockholms slott den 19 april 1963.
- Prop. 1971:51, Kungl. Maj:ts proposition med förslag till rennäringslag, m.m.; given Stockholms slott den 26 februari 1971.
- Prop. 1972:111, Kungl. Maj:ts proposition angående regional utveckling och hushållning med mark och vatten; given Stockholms slott den 20 oktober 1972.
- Prop. 1972:111, suppl. 2, Utdrag av protokollet över civilärenden, hållet

- inför Hans Kungl. Höghet Kronprinsen-Regenten i statsrådet på Stockholms slott den 29 September 1972, Civildepartementet.
- Prop. 1974:32, Kungl. Maj:ts proposition med förslag till gruvlag m.m.; given den 8 mars 1974.
- Prop. 1974:146, Kungl. Maj:ts proposition med förslag till lag om vissa mineralfyndigheter, m.m.; given den 25 oktober 1974.
- Prop. 1975/76:1, Regeringens proposition med redovisning av programskedet i den fysiska riksplaneringen.
- Prop. 1976/77:100, Bilaga 13, till budgetpropositionen 1977. Jordbruksdepartementet.
- Prop. 1977/78:31, om riktlinjer i den fysiska riksplaneringen för vissa s.k. obrutna fjällområden; beslutad den 3 november 1977.
- Prop. 1977/78:57, Regeringens proposition om riktlinjer i den fysiska riksplaneringen för vattendrag i norra Svealand och Norrbotten.
- Prop. 1977/78:96, om medelstillskott till Luossavaara-Kiirunavaara AB för att upprätthålla viss sysselsättning.
- Prop. 1977/78:172, om regionalpolitiskt stöd till företag inom gruvindustrin m.m.
- Prop. 1978/79:100, bil. 13, till budgetpropositionen 1979. Jordbruksdepartementet.
- Prop. 1978/79:110, Regeringens proposition om riktlinjer för skogspolitiken, m.m.; beslutad den 22 februari 1979.
- Prop. 1978/79:213, med redovisning av planeringsskedet i den fysiska riksplaneringen; beslutad den 17 april 1979.
- Protokoll 1884. Utdrag af protokollet öfver lagärenden, hållet uti Kongl. Maj:ts Högsta Domstol Fredagen den 21 November 1884. Apparently this *protokoll* was taken as a supplement to Kongl. Maj:ts nådiga proposition no. 2 till Riksdagen, med förslag till lag angående de svenska Lapparnas rätt till renbete i Sverige och till lag angående renmärken; gifven Stockholms slott den 11 December 1885. Assembled in the Parliamentary publications for 1886, 1 saml., 1 Afd., 2 Band.
- Protokoll 1928, I K, no. 32, Onsdagen den 16 maj e.m. Lagförslag om rätten till renbete i Sverige m.m.
- Qvigstad, J. (1894), Nordische Lehnwörter im Lappischen. *Forhandlinger i Videnskabs-Selskabet i Christiania*, Aar 1893. Christiania.
- Qvigstad & Wiklund (1909), Dokument angående flyttlapperne m.m., samlede efter renbeteskommissionens opdrag, I-II. Renbeteskommissionen af 1907, Kristiania. D:o Tillägg. See Wiklund 1912.
- Reindriftsavtale*, 1 januar 1977–31 desember 1978. See St. prp. nr. 1, Tilleg nr. 20 (1976–77), Landbruksdepartementet. Tilråding fra Landbruksdepartementet av 19 november 1976, godkjent ved kongelig resolusjon samme dag. Oslo.
- Rennæringsgruppen, LBS (1978), *Översyn av Vissa Frågor inom Rennæringen*. Vol. I: Redovisning och förslag angående rådgivning, statligt stöd och markförvaltning. Vol. II: Bilagor.

- Rennäringsnytt* (1978), no. 3, Tuorpons sameby hårt drabbad. Jönköping.
- Rennäringsnytt* (1980), no. 3, Utredningen om rennäringens ekonomiska förhållanden vidgas, p. 7. Jönköping.
- Rennäringsnytt* (1980), no. 6, Vad är fysisk riksplanering (FRP)? Jönköping.
- Rensund, L. (1968), *Med Jon-Erik på Renstigarna*. Norrbottens Museum. Luleå.
- (1976), Stödjande Medlemmar — De Skapar Bara oreda, in *Samefolket*, 1976, no. 4.
- Renutredningen (1960), *Renskötselns Organisation och Renprodukternas Marknadsförande*. Betänkande avgivet av Renutredningen. A mimeographed report presented to the Department of Agriculture.
- Retzius, G. (1889), Hjernans form hos de olika människoraserna. A lecture summarized in *Ymer* 1889, 9th year. Svenska Sällskapet för Antropologi och Geografi, Stockholm. Reprinted in *Samernas Vita Bok* VI:4, 1979.
- Rheen, S.* (1897 ed.), *En kortt Relation om Lapparnes lefwarne och Sedher, wijd Skiepellsser, sampt i många Stycken Grofwe wildfarellsser*. Uppsala. Original manuscript dated 1671. Printed in *De Svenska Landsmälen och Svenskt Folkliv*, vol. XVII.
- Riksskatteverket (1977), Dnr. 1004/77-302, 18 oktober. Övergång till bokföringsmässig redovisning av inkomst av renskötsel. Taxeringssektionen.
- Robson, C. (1797–1800), *Dagbok under resor i Vesterbotten och Lappmarken*. Hand-written manuscript in Kungliga Biblioteket (KB), M 200. Stockholm.
- Rönn, G. (1960), *Sameland*. Stockholm.
- Royal Ministry of Foreign Affairs (1974), *The Biography of a People: Past and Future Population Changes in Sweden, Conditions and Consequences*. A contribution to the United Nations World Population Conference. Stockholm.
- RNL 1971, i.e. Rennäringslagen or SFS 1971:437.
- RSV (1978), *Den Nya Beskattningen av Rennäringen*. A guide to herders published by Riksskatteverket.
- Ruong, I. (1937), *Fjälllapparna i Jukkasjärvi Socken*. *Geographica* 3. Uppsala.
- (1945), *Dagbok: sommaren 1945 Jokkmokk*. Unpublished field notes in Dialekt- och folkminnesarkivet, ULMA 18368b. Uppsala.
- (1964), Jåhkåkaska sameby. *Svenskt Landsmål och Svenskt Folkliv*. 87th year. Dialekt- och folkminnesarkivet, Uppsala.
- (1966), Om renens användning. *Samefolket*, nos. 6–7.
- (1967), *The Lapps in Sweden*. Stockholm.
- (1968), Different factors of reindeer-breeding. *Inter-Nord* no. 10, Centre d'études arctiques et finno-scandinaves. Paris.
- (1975), *Samerna*. Stockholm.

- (SOU 1975:100), Historisk återblick rörande samerna, in the government report, *Samerna i Sverige, Bilagor*. Stockholm.
- (1978), Harrok: ett samiskt nybygge i Pite lappmark, in *Kultur på Karrig Jord*. Festschrift til Asbjörn Nesheim. Oslo.
- Saami Political Program* (1980). Adopted at the XIth Saami Conference in Tromsø, Norway, Printed in *Invandrare och Minoriteter* 1980:4.
- Sagat*. Norsk- och samiskspråkig tidskrift.
- Samebyarnas Redovisning av Renskötselns markanvändning* (1974). Statens Planverk, planeringskartor. Upprättad på uppdrag av Kungl. lantmäteristyrelsen, Statens naturvårdsverk och Statens planverk. See Statens Planverk rapport 20, del 3.
- Samefolket*. Svensk- och samiskspråkig tidskrift. Organ för svenska samernas riksförbund och föreningen Same-Ätnam. Uppsala.
- Samemakt! Välfärd till döds eller kulturellt folk mord?* (1970), edited by A. Küng. Stockholm.
- Samenuorra*. Tidskrift. Organ för svenska samernas ungdomsförbund.
- Samernas Vita Bok VI* (1979), *Samiska Domstolar, Samiska Rättsfall*, vols. 1–5, Stockholm.
- Särskilda Utskottets Utlåtande 1886, no. 1. Riksdagens Särskilda Utskotts Utlåtande, i anledning af Kongl. Maj:ts till Utskottet remitterade nådiga proposition med förslag till lag angående de svenska lapparnes rätt till renbete i Sverige, samt till lag angående renmärken.
- Schefferus, J. (1704 ed.). *The History of Lapland*. London. First published in Latin in 1673. Translated into Swedish in 1956 by Henrik Sundin and published in *Acta Lapponica* VIII. Uppsala.
- Schnitler, P. (1929), Grenseeksaminasjonsprotokoller 1742–1745, vol. II, edited by J. Qvigstad & K. B. Wiklund, Oslo. The second volume of Major P. Schnitler's records of his border investigation was edited by K. Nissen & I. Kvamen and published in Oslo (1962). A third volume is apparently forthcoming.
- SFS 1925:181, Lag angående minskning i vissa fall av renantalet inom lappby; given Stockholms slott den 6 juni 1925.
- SFS 1938:314, *Gruvlag*; given Stockholms slott den 3 juni 1938.
- SFS 1951: 308, *Lag om ekonomiska föreningar*; given Stockholms slott 1 juni 1951.
- SFS 1973: 1150, *Lag 14 december 1973 om förvaltning av samfälligheter*.
- SFS 1974:342, *Gruvlag*; utfärdad den 31 maj 1974.
- SFS 1970:988, *Fastighetsbildningslag*; given Stockholms slott 17 december 1970.
- Simonsen, P. (1959) *Fundforhold og dateringer. Varangerfunnene I, Funn av menneskeskjeletter*. Tromsø Museums Skrifter, Vol. VII:I. Tromsø.
- SIND PM 1977:1, Industrin i den fysiska riksplaneringen, gruvindustrin. Statens Industriverk memorandum.
- Skogsstyrelsens författningssamling* 1979:3, Skogsstyrelsens föreskrifter m.m. till skogsvårdslagen (1979:429).

