On the Bifurcation of Emotion and Cognition in Attitude Formation and Application
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Editor: Hedvig Ekerwald
ABSTRACT


It is well-known to researchers on opinions, attitudes and corresponding behaviour that the behaviour of individuals rarely if ever correlates completely with opinions and attitudes verbally expressed by those same individuals. Intervening external circumstances may prevent high correlations. In this paper certain internal conditions within the given semantic field of an attitudinal definition of the situation will be assumed to explain a large part of those varying degrees of correlation between verbal opinions, attitudes and corresponding behaviour.

Here I introduce the notion of an independent emotive meaning of attitudinal or normative language as an explanation. This notion was originally proposed by the philosopher Charles L. Stevenson (1944: 72 ff). My own adoption and further empirical elaboration of this notion in order to explain various degrees of correlation between attitudes and corresponding behaviour appeared in the late 50’s and was published 1960 in Social Pressures, Attitudes and Democratic Processes.

In view of the fact that this work is little known among contemporary sociologists, and due also to my continued interest and study in this field of research, I have in this paper summarised the main outline of my theory and the methods used to assess the degree of Independent Emotive Meaning of Attitudinal and Normative Language as a factor in social action. The construct validity of the empirical methods which I have developed for measuring the degree of Independent Emotive Meaning is also explored by reference to a theory on the bifurcation of emotion and cognition in contexts of opinion formation and application. In doing this I have also related my theoretical notions to programmes of issue polling, and to the notion of "mature" opinions suggested by Hans L. Zetterberg. Work by the Swiss psychologist Jean Piaget on the moral development of children is also surprisingly found to be relevant in this context. I have also tried to relate my approach to Louis Guttman's studies on the attitude components called closure and involuition.

Key words: attitudes, opinions, measurement, semantic field, independent emotive meaning, normative language, sociology

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Layout: Anders Hökback
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In celebrating the 50-year anniversary 1955-2005 of Scandinavian Sociology it became natural to look back on the developments of years past. Perhaps this is one reason why I was asked at that occasion to submit a paper to a session of the International Institute of Sociology for its meeting in Stockholm in July 2005, with a specific request to revive theoretical approaches and empirical findings of my own from the late 50’s and early 60’s on the so-called “independent emotive meaning” of attitudinal and normative language - crucial research for the advance of sociological theory I thought at that time, but research later forgotten. Anyway, that request explains why this research topic once again has been brought to the fore in the present paper.¹

Originally my research was commissioned in the mid-50s by Swedish non-governmental organisations – Byrån för Ekonomisk Information – who were interested in mapping the political opinions of Swedish male youth of 20 – 30 years of age. Female youth obviously were not considered to be politically significant enough at that time by that organisation, and were not included in this survey. A bit unusual was a request from this organisation that the survey should cover not only certain political opinions and attitudes but also relevant cognitive aspects such as attitudinally relevant knowledge, opinion saliency and the respondent’s degree of comprehension of the issues involved. This was well in line with my own inclination at that time; I thought that cognitive aspects of human behaviour, and the role of rationality in attitude formation where neglected in the prevailing behaviourist stimulus-response approaches.

But why bring those attitudes to the fore again at a conference 2005, or in a research report of 2006? Attitude measurement as such is not particularly fashionable among sociologists. Why should any seri-

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* An earlier version of this paper has been presented to the International Institute of Sociology for its conference in Stockholm, July 2005

¹ Hans L. Zetterberg who asked me to write and submit this paper for his session of a congress might have thought that it was worth reopening the theoretical issues raised in my earlier publication.
ous scholar bother about measuring attitudes at all when attitudes turn out to be so weakly correlated with actual behaviour?

To me as a young researcher at that time this weak correlation between verbal attitudes and corresponding behaviour was an interesting challenge to be met and tackled. In *Measurement and Prediction* (Stouffer *et al.* 1950), one of the thick volumes emerging from post-war research on the American Soldier, we were told that a main reason for that weak correlation might be ‘intervening circumstances’ *external* to the attitude, preventing individuals from actually behaving as expected from their attitudes. If we could control for those ‘intervening circumstances’ we might be able to identify situations where actual behaviour indeed could be predicted from attitudes.

I thought, however, that there are other circumstances *internal* to the very nature of attitudinal structures that also might be significant in explaining why attitudes predict corresponding behaviour so poorly. My own attempts to illuminate the internal dynamics of the attitude-behaviour relationship were stimulated by the request I had received to devote more attention to the interplay of cognitive and emotional factors in the study of opinions and attitudes. This research of mine started in the late fifties and early sixties (Ulf Himmelstrand 1960). Two decades later Icek Ajzen and Martin Fishbein published their *Understanding Attitudes and Predicting Social Behaviour* (1980), which probably was the most penetrating of current studies in this area that far. Their “theory of reasoned action” in its very title incorporated one of the main conceptual ingredients – reason - which I also tried to take into account to replace what I considered, then and now, to stifle sociology, namely its normativistic hegemony, its complete reliance on the impact of shared social norms as masters of societal and cultural formation, with sanctions against deviance needed for its maintenance. In contrast with this, the Aizen-Fishbein notion of “reasoned action” (when I later came to know of it) fitted well with my own attempts to bring cognitive attitude components into the picture. The interplay of emotion and cognition in reasoned action had been, and remained a theoretical focus of mine for years.