- Skum, N. (1938), *Same Sita—Lappbyn. Acta Lapponica* II. Stockholm.
- (1955), *Valla Renar: Olika sätt att sköta renarna i ord och bilder skildrade*. Translated from the original manuscript in Finnish by Gunnar Pellijeff. Nordiska Museet: *Acta Lapponica* X. Uppsala.
- Skunke, F. (1958), *Renbeten och deras Gradering. Lappväsendet—renforskningen, Medd. 4*. Uppsala.
- Snell, H. & Snell, T. (1975), Samish responses to processes of national integration, in J. Boissevain & J. Friedl (eds.), *Beyond the Community: Social Processes in Europe*. University of Amsterdam: Dept. of Educational Science of the Netherlands.
- Solem, E. (1933), *Lappiske Rettstudier*. ISKF, Ser. B, XXIV. Oslo.
- SOU 1923:51, *Förslag angående Lapparnas Renskötsel m.m.* Stockholm.
- SOU 1924:16, *Betänkande med Förslag till Gruvlag*. Stockholm.
- SOU 1924:59, *Fattigvården bland Lapparna*, avdelning II, Lapparnas Beskattning. Stockholm.
- SOU 1927:14 *Allmänna Principer för en Ny Gruvlagstiftning*. Stockholm.
- SOU 1942:41, *Betänkande angående Åtgärder till Stöd för de Renskötande Lapparna m.m.* Stockholm.
- SOU 1951:49, *Turisttrafiken från Utlandet*. Stockholm.
- SOU 1960:37, *Tornedalsutredningen*. Stockholm.
- SOU 1963:36, *Malmen i Norrbotten*. Stockholm.
- SOU 1964:47, *Friluftslivet i Sverige, Del I: Utgångsläge och Utvecklingstendenser*. Stockholm.
- SOU 1965:19, *Friluftslivet i Sverige, Del II: Friluftslivet i Samhällsplaneringen*. Stockholm.
- SOU 1966:12, *Renbetesmarkerna*. Stockholm.
- SOU 1966:33, *Friluftslivet i Sverige, Del III: Anläggningar för det Rörliga Friluftslivet, m.m.* Stockholm.
- SOU 1967:61, *Semesterspridning*. Stockholm.
- SOU 1968:16, *Rennäringen i Sverige*. Stockholm.
- SOU 1969:10 *Ny Gruvlag*. Stockholm.
- SOU 1969:29, *Idrott åt Alla*. Stockholm.
- SOU 1969:49, *Lokaliserings- och Regionalpolitik*. Stockholm.
- SOU 1971:75, *Hushållning med Mark och Vatten*. Stockholm.
- SOU 1973:14, *Mål och Medel i Skogspolitiken*. Stockholm.
- SOU 1973:52, *Turism och Rekreation i Sverige*. Stockholm.
- SOU 1974:22, *Vattenkraft och Miljö*. Sehlstedt Report. Stockholm.
- SOU 1975:99, *Samerna i Sverige*. Stockholm.
- SOU 1975:100, *Samerna i Sverige: Bilagor*. Stockholm.
- SOU 1976:28, *Vattenkraft och Miljö 3*. Ekström Report. Stockholm.
- SOU 1976:50, *Kommunala Befogenheter inom Turistväsendet*. Stockholm.
- SOU 1977:27, *Revision av Vattenlagen: Förslag till Ny Vattenlag*. Stockholm.
- SOU 1978:6, *Skog för Framtid*. Stockholm.
- SOU 1979:54 *Hushållning med Mark och Vatten 2, Del I: Överväganden*. Stockholm.

- SOU 1979:55, *Hushållning med Mark och Vatten 2, Del II: Bakgrundsbeskrivning*. Stockholm.
- SOU 1980:12, *Mineralpolitik*. Stockholm.
- SSR Protokoll (1968), *Svenska Samernas Riksförbunds urtima landsmöte i Östersund*, m.m. Stockholm.
- SSR Protokoll (1973), *Svenska Samernas Riksförbunds urtima landsmöte i Åre*, m.m. Stockholm.
- Statens Planverk (1975). *Fjällen*. Report 20, part 3: Samebyarnas Redovisning av Renskötselns Markanvändning (1974), with a commentary by the Saamebys on the map material.
- Stenberg, K. (1920), *Dat Läh Mijen Situd: En Vädjan till Svenska Nationen från Samefolket*. Written in conjunction with and copyrighted by Valdemar Lindholm. Örnsköldsvik. Reprinted in *Samernas Vita Bok* VII:1, 1980. Stockholm.
- Stephansson, O. (1980), Professor Ove Stephansson om den mineralpolitiska utredningen: Ett fiasko. *Norrländska Socialdemokraten*, 6 augusti.
- STF (1921), *Lappland I; Norrbottens lappmarker och Kustland*. Svenska Turistföreningens Resehandböcker. Stockholm.
- Sundin, L. (1979), Vattenlagstiftningen, in *Älvarnas Bok: om vattenkraften, miljön och kampen i älvdalarna*. Älvräddarnas Samorganisation.
- Svensson, T. (1973), *Samernas Politiska Organisationer*. Doctoral thesis. Stockholm.
- (1976), *Ethnicity and Mobilization in Sami Politics. Stockholm Studies in Social Anthropology* 4. University of Stockholm.
- Sveriges Rikes Lag (1980), utgiven av Torkel Nordström. Stockholm.
- Svonni, L. (1974), Renskötselformer, in *Samerna: Ett Folk i Fyra Länder*. L. Svonni, editor. Falköping.
- Swartz, O. (1780), *Dagbok öfver min resa till Lappmarcken*. Hand-written manuscript in Kungliga Biblioteket (KB), M 200. Stockholm.
- Tegengren, H. (1952), *En utdöd Lappkultur i Kemi Lappmark*. Åbo (Turku).
- Thomasson, L. & Utsi, L. (1975), Särskilt Yttrande: Stödjande medlemmar i samebyar, in SOU 1975:99.
- Tjåhkevarasj—Lilla Hjärtberget, Tjäkovarats* (1977). A report of an excursion by students from the Department of Cultural Anthropology, Uppsala University, to Jokkmokk in February 1977. Mimeographed.
- Tomasson, T. (1918), Renskötseln, dess utveckling och betingelser, in *Svenska Lapparnas Landsmöte i Östersund*. Uppsala. Reprinted in *Samernas Vita Bok* VII:2, 1980. Stockholm.
- Turi, J. (1910), *Muittalus samid birra, en bog om lappernes liv*. Utg. av Emilie Demant Hatt. Copenhagen. Swedish edition, 1917, Stockholm. English edition (*Turi's Book of Lappland*), 1931, London.
- Utsi, M. (1948), The Reindeer-Breeding Methods of the Northern Lapps, in *Man*, Vol. IV. London.

- Utsi, P. (1974), *Giela, giela. Divtaid čallii*. Translated into Swedish by Siv Näkkäläjärvi, Israel Ruong and Per Mikael Utsi. Uppsala.
- Utsi, Per M. (1976), Samisk stat eller inte, in *Samefolket*, 1976, no. 2.
- Vansina, J. (1970), Cultures through time, in *A Handbook of Method in Cultural Anthropology*. Raoul Naroll & Ronald Cohen, eds. New York.
- Vesterlund, O. (1925), *Tjugu År i Norrbotten*. Uppsala.
- Wahlenberg, G. (1807 & 1810), *Resor i Lappland år 1807 och 1810*. Handwritten manuscript in Uppsala Universitetsbibliotek (UUB), S169b. Uppsala.
- (1808), Berättelse om Mätningar och Observationer för att Bestämma Lappska Fjällens Höjd och Temperatur vid 67 Graders Polhöjd, förrättade år 1807. Forms a part of S. G. Hermelin's anthology, *Försök till Beskrifning öfver Lappmarken och Vesterbotten uti Särskilta Afhandlingar*, 1810. Stockholm.
- Whitaker, I. (1955), *Social Relations in a Nomadic Lapp Community. Samiske Samlinger* 2. Oslo.
- Whitehead, A. & Russell, B. (1910–13), *Principia Mathematica*. Cambridge.
- Wiener, N. (1948), *Cybernetics: or Control and Communication in the Animal and the Machine*. Cambridge, Mass.
- Wiklund, K. B. (1912), Tillägg till den genom renbeteskommissionen af år 1907 utgifna dokumentsamlingen. Uppsala.
- (1918), Om Renskötselns Uppkomst. *Ymer*. Stockholm.
- (1929), *Nomadskolans Läsobok*, Tredje boken. Uppsala.
- (1932), Prehistory of the Lapps, in *The Race Biology of the Swedish Lapps*, Part I, edited by H. Lundborg & S. Wahlund. The Swedish Institute for Race Biology. Uppsala.
- (1947), *Lapparna. Nordisk Kultur* X. Stockholm.
- Wilden, A (1972), *System and Structure*. London.
- Wynne-Edwards, V. (1965), Social organization as a population regulator. *Zoological Society of London Symposia* 14.

Index

- advance responsibility (*förskottsskyldighet*), 352, 366
- Agricultural Committee Report (JoU 1971:37), 323
- Agriculture, Board of (*Jordbruksstyrelsen*), 328, 483
- Agriculture Boards, Country (*lantbruksnämnder*), 328
- Agriculture, Department of (*Jordbruksdepartementet*), 253, 287, 312
- Agriculture Line, 5, 75–6, 79 (note), 153, 309
- Ahnlund, 61–2, 64
- Åhrén, Ingvar, 144–5, 290
- Alkavare silver mine, 73
- Ålvarnas Bok*, 291
- Anderson, M., 1 (note), 127 (note)
- Andersson, Olle, 407
- Arjeplog, 75, 176
- artificial fodder, 29, 92, 343–4, 433, 440, 491
- Arvas Group (*see also* Saamis, Arvas), 171
- Arvas lengthwise fence (*see also* district-line fence), 430
- Ashby, 17, 487
- Asplund, 313–16, 338, 367
- assertive-integrative balance, 470; continuum, 472; dialectic, 481
- assimilation into Swedish society, 197, 291, 298, 351, 402, 453; cultural, 298 (note); enforced, 292, 471–2; voluntary (cultural flooding), 414
- association herding (*föreningsrenskötsel*), 462
- autumn (*see also* seasonal changes), 90–2
- autumn land, 52, 99–102, 127–8, 131, 136, 141, 148, 159, 164, 166–8, 171–3, 175–6, 178–82, 186, 194, 198–9, 206–9, 217, 448–50
- Bäckman, 4
- bad winters, 53, 174, 431–33, 440–43
- big-group formation, 51, 142, 330
- bad years, 47; increasing frequency of, 48
- Baer, Lars Anders, 229, 404–6
- bare-ground period, 35, 51, 84
- Barth 487
- Basseri herdsman, 487–88
- Bateson, Gregory, 9, 16–23, 25–6, 469–70, 491–2, 494, 508; ecology of mind, 495; *Our Own Metaphor*, 471; pioneer in the application of holistic principles to culture, 16; principles applied to reindeer management, 26–33
- BD80 Report, 239
- bear, 49
- beard moss, 92, 266
- Beckman, 1, 2
- Bergsland, 60, 75
- Bergström, Eric (nomad-school inspector), 83, 133, 135, 148, 151, 158, 168, 177, 480
- big herder, 45, 55, 76, 314–15, 366, 369, 380, 384, 465, 484–7; predominance of, 329, 329 (note), 387
- Big Lule River (*Stora Lule älv*), 64, 211
- birch: birch forest, 126; birch trees for firewood, 273; birch-tree line, 84; defoliation of birch woods, 266
- Birkarls, 73, 75, 77
- Birket-Smith, Kaj, 411
- Blind, Anders Olofsson, 149, 173, 205
- Blind, Henrik, 226, 456; family, 429
- Blind, Henrik Persson (“Heika Guben”), 121–4, 139–40, 148, 150, 161, 183
- Blind, Lars Petter, 184
- Blind, Seth Johannes, 184
- Borenus, 253
- boundaries: artificial, 39, 50–3; natural, 39, 50–3; Village, 70
- Brattli Project, 271
- Brox, 238–9
- bull reindeer (*see also* reindeer bulls), 42; bull calves, 342

- bull slaughter, 216, 218, 233–4; pre-rut, at Valli, 233, 238, 451, 458
- Bureus, Andreas, 61, 63–4
- by (village), 59
- Byordning* (Village Herding Regulations), 80; Regulations of 1927, 154; Regulations of 1946, 46
- Byordningar för Lappbyarna i Norrbottens Södra Distrikt* (1946), 319
- cabins, 208; herders', 209, 272, 368; vacation, 270
- calf-markings, 193, 199, 481; at Jälli, 448
- calf meat, 339, 456
- calf-slaughter, 29, 234, 336, 339–40, 344, 454–7, 459
- calves, unmarked (*see also* "whole-ears"), 392
- calving land, 84
- calving percentage, 375
- calving period, 84, 214
- Campbell, 78, 500
- caravan (*see also* pack caravan and sled caravan): time of the caravans and time after the caravans, 212
- cash economy, 43, 127, 207, 487
- castration, 35, 129 (note), 199, 203, 234
- catastrophic winters: winter of 1936, 217; winters since the 1930s, 329
- cheese, 45, 55
- chemical spraying (*see* trichlorophenoxyacetic acid)
- chief administrator (*syssloman*), 353
- church registers, 14, 111
- circumpolar area, 43
- clergymen, 60, 83
- climate (*see also* weather), 39–40, 53–5; climatic catastrophes, 197; climatic variations, 440; interplay of, with grazing and landscape, 55
- Club of Rome, program outlined in *The Limits to Growth*, 21
- Cobo, José F. Martinez, 398
- Codicil of 1751, 281
- cohesive power (of herd), 42
- collective work organization, 319, 327
- collectivity, 392; of grazing-land use, 361; Village grazing, 80
- collectivization, 318, 320
- Collinder, 2, 59, 493
- colonial confrontation, 472
- colonial encounter, 278, 302, 403
- colonists, 69
- colonization, 43, 296
- commons, 28, 72; the Crown's, 76
- commons dilemma, 145, 303, 393
- commons tragedy, 22, 28–30
- communication facilities, 39
- communications theory, 469
- compatibility, 281; ideology, 289
- compensation payments (*see also* land encroachment and predation): for damage done by reindeer, 79; for departure from herding, 357; for encroachments on grazing territory, 333; for reindeer killed by predators, 50, 228, 463; for ruined grazing territory, 463; lump-sum payments, 308
- concession system (mining), 246, 248
- conservation, environmental, 262; interests, 252; Conservation Committee, 261
- conservationists, 50, 233
- contorta pine, 261
- contract reindeer (*skötesrenar*: term covers both reindeer belonging to inactive members of Saameby and reindeer belonging to non-members), 110, 110 (note), 305–6, 308, 337, 382, 387, 387 (note), 484; owner, 387 (note); ownership possibilities, 384; ownership rights, 312
- control (*see also* reindeer-herding, control of), 37–8, 51, 499–502, 506–7, 509; intensive, 68
- control mechanisms, the environment's own, 475
- core area, 270, 294
- corral, 335 (note), 410, 432; at Jälli, 165, 193; at Keddaure, 165, 202; at Rävudden, 441; at Rovijaure Lake, 193; bush corral at Rautare, 128; late-summer corrals, 187; lowland corrals at Karats of Maitum, 190, 232; separation corrals at Parka and Lastak, 226; winter corral, 434 (note); winter-separation corral at Karats, 441, 441 (note)
- Council of Europe, Convention on Human Rights and Fundamental Freedoms, 399
- cow reindeer (*see* reindeer cows)
- Cramér, Tomas (the Saamis' ombudsman), 14, 61, 78–9, 98, 278–9, 351, 361, 395–6
- cratering of reindeer, 267

- crosswise fence (*see* Parka crosswise fence)
- crowding (*see also* overcrowding), 154, 337, 419
- ČSV group, 403–5, 407
- cultural and occupational dichotomy (*see* occupation–culture split)
- cultural flooding (*see also* assimilation, voluntary), 296–7, 337, 397
- cultural leveling, 396, 497
- cultural protection (*see* Saamish culture)
- cultural survival, 396, 467
- culture, Saamish (*see* Saamish culture)
- cybernetics, 16, 469, 486; cybernetic principles, 473; cybernetic system, 16, 18, 24, 468
- Dagens Nyheter*, 229, 386
- Dahlström, 452–3
- damage caused by reindeer: to crops, 362; to settlers' property, 80; damage-compensation areas, 363
- dam construction (*see also* hydro-electric power), 235, 251–8
- determinants (*see also* reindeer-herd management), 162, 427–51, 452–3; basic relations between, in herd management, 9, 39–55; determinants of herding form, 50; structuring and analysis of general, 39
- discrimination, 334, 398; legal, 406; racial (ethnic), 398; reverse, 307, 350
- dissolution, tendencies to, 30
- District Clerk (*länsman*), 73
- district-line fence (*see also* Arvas lengthwise fence), 224–6
- diversity of utilization, 37
- Doj, Pål, 483
- Dombok, 74
- Drake, 45, 55
- Düben, von, 79, 83, 144, 279
- eagle, 49
- earmark (mark of reindeer ownership), 35, 284–5, 344–5
- ear-marking, 35
- ear tags, colored, 345
- eastern pattern of migration, 141–2, 219–35
- eastward migration route, 49
- eastward move of northern Saamis, 168, 178
- eastern shifts, 219; in Tuorpon, 176, 197–218
- economic collectives, Saamebys of today called, 327
- economic corporations, 364–74
- economic organization, Swedish types of: *ekonomisk förening*, 331; *samarbetslag*, 331; *samfällighet*, 331
- economics of flexibility, 12, 16, 19–20, 347, 453, 468, 474, 481, 490
- Edney, 29
- Eidheim, 400, 407
- Eidlitz, 43, 68, 82 (note), 286, 400
- Ekonomisk Renskötsel*, 339, 342
- Ekström Report, 257
- Enare Lake, 3
- enforced transportation of silver ore (*see also* mineral ores, forced transport of), 73
- Engström, 83, 134
- Eriksson, A., 2
- Eriksson, Olof, 267
- ethnic identity, 394–423; preservation of, 290
- ethnic rights (*see also* Saami rights), 394–400
- European Travel Commission, 269
- exploitation, environmental, 359, 414
- Expropriation Act: State's expropriation rights over Saameby territory, 355
- extensification process in Tuorpon, 11
- extensive herding (*see also* herding, extensive), 10, 44, 46, 348, 499–504, 507–10; extensive herder, 35–6; modern herding, 411
- extensive revolution, 10, 82
- extensive spiral, 207, 209, 218, 227, 300–1, 332, 388, 427–8, 444, 476, 480–1, 487, 489
- extensivity (*see also* herding, extensive), 10, 35–6, 41, 43–4, 48, 180, 190, 207, 209, 317, 475; seasonal, 292; summer, 442; winter, 220
- extractive industries, 414, 477; destruction of the environment by, 476
- farmers, 46, 308; conflicts with, 197
- farming, 75; demise of, 160, 177; greater intensivity of, 68
- farming systems, 78
- feedback, 24, 26, 52, 444; effects, 23; loops, 16, 19, 24, 32–3; negative, 29; negative-feedback loop, 29; reinforcement, 11, 474