An attitude is not a simple and unilinear matter but indeed a multifaceted structure, a semantic field made up by several ingredients: (1) favourable or unfavourable verbal statements, (2) concrete referents denoted by these statements, (3) cognitive and emotive dis-
positions focussed on (1) or (2) or both, thus providing descriptive and emotive meanings to the language of the given semantic field.

In trying to make sense of my own notions of varieties of attitudinal structure I stumbled on the somewhat puzzling notion of a bifurcation of an originally unified stream of emotional and cognitive response involved in expressing an attitude in a given semantic field. In geography the branching of a river is usually upstream toward the sources of that river, several streams coming from a multitude of smaller sources and uniting into a larger stream, while in a bifurcation the branching occurs downstream, a united stream branching out, and divided into several smaller streams.

In an attitudinal bifurcation our point of departure is a unified stream of cognitive notions and of emotional responses to those cognitive notions, a unified stream of cognitive-emotional interplay which however may come to be divided thereafter into two branches, one cognitive and one emotional stream. However, while we can make sense metaphorically of the notion of a “stream” of emotion, and a “flow” of cognitive notions this cannot satisfy our need for a scientifically more precise and tenable notion of a “bearer” of those emotions or cognitions. Emotions do not really “stream” or “flow”; they may, however, be attached to something that flows, to a flow of words or statements, or of real objects, of loved or hated persons or events or things that are passing by and being confronted by the individual, or emerging in mass media as notions which can be reported to an interviwer.

While we may find it useful to continue speaking of a “flow” of emotions or cognitions, we must understand that this is only a simplifying metaphor. Crucial, however, is the stream of words, or symbolic behaviour, or a sequence of their objective referents to which emotions or cognitions may be associated or attached.

Our notion of a bifurcated attitudinal structure now makes it possible for us to see the actor as involved either more or less entirely in verbiage. i.e. in expressing and/or paraphrasing her attitude verbally, or rather to have its referent objects in mind cognitively or in action – touching them, exploring their characteristics, getting to know them better, etc. – or of course both, oscillating between these two flows of activity, the verbal/symbolical and the referential.
These notions of a bifurcated structure of the semantic field turned out to fit beautifully with notions of varieties of emotive meaning that were explored in a book by the American philosopher Charles L. Stevenson, *Ethics and Language* (1944), who introduced a distinction between dependent and independent emotive meaning. This distinction took account of the fact that the emotive dispositions prevailing in a semantic field could be focussed alternatively on the very verbal ingredients of that semantic field – words or rhetoric – or rather on the concrete referents of those words or statements.

An attitude is defined as having an “independent emotive meaning” if it is more emotionally gratifying for a person to vindicate or rally around the purely verbal statements or symbols involved in expressing that attitude rather than dealing cognitively or in action with its referents, the very objects of that attitude. That is a purely “expressive” way of having an attitude or a preference. On the opposite end of this dimension we find persons whose attitudes exhibit a “dependent emotive meaning”. Their verbally expressed attitudes are not preserved as affectively loaded symbols dissociated from the referents of those attitudes, but depend for their emotional meaning only on what is understood and felt with regard to those concrete referents or objects themselves.

In order to measure the variable of independent versus dependent emotive meanings of an attitude I developed a scale which I did at that time call the *L*-scale due to my intention to measure the distribution of affective Loadings between words and things. Later I rebaptized it as the KEY-scale distinguishing hi-KEY and lo-KEY persons.2

Independent emotive meaning (hi-*L* or hi-KEY) thus implies that the very expression of certain given words or statements do have an emotional meaning quite independently from any emotional arousal associated with the cognition of referents, i.e. the very objects of those words or statements. This is perhaps like falling in love with love.

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2 Due to the fact that the label L, referring to the notion of Affective Loadings, turned out to be occupied by another, pre-existing variable, I was forced to relabel my scale for measuring *Independent Emotive Meaning of Attitudes* as the KEY-scale. The term “key” refers both to the assumption that this variable plays a key role in determining if emotion turns to rhetoric or to affirmative action, and to the notion of rhetoric as being a high-key way of expressing oneself. However in papers I published earlier, and also in later publications such as this one with extensive quotes and references from my earlier publications, the label L-scale is of course retained.
forgetting about the lovely creature whom you were expected to have in mind.