- Fellman, I., 73
 fencing (*see also* Parka crosswise fence, Arvas lengthwise fence *and* missile-field fence), 52, 191; facilitates separations markings or slaughters, 52
 fertilizing of forest land, 262
 fiberboard and plywood factories, 259
 Finland, 1, 60
finnar (*skridfinnar*) (*see* Saamis)
 firewood, 125, 125 (note), 170
 fishing, 202–3, 211; rights, 72, 76; waters, 73, 170
 flexibility (*see also* economics of flexibility), 19, 20–1, 278, 292, 301, 330, 335, 347, 349, 367, 392–3, 455, 471, 477 (note), 486, 490–1, 497; “cake”, 21; expanding into, 492; herding, 476, 496; range, 19, 21–4, 26, 31; room, 21–3
 forest land, cleared, plowing of, 266
 Forestry Boards, County, 263
 Forestry Conservation Acts (1903, 1923, 1948 and 1980), 260
 Forestry, National Board of (*Skogsstyrelsen*), 264
 forestry policy: *Ends and Means in Forestry Policy*, 261
 forestry operations: burning ground vegetation, 266; clearing away of post-logging debris, 267; logging (cutting), 263, 265; plowing, 266; replanting, 266
 forests: Church-owned, 260; company-owned, 260; difficult to regenerate (*svårföryngrad skog*), 264; protected (*skyddsskog*), 264; State-owned, 260
 Frank, A.G., 239; metropolitan-satellite (center-periphery) paradigm, 239
 Gällivare-Malmberget mines, 240
 gathering operations, 68, 211, 436; early-autumn, western, 227; wage for, 460
glesbygdsproblemet, 293, 413
 goats, 175, 211
 Graan, Olaus, Governor, 83, 409
 graduated vote, 334, 386, 429, 433
 Grängesberg, 246; Grängesberg Iron-Ore Company, 247
 Granström family, 67, 124, 309
 grazing (*see also* grazing land, reindeer/grazing land ratio, summer grazing *and* winter grazing), 28, 39, 46–9, 53, 314; area increasing with increasing herd size, 32; capacity, 49, 265–6, 338, 491; competition for, 70, 464; concentration, 41; conditions, 32, 35, 47; in the woodland, 84; mountain, 68; poor, long-term, 48; poor, temporary, 48; possibilities, 141; quality, 41; range, 42; reserves, 29; rights, 75, 77
 Grazing Acts: Act of 1886, 363; Act of 1898, 362–3; Act of 1928, 155–6, 222, 238, 285, 302, 363, 388 (note), 419, 482
 grazing areas, 79
 grazing land, 28, 47–8, 53, 73, 77, 174, 358, 475; collectivization decree for, 79; depletion of, 46; encroachment on, 222, 391, 415; inspections, 323; legal protection of, 45; man-made marks on, 52; mountain, 77; resources of, 30; summer, 49; utilization of, 28, 215
 grazing-reindeer relationship (*see also* resource-consumer relations), 26–7
 grazing territory, 51, 164
 grazing zones, 68; in Tuorpon, 10, 100
 group fission, 197–218, 444
 group formation, 82, 99
 group lists, official, 178–196
 Grundström, 83, 135, 138
 Gruvvisare, Nils-Antaris, 88, 153–4
 Gruvvisare, Olov Amma, 130
 guarding, 152, 177, 318, 321, 443; edge guarding, 500; wage for regular, daily, 460
 Gunnare, Olof Johannes, 184
 Gunnare, Per Andersson, 184, 445
 Gustav Vasa, 73
 Gustavsson, Knut (advisor to the Board of Agriculture), 345, 365, 368, 370
 Haeckel, Ernst, 278–9
 Haeckelianism, 61
Handlingsprogram Rennäring, 243, 295, 325, 334, 341, 389
 Handölsdalens Saameby, 382, 482
 Haraldson, 296
 Härjedalen (*see also* Saamis, Härjedalen), 46–7
 Härma, 229
 Hatt, 35, 41, 67
 headman, Village (*ordningsman-ordförande*), 303, 328

- Hedbäck, Erik (former Saami sheriff), 332, 410
- "Heika Gubben" (see Blind, Henrik Persson)
- helicopters, 453; transport of reindeer carcasses by, 233, 450–1
- herd composition (age/sex composition), 42, 342, 454, 457, 459
- herd management (see reindeer-herd management)
- herd loss in Tuorpon, due to predators, 488
- herd size, 39, 42–6, 48, 53, 161, 163, 217, 271, 485; effect of predation on, 30; optimal, 324; rational, 324
- herder (see also big herder and small herder), 5, 46, 50, 268, 280, 350; active herders (*husbönder*), 121, 325; all herders must belong to a Saameby, 371; and Saamish society, relationship between, 26; extensive, 43; herder and non-herder split, 304–16, 336; herder-farmer relations (conflicts), 46, 53, 206; herder's rifle, 228; herder-settler relations, 78; hunting and fishing rights of, 354, 390; intensive, 36, 52; partial, 93; rational limit in, 456; specialized, 93
- herding (see also reindeer-herding), 36; and holon, relations between, 27; arctic, semi-nomadic, 66–7; compatibility between, and farming, 283; extensive, 46; over-extensive, 318, 476, 503; over-intensive, 44; partial, 70, 81; privileges, Saamish, 353; rights, 350, 352; summer, 41; technical facilities for, 391; terms, 38, 499–508; winter, 41
- Herding Act of 1971 (RNL), 7, 11, 27, 235, 242, 285, 302, 316, 363, 385–92, 402, 419, 429, 467, 472, 478
- herding cycle, 35
- herding determinants, basic relations between, in herd management, 9, 11; herding determinism, 509
- herding eligibility, 304–16, 418
- herding, extensive (*luopos pãtsãĩ*), 9, 34
- herding families, mountain, 42
- herding fee, 332–3, 360, 365, 383, 461–3; non-deductibility of, in tax declaration, 377
- herding form, 35, 39, 42, 49, 51, 53, 81, 83; and climate, interplay between, 55; climatic determination of, 54; extensive, 40, 83; Jokkmokk form during the 18th century, 35; seasonal variations of, in Sweden, 54
- herding ideals, current, 11
- herding, intensive (*tjuonkes pãtsãisuihto*) (see also intensive herding), 9, 35, 37, 42–3
- herding law, 11, 14, 22, 32, 39–40
- Herding Regulations (see *Byordning*)
- herding rights, 380, 420; hunting and fishing rights, 382
- herding, specialized, 10, 66, 69, 70, 82
- herding systems, 78
- herding technique, 82
- herding transitions, 474–97
- hierarchy, 18
- hierarchical systems, 16–19, 31, 454
- hindrances, natural (*oaggeh* or *oag'ge*), 51, 430; land with (*oag'gas aednan*), 51; land without (*loukomis aednan*), 51
- hired hands, 131, 389
- historical context, uniqueness of, 39
- Hjern, 352
- Hjort, 65
- hobby herders, 300, 334, 372, 381, 435, 464–5
- holism, systemic, 16
- holistic approach, 285 (note)
- holistic principles (see also Bateson, Gregory), 16
- Holmbäck, Åke, 60, 71, 98, 279
- holons, 18, 20–1, 24, 27, 468
- homeostasis, 18, 29, 31, 360, 494; relative, 19; homeostatic checks, 26; homeostatic circuit, 26; homeostatic controls, 372, 469, 472, 475, 480, 482, 486; the State's homeostatic control, 477; homeostatic devices, 48, 479; homeostatic mechanisms, 18, 21–2, 30, 41, 48, 468, 482; homeostatic punishment, 473; homeostatic relations, 18; homeostatic restraints, 486
- homeostats, 22, 48
- hoof disease, 44
- Hoppe, 65
- Hotti, Lars Nilsson, family, 147–9, 174, 176, 181–2, 201, 205
- hubris, 494
- Huljo, Anders, 116
- Hülphers, 61, 70
- Hultblad, 10, 14, 37, 43–4, 60, 65–74, 77, 81–3, 94, 96, 111, 392–3, 480, 501, 505

- hunters, 152, 438
 hunting: moose, 216, 233; wild reindeer, 65
 husbandry, 36; extensive, 37–8; form, 42; forms of meat and milk consumption, 45; intensive, 37; milking form of, 43–4, 68; terms, 38
 Hutton & Cohen, 39; “spurious causality”, 452
 hydro-electric power, 221, 241, 251–58, 421–3; dams, 39; industry, 30; potential, 28
 identity determinant (*see* ethnic identity)
 illegalized poverty, problem of, 295, 299, 356
 industrialization of the north, 245, 296
 Ingold, 26, 35, 47, 393, 400–1, 480, 506
 innovations, 52, 67
 insects: control in forestry, 263; pests, 126; plague, 51, 53; reindeer’s sufferings from, 40; smudge pots to drive away, 507
 instinct, 503–4
 instinct-and-restraint school, 502–3, 505
 intensification, 217
 intensive era, 82
 intensive herding (*see also* herding, intensive, *and* reindeer management), 10, 46, 67–8, 82, 499–504, 507–09; degeneration of intensive-herding skills, 48; era of, in Jokkmokk area, 81; expertise, 49; milking, 10
 intensive spiral, 476, 480
 intensive-management methods, 83
 intensive–extensive continuum (scale), 11, 39, 44, 54, 70, 427; transition from intensive to extensive forms, 10
 intensive–extensive degree, 55
 intensive–extensive oscillations, 12, 480
 intensive herding (*see also* herding, intensive), 46, 48; transitional herding, 411
 intensity (*see also* herding, intensive, *and* intensive herding), 35, 41, 43–4, 54, 180, 210, 224, 443; breakdown of, 48; intensive group, 35; intensive period, 35; winter, 35, 431
 interactionism, 282–4, 291, 294, 298
Invandrare och Minoriteter (Immigrants and Minorities), 395–6
 iron-and-steel industry, 240
 islands along the Norwegian coast, used for summer pasturage, 51
 isolationism (*see also* interactionism), 294; dilemma of, and interactionism, 282–3, 295
 Jäkkåkaska herders, 13
 Jäkkåkaska Village (Saameby), 76, 102 (note), 135, 153, 186, 190–2, 203, 208, 430
 Jälli corral (*see also* corral), 165, 193, 447
 Jämtland, 78
 Jannes, 119
 Johansson, H., 325, 428, 488
 Johansson, Sven (LKAB chief), 250
 Jokkmokk, 9–10, 12, 14, 51, 54, 59, 65, 68–70, 75, 256, 394, 411; last, untouched waters in (Sitojaure Lake), 422; local authority (*kommun*), 257, 416; local-authority area, 3, 270; Winter Fair in, 153, 421, 423
 Jokkmokk herders, 10, 108, 156; classic, intensive-herding form, 10; group divisions, 108; intermarriages with Swedes, 414
 Jokkmokk Kaila Saamis (*see also* Saamis, Jokkmokk Kaila), 408–415; learned new techniques from relocated northern Saamis, 409
 Jokkmokk–Karesuando Saamis, differences between, 408, 410; split between, 445
 Jokkmokk–Karesuando intermarriages, 408
 Jokkmokk parish, 3, 72
 Jokkmokk Village, 95
 Jukkasjärvi, 44
jordägarandel (land-owner’s portion), 247
justitieombudsman (Parliamentary Commissioner for the Judiciary and Civil Administration), 248, 322
 Kabla Saamis (*see* Saamis, Kabla)
 Kaalasvuoma Lappby, 322
 Kalix River, 61, 254
 Karatj Lake, 95, 130, 140, 188, 210, 274
 Karats, 201, 210, 223, 441, 441 (note)
 Karesuando, 3, 147, 160 (note), 293 (note)
 Karesuando families, 146, 149, 182, 189, 412

- Karesuando herders, 14, 122-3, 146, 172-3, 186 (note), 412, 414, 416
 Karesuando reindeer, 150
 Karesuando Saamis (*see also* Saamis, northern, *and* Jokkmokk-Karesuando differences), 51, 121, 144-5, 148, 150-3, 155-6, 185, 198, 216, 348, 408-11, 414-15, 507, 509; herding form, 508
kårn fly, 55, 92
 Kaska Tjavelk area (zone), 96, 101, 137 (note), 207-9, 212, 217
 Kaska Tjavelk Group, 157, 164, 174, 181, 188, 194, 445, 447-8; reindeer, 207, 220; sweep operation, 221
 Kaska Tjavelk herders, 115-16, 169, 202, 206, 209, 213-15, 221, 224, 226-7
 Kaska Tjavelk Saamis (*see* Saamis, Kaska Tjavelk)
kåta, 12, 60; tent *kåta*, 126, 159, 409, 411; double-arch variety, 200; turf *kåta*, 141, 159, 193, 200, 409
 Kåtnjunjes reindeer, 181
 Kautokeino, 145, 407, 503; "Kautokeinization", 407, 411-12; pastoralists, 284; Saami Institute at, 400; uprising of 1852 at, 408
 Kautokeino families, 145
 Kautokeino Saamis, 145, 412
 Kerkevarer herders, 171, 182; *kåta*, 409; reindeer, 171
 Kerkevarer silver mine, 73
 Kihlstedt, Lucie, 83, 119
 kinship structure, bilateral, 5; correlated with extensive reindeer herding, 5
 kinship structure, lineal, 5; correlated with intensive reindeer-herding, 5
 Kiruna, 246
 Kitok, Ivan, 294, 385-6
 Klefbeck, 314-15
 Klein, D., 47
 Klockhoff, 75
klövje (to travel with pack reindeer), 126
 Koestler, 18-19
 Kola peninsula, 68
 Komi-Saami encounter in the Soviet Union, 286
 Könkämä Village, 5; Saamis, 283
kontora (booths), 441
 Korhonen, Olavi, 1 (note), 64
 Kosmo, 491
kronobonde (tenant paying rent to the Crown), 72
 Kuhmunen, Henrik, 423
 Kuoljokk, Anders, 116, 130-1, 135, 137
 Kuoljokk, Matthias, 122, 122 (note)
 Kvikkjokk, 139, 230, 233, 450
 Labba, Tomas Ammasson, 146
 Laestadius, Petrus, 4, 43, 61, 83
 Laevas Saameby, 250; action group, 255
 Lainiovuoma Village, 71, 503
 land encroachment (*see also* hydroelectric power), 11, 31, 237-74
 land ownership: criterion of Saami rights, 307; rights, 82; Saami land rights, 248; system, 246
 Land Register (*jordebok*), 74, 78
 land utilization (use, usage), 53, 99, 435, 448, 499-500
 Lapland (*see also* Sameätnam), 487
 Lapland ore-fields, 245
 Lappby (*see also* Saameby), 5 (note), 59, 65, 73, 79
Lappfogde (Lapp sheriff) (*see* Saami sheriff)
 Lappmark Line, 5, 75
 Lapps (*see* Saamis)
lappskatteland, 72
 Lapp tax, 77
 lasso, 88, 410
 Lastak, 169, 171-3, 175, 179-80, 186, 195, 199-200, 202, 207-8
 Laula, Elsa, 310, 310 (note), 312
 Leach, 25
 Leeds, 44-5
 legal definition of "Lapp", 80, 305
 Lévi-Strauss, 25
 lichen grazing, 161
 Lillselet, 12, 127, 139, 173, 180, 195
 Linder, 64, 74, 83, 409
 Lindhagen, Carl, 133, 177 (note)
 Linné, Carl von (Linnaeus), 83, 87, 90
 Lithander (chief of Reindeer Management Department in Norrbotten), 381, 390
 Little Lule River (*Lilla Lule älv*), 61, 140
 living standard-culture dilemma, 293, 331, 342
 living standard of herders, 288, 351, 356, 472, 479
 Ljunga, 201
 Lule Alep, 170

- Lule Lappmark, 60, 66, 69, 72, 96;
westerly oriented, mountain herding
Villages in, Tuorpon and Sirkas, 95;
easterly oriented, forest herding Vil-
lages in, Jokkmokk and Sjøkkmokk,
95
- Luleå, 14
- Lundius, 83
- Lundmark, 65, 73, 238–9
- Lundqvist seaplane service, 204, 211
- Luokta Mavas herders, 13, 199
- Luokta Mavas Village, 101, 126, 150,
170, 224; reindeer, 191
- Luossavaara-Kiirunavaara AB
(LKAB), 246, 251
- Luvos, 65, 205, 210–11
- lynx, 49, 197
- magnesium, 251
- Magnusson, Nils, 250
- Maitum, 65, 140, 158, 190, 201, 205–6
- Makridin, 229
- Malmberget, 246
- Malmström (Saami sheriff), 152, 159–
65, 171, 176–7, 181, 193, 459
- Manker, 4, 6, 37, 54, 83, 151, 172, 188
(note), 189, 206, 215, 408, 507–8
- man-predator-reindeer relations, 50
- market developments, 39
- marking (*see* ear-marking)
- Meadows, 21, 33
- meat consumption, 43
- meat production (*see also* reindeer
meat), 5; maximization of, 29, 48,
336–7; meat-price subsidy, 488
- Mebius, 4
- mechanization, 373
- merchants, 74
- migration: autumn, 13, 141, 429; pat-
tern, 82, 173; Nuortvalle Group pat-
tern, 125; western pattern, 156; rein-
deer migrations, 501, 504–6; routes,
97, 99, 250, 430; scheduling, 70, 77,
82, 183, 196, 445; winter, 141
- milk, 55; powdered, 175
- milking, 42–3, 67, 154, 474, 509; au-
tumn, 160; capacity, 45; corrals, 410;
efficiency, 474; milking economy,
43, 65–70; vocabulary, 67
- Mine Inspector's Office, 247
- mineral deposits, 28
- mineral ores, forced transport of, 69
- mineral resources, 245
- mining, 240, 245–51
- mining-claims system, 246
- missile base, 223
- missile-field fence, 223–5, 227
- mixing of herds, 153, 205, 221, 410
- mobility, 499, 501–4; degree of, 43;
high, 501–2; low, 501–2
- modernization: of reindeer-herding,
197–8, 235, 320, 466; of the timber
industry, 209
- monoculture, 5
- moose-hunting (*see* hunting, moose)
- Mörner, 72
- mortality of reindeer, raised, 48
- motorbikes, 437, 437 (note)
- mountain grazing land (*see also* grazing
land, mountain), 66, 68
- mountains with constant snow
(*tsuoptsa-vare*), 55
- museums, 14
- mushrooms, 91
- Nasafjäll silver mine, 73
- National Environment Protection
Board (*Naturvårdsverket*), 243, 269
- National Parks, 248, 268, 270; Padjel-
lanta, 204, 222, 257, 272; Padjelanta
Trail, 272
- National Swedish Tax Board (*Riks-
skatteverket*), 376
- nature-conservancy zones (*naturvårds-
områden*), 264
- need and greed, 278, 283, 299, 374; de-
cision on balance between, 289
- negative entropy, 17
- Nickul, 2
- Nielsen, 71
- Nielsen and Nesheim dictionary, 54
- njalla* (one-legged storage construc-
tion), 136
- nomad school, 157
- nomadic team (*flyttlaget*), 59
- nomadism (*see also* whole-nomadism
and semi-nomadism), 16, 76, 281
- Nordic Saamis' Cultural and Political
Program, 395, 471
- Norrbotten, 78–9, 241; County Admin-
istration (*länsstyrelsen*), 238; County
Administration's overall plan for the
mountains in, 289
- Norrbottens Järnverk*, 241
- Norrbottens Kuriren*, 251, 272
- Norrlands handlingar*, KA, 60
- Norrlands lappmarker*, KA, 65

- Norrländska Socialdemokraten*, 250–1, 273–4
- northern Saamis (*see* Saamis, northern)
- Norway, 1, 3, 60, 69, 73; herd-tameness grade in, 13; herding form in, 13; migration techniques in, 13; topography in, 13
- Norwegian Finnmark, 13
- Norwegian Saamis (*see* Saamis, Norwegian)
- Norwegian-Swedish border, 5, 75, 81, 144; conditions on, 122
- Norwegian-Swedish Grazing Commission (*see also* Swedish-Norwegian Reindeer-Grazing-Land Commission [1907]), 122, 144; grazing controls, 324
- Nuirenus, 83
- Nuortvalle Group, 124–133, 137, 140–2, 162, 191, 227, 435–51, 510; herd size, 436; old Nuortvalle Group (Pära-Petter Group), 435; poor, internal-recruitment prospects, 435; reindeer, 207, 216; work-force depth, 435
- Nuortvalle herders, 114, 116–18, 226, 461–4
- Nuortvalle-Kaska Tjavelk zone, 437
- Nya Beskattningen av Rennäringen, Den* (new taxation system for herders), 351, 359, 378–9, 390, 431, 439
- Nylén, 254
- occupation-culture split, 290–1, 297, 304, 356, 391, 393, 395, 419
- Olivecrona, 311
- Olofsson, 75
- Olsson, 183
- Omnia brothers, Anders, Nils and Ola, 213
- Omnia, G., family, 147
- Ommas, from Kitajaur, 441, 446
- Omnia, Lars G., 446, 446 (note)
- Omnia, Mårten Nilsson, 184
- opencast mines, 249
- organism, 16, 468, 470
- Orpus family, 447–8, 448 (note); Johannes, 446 (note); Inga, 151
- orthography, 406; northern-Saamish, 406
- Öström, 65, 256
- over-assertiveness (*see* runaway systems)
- overcrowding, 79, 156, 485
- over-exploitation (*see also* grazing lands, depletion of), 46
- over-extensivity, 162, 286, 427, 434, 480; characteristics of, 476
- overgrazing, 47–8, 343, 480
- over-humility (*see* dissolution)
- ownership rights in mineral deposits, 246
- oxen, 69; transport, 84, 129, 164
- ox slaughter, 234, 433
- pack caravan, 142 (note), 168, 172, 178, 210
- pack oxen (*see* oxen, transport)
- Padjelanta area (*see* National Parks)
- Paine, R., 36–7, 45–6, 138, 284, 293, 507
- Pajala, 256
- pan-Saamish movement, 394, 400–15, 418, 454, 479, 494; conflict between, and colonizers, 412
- parallel theory, 80, 302; parallelism, 281
- Parffa, Isak, 164, 174, 204, 438–9
- Parffa, Nils Thomas, 12
- Parffa, Per Persson (“Parffa Gubben”), 123–4, 139–40, 148, 169, 183
- Parka camp, 126, 170–3, 175, 179, 186, 195, 199, 201, 208, 213–14, 226; gathering sweeps from, 449
- Parka crosswise fence, 125, 128, 165, 168, 170, 176, 198, 224, 439
- Parka (-Lastak) separations, 168, 171–3, 176, 187, 193, 199, 204, 207–8, 213, 221, 226–7, 233, 449
- Pärlälven River, 95, 438; Pärlälven and Peuraure-Karatj Lakes Project, 258
- Pärlan, 139
- Pärtnak, 201, 205
- part-time jobs, 217, 294; work for farmers, 81
- Pasta Project, 258
- pastoralism: Lapp reindeer, 37; Chukchi reindeer, 44
- pastoralists, 47–8, Kautokeino, 284
- pasturage shifts, 206; autumn, 49; winter, 49
- pasture land for reindeer-herding, 7
- Paterson, Sten Sture, 98, 189, 196, 217, 219
- Pavval, Erik Axel, 126, 137, 224
- Pavval, Erik (“Norske Erik”), 190
- Pavval, Lars Anders Ammasson (“Pava-Lasse”), 103, 132, 138–40, 148, 162, 168, 183, 480
- Pavval, Nils Petter Persson (“Pära-

- Petter"), 114, 124, 125 (note), 127, 130, 137, 160-2, 174, 442
- Pavval, Per Anders, 115, 119, 126, 135, 165
- Peace of Nöteborg (1323), 65
- "Peace in Sarek", 221-2, 253, 257
- Pehrson, R., 4, 5, 71, 509-10
- permanent houses, 311
- Peuraure Lake, 96, 125, 139-40, 169-70, 212; Peuraure-Karatj Lakes route, 139, 169, 451
- Physical Planning and Building, National Board of (*Statens Planverk*), 243
- physical planning, State, 242-5
- Piltto family, 155, 190; Per Jonsson, 146
- Pirak, Anta, 54, 83, 118, 124, 128, 130, 132, 136, 153
- Pite Lappmark, 60, 66; forest Saamis of, 54
- Pite River, 95, 168
- Pittsa, Lars, 386
- pluralism, 397, 497
- plurality, 495; cultural plurality, 496
- police era, 76, 80, 277
- Porjus dam, 241
- poverty line, 300
- Prawitz & Cramér, 305
- predation, 30, 45, 48, 50, 228; pressure of, on herd management, 50
- predator policy, 438
- predator problem in Tuorpon, 490
- predators (*see also* bear, eagle, lynx, wolf and wolverine), 39, 41, 49-50, 53, 66, 68, 85, 175, 228-9, 373, 432, 437, 443, 456-7; legal protection of, 235; man-predator-reindeer relations, 50; predator concentration, 36
- predictive ability, 32
- Predikstolen ("The Pulpit"), 138
- production rationalization (*see also* reindeer-herd management, rationalization of), 335-48
- profit, distributable, 369, 374-5; impracticable for Saameby to make, on account of double taxation, 372
- profitability, 478; maximization of, for the herding industry, 317
- "Projekt Jokkmokk", 273
- property with common responsibility (*samfällighet*), 364-74
- protective legislation, 353, 358
- pulp mills, 259
- Puollemäive, 125-7, 141-2, 169-70, 173-4, 198, 200-1, 209-11, 216-17, 219
- quartz, 251
- Qvigstad, 67
- Qvigstad & Wiklund, 59, 74, 77
- Rakka, 173, 175, 180, 195, 198, 201-2, 208-11, 216-17, 219
- Randi (Randijaur), 59
- Rappadalen, 422
- Rasbiologiska Institutionen* (Institute of Race Biology), 1, 279
- rational herding: ideals, 11-12; program, 11, 496
- rational husbandry, 338-46; Swedish method, 339
- rationality, 317, 326, 472, 477 (note), 497; conflicts, 495; considerations, 495; herding, 352
- rationalization of herd management (*see also* reindeer-herd management, rationalization of), 451-66
- rationalization ideology, 10, 277
- rationalization policy, State, 11, 277-303
- rationalization program, State, 11, 351, 427
- rationing system, 180
- Rautare, 128, 204, 209
- Rautasvuoma Saameby, 250, 322
- recreation: recreation areas, primary, 269; Recreation Bureau (*fritids-nämnd*), 268; Recreation Inquiry, 269
- regenerative capacity: of forest, 259; of herds, 45; of resources, 301, 496
- regenerative loop, 474
- reindeer, 39, 41-2; and herder, contact between, 34, 41; and herders, relation between, 9, 26-7; and man, relationship between, 34, 428; bulls, 42, 378, 458; cows, 42, 45, 378; pregnant cows, 84, 178-9; forest, 55, 506; killed by predators compensated by the State, 373; mountain, 55, 504, 506; ownership of, 68, 312; response of, to increasing population density, 47; sufferings from insects, 40; use as transport animals, 42, 69, 204, 212
- reindeer count, yearly, 375, 431; lists, 14, 387
- reindeer/grazing land ratio, 46, 48,

- 237, 454-5, 483; reindeer and grazing, relation between, 9
- reindeer-herd management (*see also* extensive herding *and* intensive herding), 5, 14, 16, 24, 26-7, 36, 42, 162, 493; basic determinant relations in, 31; extensive (modern), 34, 37; formation, 32; intensive (traditional), 34, 37; predominance over other sources of livelihood, 43; rational, 9, 29, 30, 278; rationalization of, 277, 287, 317-48; enforced rationalization, 379; Saamish rationalization, 347; Swedish rationalization, 347; terminology of, 499-510
- reindeer herders, 1
- reindeer-herding (*see also* herding), 14, 28; arctic, semi-nomadic, 65; difficulties facing, 493; methods of rational, 11; program for rational, 9; the Swedish State no longer needs, 473, weakening of, 470
- reindeer-herding authorities, 14; Reindeer-Herding Administration, Swedish, 14
- reindeer-herding, control of, 9, 41
- reindeer-herding law (*see* herding law)
- reindeer hides, 55
- reindeer horn, 233, 457-9; prices, 340 (note), 467; sale of, to the Orient, 346 (note)
- reindeer-hunting, illegal, 256
- Reindeer Industry in Sweden, The*, 321-2
- reindeer meat, 242, 341; government subsidies for, 378, 488; no index-regulated price guarantees for, 488; prices, 488; production, 242, 286; veterinary inspection of, 340
- reindeer-milking (*see* milking)
- reindeer moss, 46-8
- reindeer population, 47, 455; ceiling level in the 1960s, 47; "explosion" of, 29; of Saameby, 388; rational figure for, 324; rational limit for, 454; rise of, 48; runaway, 26;
- reindeer research, 333; into reindeer diseases, 326
- reindeer slaughter (*see* slaughtering of reindeer)
- reindeer-sled caravan (*see* sled caravan)
- reinforcement gap, 444, 475-6, 488-90
- re-intensification, 444-5, 466, 476, 489
- re-intensivity, 480
- relations of systems and structure, 16
- Rennäringsnytt*, 244, 321 (note), 382, 437
- Rensund, Lars, 285, 375, 407
- Renutredningen*, 66, 288, 320, 332, 394
- resource allocation, 82
- resource-consumer relations, 26-8, 30; critical limits in, 30; grazing/reindeer, 27; herders/Saamish society and culture, 27; homeostatic mechanisms in, 30; problems (conflicts) in, 281; ratio in, 26-7, 346, 379, 391; reindeer/herders, 27; Saamish society (minority)/the Swedish State (nation), 27; tendencies to dissolution (over-humility), 30; tendencies to runaway (over-assertiveness), 30
- resource exploitation by Saamis, 5
- resource-extraction industries, 238
- resource management, policies of, 493
- resource redistribution, 31
- resource utilization, 353, 497; efficiency in, 302
- reverse discrimination (*see* discrimination, reverse)
- Rheen, 69, 73, 83
- rights, Saami (*see* Saami rights *and* herding rights)
- road, new, rendering a certain grazing area unusable, 40
- roadless mountain regions (*see* unbroken mountain regions)
- roads, 219; road network, 231; road construction, 255
- Robson, 83
- Rönn, 2
- Rovijaure Lake (Rovi), 126-7, 158-9, 170, 193, 195, 198-9, 226, 449
- runaway systems, 18, 29-30, 244, 244 (note), 302, 334, 361, 374, 471, 493; runaway population growth, 31; tendencies to runaway (over-assertiveness), 30
- Ruong, I., 2, 4-5, 37, 41, 43-5, 54, 60, 72, 83-5, 87, 89-91, 119, 122, 134, 151, 175-6, 280, 311, 332, 364, 510
- rustling, 284
- Saameby (*see also* Lappby), 5 (note), 11; as an organism, 26; budget, 368; concession, 5; deputy headman, 327; earmark, 344-5; forest, 5; headman, 327; herding members, 31; legal de-

- sign of, 352; legal status of, unclear, 377; membership categories, 110 (note), 380-1, 381 (note), 485; membership eligibility, 304-16, 358; mountain, 5, 75, 265; no true membership list for many Saamebys, 390 (note); not permitted to engage in economic activities other than herding, 272, 371; privileges, 358; Saameby resources/Saameby members $\times$ consumption (R/SC) ratio, 485; self-rationalizing Saameby, 379-93, 472; supporting members, 30, 418-21, 467; treasurer, 327; treasury, 355; voting power, 328, 371; voting rights, 110 (note), 360, 380, 485
- Saami: definition of a, in the 1980 Saami Political Program, 400, 402
- Saami Fund (Samefonden), 253, 307, 351
- Saami herders (*see* herder)
- Saami Institute (*see* Kautokeino)
- Saami Law Committee, 78-9
- Saami mortality statistics, 320
- Saami Political Program 1980, 395, 400
- Saami privileges, 304
- Saami rights (*see also* herding rights), 470
- Saami settlement area, 2
- Saami sheriff administration (*fogde*), 73, 77-8, 142, 147, 328; instructions of 1695, 74
- Saami-Swede intermarriage (*see also* Jokkmokk herders *and* Karesuando herders), 414
- Saami-Swedish relations: differences (conflicts), 364, 413; last major phase of, 277-303
- Saamis, 1, 3-4, 14, 67; all Saamis in Sweden Swedish citizens, 9 (note); Arvas, 43, 45, 143, 165, 193; Bartute, 45; bilateral kinship structure, 5; conversion to Christianity, 4; eastern, 81; Kabla, 99, 143, 186; Kaska Tjavelk, 104; Kemi, 59; Mavas, 193-4, 199; Norwegian, 80-1, 308; resource exploitation by, 5; settlement, 81: southern, 418; Swedish, 80-1
- Saamis, fishing, 4, 80, 306
- Saamis, forest, 3, 69-70; distinction between forest Saami and mountain Saami, 280
- Saamis, Härjedalen, 46
- Saamis, herding, 4, 31, 75; and Saamish culture, relations between, 9; and Saamish society, relations between, 26-7; and non-herding Saamis, relations between, 290
- Saamis, herding and farming, 31
- Saamis, hunting and fishing, 31
- Saamis, Jokkmokk Kaila, 69, 106-7, 234, 363
- Saamis, mountain (*see also* Saamis, forest), 3, 69-71
- Saamis, non-herding (*see also* Saamis, herding), 13, 290
- Saamis, northern (*see also* Karesuando Saamis), 121, 416; arrival of, in Tuorpon, 10; encroachment by, 460; infiltration by, 94; relocation to Tuorpon, 9, 11, 106
- Saamis, Suenjil Skolt (*see also* Skolts), 58
- Saamish ancestry, 304, 485
- Saamish character, 405
- Saamish craftsmen, 273
- Saamish culture, 23, 29-30, 277, 289, 292, 312, 348-51, 357-8, 405, 469, 476, 479, 494, 496; protection of, 355, 357; survival of, 478
- Saamish Folk High School at Jokkmokk, 399, 413; Saamish-language teachers' strike at, in 1978, 416-18
- Saamish handicrafts, 402; handicraft workers, 458
- Saamish identity (*see also* ethnic identity), 358, 394, 418
- Saamish language (*see also* orthography), 2-3, 54, 305, 400; central, 3; eastern, 3; Lule dialect, 3; northern, 3, 54, 417; southern, 3, 417
- Saamish legal rights, 30, 61
- Saamish minority: and the Swedish State, relations between, 27; incorporation of, into the Swedish State, 27; rights, 471; minority movement (struggle), 23, 29-31, 473; minority politics, 470-4
- Saamish nationalism, 405
- Saamish "poor proletariat", 310, 350
- Saamish population, 4, 296-7; in Finland, 4; in Norway, 4; in the Soviet Union, 4; in Sweden, 4, 402
- Saamish resources, 30
- Saamish society as a holon, 26
- Saamish Studies, chair of, at Umeå University, 399

- Saamish-Swedish relations (*see also* colonial encounter), 9
- Saarivuoma Village, 71, 122
- sabotage of dam construction, 406
- Sagat* (Norwegian Saamish newspaper), 404
- Saggat Lake, 139–40, 169
- Saint Matthew Island, 47
- salmon tax, 73
- Sameätnam (Lapland), 5, 60, 245
- Samebyarnas Redovisning av Rensköt-seln Markanvändning*, 274
- Samefolket* (Swedish Saami newspaper), 12, 30, 46 (note), 79, 89, 255, 294, 378, 382, 396, 403, 405, 407, 414, 417, 420–1, 423, 438–9, 458–9, 482–4
- Samenuorra* (Swedish Saami newspaper), 396
- Sameprodukter AB (Simonson Company), 231–2, 340;
- Samernas Vita Bok*, 79, 278–9
- Sameslöjd och Material AB, 459
- Sarri, Anders Olsson, 44
- Saulo, Pavva Anders Nilsson, 118
- sawmills, 259
- schablontaxering* (taxation based on rough estimates), 375–6, 439
- Schefferus, 4, 83
- Schnitler, Major, 73, 75, 80–1
- seaplanes (*see also* Lundqvist seaplane service), 211, 273
- seasonal changes, 51, 53; spring, 51; winter, 51
- security, herding, 42
- Sehlstedt Report, 253
- selective breeding, 29, 343–4, 343 (note), 454, 457, 459
- self-correctiveness (*see* systems, self-correcting)
- semi-nomadism (*halvnomadism*), 43, 66, 70
- separations, 35, 68, 155, 161, 213; autumn, 200; early-autumn, at Parka, 175, 227; late-summer, 187 (note), winter-separation corral, 226
- settlement, 310; easterly shift in, 196, 217, 219, 227; pattern of Saami, 183
- settlers, Swedish, 66, 68, 70, 153; families, 413
- shaman (*noai'di*), 4
- shamanism, 4
- Sijtovuoma, 64
- Simonsen, Poul, 2
- Simonson, John (“Lapp-Simon”), 231–3
- Simonson slaughterhouse company (*see* Sameprodukter AB)
- Sirkas herders, 13
- Sirkas Saamis, 74
- Sirkas Village (Saameby), 75–6, 222, 421; grazing cycle and migration of the Saameby's reindeer, 421
- sita* (for definition, *see* pp. 59–60 and p. 109), 61; collective winter, 69
- sita* groups (“big groups”), 51, 142
- sita* herding units, 51
- sita* model, 59
- Sitojaure Lake, 257, 421–3
- Sjaggo, Anton, family, 126–8, 194 (note)
- sjaljo* (the area around the *kåtas*), 88
- Sjokksjokk Village, 95
- Skalka Lake, 139–40
- Skalojaure Lake, 159
- skattebonde* (independent peasant proprietor), 72
- Skattefjäll Case (*see* “Tax Mountain” Case)
- skattelapp* (Saami taxpayer) (*see also* tax-Lapp), 72
- Skellefte River, 3
- Skeltevere mountains, 127, 170, 199
- Skibotn River bridge, 403
- Skolts, 60; *byalag* of Skoltish type, 60; Skoltish *sit*-concept, 60; Suenjil Skolt Saamis, 59
- Skum, N., 54, 83
- Skuncke, 54
- slaughtering of reindeer (*see also* bull slaughter and calf-slaughter), 35, 129, 155; enforced, 153, 482; policy, 212, 440, 457; transport trucks for, 46
- slaughterhouse industry, 203, 230, 339, 341, 456, 483
- sled caravan, 84, 142 (note), 168, 212, 216 (note)
- sled supply run, 170, 202
- small herder, 43, 55, 203, 294, 299, 315, 331, 333, 345, 350, 366, 379–80, 383, 460, 464–5
- smudge pots, 505
- Snell & Snell, 508
- snow cover, 131, 158, 180, 214
- snow terminology, 54
- snowmobiles, 209, 436, 440; patrolmen on, 443; rental agencies, 270; subsidies for, 478; tracks, 270
- social Darwinism, 79, 279; social Darwinists, 278

- Solem, 60
 Sörkaitum Saameby, 122, 385
 South Africa, 396; apartheid policies, 396; Boers in, 396
 Soviet Union, 1, 82 (note), 330; herding in the, 52
 spraying of chemical poisons to kill deciduous trees, 262
 spring (*see also* seasonal changes), 84–88; thaw, 84
 sprintar-Lapp, 72–3
 Stalajokk Project, 257
 Staloluokta (Stalo, “troll inlet”), 12, 138, 141, 168, 179, 194, 194 (note), 215, 432; high-summer camp at, 446
 State Power Board (*Vattenfall*), 221, 252, 421
 “stealing”, 282
 Stenberg, Karin, 78, 153, 177, 279, 319
 Stenträsk (“stone lake”), 13, 139, 220, 432
 Stephansson, 249
 structural rationalization (*see also* reindeer-herd management, rationalization of), 323–35, 388, 428
 structuralist school, 25
 structure, 24
 subsistence minimum in reindeer, 237, 299–300, 313, 315, 327 (note), 338, 359, 389, 434, 475–6, 478–80, 486
 summer, 88–90
 summer herding (*see* herding, summer)
 summer land (*see also* grazing land, summer), 52, 68, 189, 195, 219
 Sundin, 252, 255
 supportive jobs, 300–3, 349
 Svensson, 295, 471, 473
 Swartz, 83, 87
 Sweden, 1, 3, 60
 Swedes: “new Swedes”, 413
 Swedish colonialism, 306
 Swedish Forest Service (*Domänverket*), 204
 Swedish–Norwegian Reindeer-Grazing-Land Convention (1907), 108
 Swedish Saamis’ Parliamentary Organization (SSR), 237, 351–2, 395, 416; campaign to separate herding-compensation payments from State programs of Saamish cultural aid, 291; Conference of 1973 in Åre, 272
 Swedish Society for the Protection of Nature (SNF), 422
 Swedish Supreme Court, 7, 61, 71, 79, 400
 Swedish Touring Club (STF), 204, 422
 sweeping operation in late autumn, 195, 216
 systemic interdependence, 288
 systems analysis, 16, 25
 systems, self-correcting, 17, 469; formation of, 20; self-correctiveness, 18; self-corrective restraints, 24; self-corrective unit, 26
 taiga, 5
 Takman, 351
 Talma, 412
 Talvatis, 201
 tameness grade, 32, 34, 41–2, 227 (note), 429, 482
 Tarraättno Project, 257–8
 Tarrekaise mountain complex, 139
 tax collection, 4, 318
 tax collectors, 60, 66
 tax district, 74
 tax-Lapp (*see also* *skattelapp*), 72–4, 76, 79
 “Tax Mountain” Case, 7, 71, 79, 271, 278, 400
 tax system, 110 (note), 263, 335
 taxation, 374–9; taxation era, 76, 277
 taxation system for herders, new (*see Nya Beskattningen av Rennäringen, Den*)
 taxland, 76–9, 362; divisions, 72; holdings, 110; ownership, 98; policies, 72
 taxland systems, 71–2, 77
 Tegengren, 59
 terminology, rationalization of, 346–8
 “thieving”, 284
 Thomasson, Lars, 421
 timber, 28; cutting work in the forests, 373; harvesting technology, modern, 322
 timber industry (*see also* timber), 30, 39, 259–68; rationalization of, 260, 262
 Tjuolta Group, 447–8, 448 (note), 449–51, 462; eastward sweep and migration, 449; Tjuolta zone, 171
 Tjuolta herders, 447–8, 464; westward shift, 447
 Tomasson, Torkel, 34, 46–8, 83, 86, 318
 topography, 39; topographical boundaries, 50; conditions, 32; relations, 53

- Tornaeus, 83
 Torneå area, 5
 Torne Lappmark, 62
 tourism, 39, 204, 268–74, 354; tourist industry, 222
 trade, 4
 traditionalism, 452–3
 traffic accidents, losses of reindeer in, 53
 transportation, 354
träsk (lake), 64
 Tresk, 59, 61–2, 64
 Troms district of Norway, 309
 Trondhjem, 308
 truck transport of living reindeer, 232
 Tsarist regime, 82
 tundra, 5
 Tuoddar, 136, 449
 Tuorpon families, 111, 486
 Tuorpon Group, 74, 124, 188 (note); Kabla Saamis, 124; Kaila Saamis, 124; Karesuando Saamis (*sirtolattjah* or displaced Saamis), 124; Virihaure Saamis (*padjelaha* or highlanders), 124
 Tuorpon herders, 13–4, 94–5, 103–4, 230, 484
 Tuorpon herding, 94, 108, 110, 258; diachronic analysis of, 94, 120
 Tuorponjaur Lake, 59, 61, 64
 Tuorpon mountain (Tuorponäive), 64
 Tuorpon reindeer, 150
 Tuorpon Saameby (*see also* Tuorpon Village), 65, 333, 364, 375, 423, 428; and Swedish production rationalization, 454–9; and Swedish structure rationalization, 459–64; voting system employed at, 433
 Tuorpon stream (Tuorponjåkkå), 64
 Tuorpon swamp (Tuorponmyran), 64
 Tuorpon territory, 96, 98
 Tuorpon Village (Tuorponjaur), 9–10, 13–14, 32, 50, 59–93, 94–104, 106–7, 110–11, 113, 118–20, 155, 234, 248, 254, 267, 274, 344, 506; a Saami from, 45; grazing land (zones), 13, 100, 268; herd management, diachronic micro-analysis of, 9; herd-management transitions, 10; herding groups, 12; herding methods, 12; herding system distinct from that of its forest-Saami neighbours, 10; history of, 14; losses of reindeer to predators, 488, 490; reindeer population, 267, 484; southern border of, 191
 Tuorponjaur Saamis, 64–5
 Turi, Johan, 44, 54, 83
 Udtja herders, 170, 223
 Udtja reindeer, 223
 Udtja Village (Saameby), 223, 467, 467 (note)
 Umeå, 14
 Ume Lappmark, 66
 unbroken mountain regions, 249
 underdevelopment, enforced preservation of, 298
 undernourishment, 47
 “unit of survival”, 16
 United Nations Declaration of Human Rights, 397–9
 Ural Mountains, 1
 uranium, 248; mine at Pleutajokk near Arjeplog, 251
 Utsi, Lars, 421
 Utsi, Mikel, 83
 Utsi, Paulus, 237
 Vacation Act (*semesterlag*), 268
 Valkepää, Anders, 149
 Valli mountain, 450; bull slaughter at Valli, 212 (note), 450
 value-added tax (*mervärdesskatt*), 377
 Vansina, 510
 Vastenjaure Lake, 75
 Västerbotten, 78
 Vesterlund, 127 (note)
 Viejevagge, 126, 128, 159, 164
 Village (*see also* Lappby and Saameby): eastern Villages, 95; Village tax, 77; western Villages, 95
 Village Herding Regulations (*see Byordning*)
 violence, 403, 406
 Virihaure (Viri) Group, 12, 113–16, 131–2, 135–41, 157, 185, 188, 188 (note), 234, 429–35, 460–65, 510; herd size, 436; intensivity maintained in, 433; late-autumn sweep, 220
 Virihaure herders, 112, 461, 464–5
 Viri-Kaska Tjavelk Group, 182, 186–7, 195; herders, 208; merger, 214
 Virihaure Lake, 158; western end, 136, 151, 182, 215, 432, 448
 Viri-Tjuolta Group, 171, 194
 Vorren, 37

- vuoma* (for definition see p. 71), 64;
organization, 71; form, 95
- wage system, 329–30, 333, 365, 367,
377, 383, 460–63
- Wahlenberg, 83, 409
- Walkeapää, Lars, 185, 466
- Water Act, 252
- Water Courts, 252
- wealth storage, 42
- weather, 32
- weeding-out process, 360–1, 380–1
- westward migration schedule, 183;
move, 179
- Whitaker, I., 60, 500, 502–4, 506–7
- “whole-ears” (unmarked calves), 191,
365–6, 373, 390 (note), 463
- whole-nomadism (*helnomadism*), 10,
43, 65–6, 69–70, 82, 143; with inten-
sive milking husbandry, 67
- Widén, Johan (Provincial Governor,
landshövding), 313
- Widmark, H.A., 79, 279
- Widmark-von Düben line, 78
- Wiener, Norbert, 16, 469
- Wiklund, K.B., 1, 43, 60–1, 65–7, 69–
70, 75, 77, 83, 154, 279
- Wikman, Åke (former Saami sheriff),
386
- Wilden, 22, 481, 494–5, 497
- “wilderness enthusiasts”, 422–3
- wild reindeer: population, 68
- winter (*see also* seasonal changes), 92–3
- winter camp, 65, 201; common winter
camp, location of, 221
- winter extensivity (*see* extensivity, win-
ter)
- winter gathering place (*talvatis*), 65
- winter grazing, 49; “bottleneck” of the
grazing cycle, 75; capacity, 30, 343,
491; quantity of, 40; weakest link in
yearly grazing chain, 66
- winter land, 52, 179, 204–5, 213, 220–1
- winter markets, Swedish, 69
- winter *sita* (*see also sita*), 204–6
- winter villages (*byar*), 60, 65
- wireless telephone, 224
- wolf, 44, 49–50, 280; “forest wolves”,
229
- wolverine, 44, 49, 197
- work division, inequalities of, 331–2,
366, 376
- work force, 42
- World Council of Indigenous Peoples
(WCIP), 395, 401
- Wynne-Edwards, 47

- ==== Lappmark line
- - - - - Agriculture line
- Mountain Saameby border
- + + + + + Forest Saameby border
- Mountain Saameby border of traditional use
- Forest Saameby border of traditional use
- ▲— Mountain and Forest Saameby border of traditional use
- Reindeer fence

0 5 10 20 km

SIRKAS

JÄKKÄKASKA

KABLA

TUORPON

LUOKTA MAVAS

SEMISJAUR-NJARG

STÄKKE