The concept of dependent emotive meaning, on the other hand, would imply that whatever emotional arousal you would feel in connection with a given attitudinal statement turns out to be dependent only on the emotions elicited by your facing, perceptually or cognitively, the actual objects, the referents of the verbal attitude or symbolic ingredients involved. Stevenson’s distinction thus points to a variation of real focus of emotional response in the semantic field – either on the language, the verbal symbols, or on the concrete referents denoted by that attitudinal language. Empirically we discovered that in between these two foci of emotional attachment, emotions can oscillate between symbols and their referents checking one against the other as it were creating a crucial middle position between hi-L and lo-L, namely medium-L. We will soon return to the importance of the medium-L position.

Anyone who has lived for long in an environment loaded with religious, political or moral rhetoric or argument may have noticed this variation of focus of emotion in spite of the fact that the same words are used in both cases. For example people may become emotionally attached to notions like Democracy or Liberty without necessarily comprehending fully the complicated structures intended and referred to. Therefore these emotive meanings may easily become independent of whatever an individual later comes to learn about the detailed structural implications of these abstract honorific notions. The independent emotive meanings attached to such honorific terms, if not clarified in common language with a proper explication of the referents intended, may unfortunately make us subject to the kind of deceptions that abound in misleading propaganda.

But let us take a more down-to-earth example: the notion of “tax burden”. Most people would probably understand this term as referring to something unpleasant and bothersome, but some would probably also at the same time comprehend that taxes are for the financing of useful and desirable social services – schools, hospitals, roads etc. Manipulative politicians involved in electoral campaigns against tax-financed services may in such cases try to inflate the term “tax burden” with an extra portion of independently negative emotive meaning thereby blurring cognition of the real thing, the detailed welfare and
other services, financed by taxes and provided for virtually every citizen.

This is also an example of the asymmetry of information that sometimes is involved in political argumentation and persuasion. A politician campaigning against the “tax burden” is focusing on information regarding the heavy costs of paying taxes while an enlightened citizen may have information in mind on the very helpful services financed by those taxes. This is an example of what the Nobel-Price-winning economists W. Vickerey & J. Mirlees (1997) have called an asymmetry of information that may be involved in economic or political transactions and communications. This cognitive asymmetry enhances an infusion of negatively independent emotive meanings on one side of the given transaction, namely in this case on the word “burden”, thereby preventing a full and balanced knowledge about the implications of the transaction proposed.

I have constructed several L- scales – one referring to party-political attitudes, another one related to attitudes toward the legalisation of abortion, one related to attitudes regarding child-rearing practices, and another one on environmentalist attitudes. As an illustration I will here below present an L-scale related to party-political attitudes (Himmelstrand 1960: 193f. For other L- scales, see op. cit. pp. 127 and 163.) All of these are Guttman type scales, and show satisfactory coefficients of reproducibility and scalability (Sc). Total attitude scores for each respondent were calculated by adding up all item scores for agreements or disagreements with each item. Satisfactory validity, however, is not only a matter of having these scales based on items which “on the face of it” seem to deal with what is intended. They also must exhibit theoretically expected significant correlations with other predicted outcomes, predicted from theories already significantly substantiated. Here more research is needed to ensure what used to be called construct validity (see below).

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3 In view of the fact that Guttman scales may be less known by sociology students today I here refer to two publications that may help to explain the matter. Ulf Himmelstrand, “Attitydmätning och psykologiska skalar” in Georg Karlsson, editor, Sociologiska metoder (1961), Svenska Bokförlaget, and Matilda White Riley (1954), Sociological Studies in Scale Analysis, New Brunswik, N.J.
An *L*-scale of Political Attitudes

### Table 1

**L-scale**

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Cutting point +/−</th>
<th>Percent positive</th>
<th>Repr.</th>
<th>Sc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>134/2</td>
<td>72</td>
<td>.92</td>
<td>.72</td>
</tr>
<tr>
<td>33 a</td>
<td>12/345</td>
<td>47</td>
<td>.93</td>
<td>.86</td>
</tr>
<tr>
<td>33 b</td>
<td>1234/5</td>
<td>28</td>
<td>.95</td>
<td>.82</td>
</tr>
</tbody>
</table>

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32. Do you think it is difficult to have an opinion about such things as we have just talked about—government, freedom, the common good—or do you think—Oh, well, you can always have some opinion? (Answer categories NOT to be mentioned)
   1. Difficult to have an opinion since one never thinks about these things.
   2. Difficult to have an opinion since there are so many facts to consider before taking a stand.
   3. One can always have an opinion.
   4. Easy to have an opinion about such things.

33a. To discuss and try to change the opinions one has is not quite to my liking. One either has an opinion or one does not. - Do you agree or do you not agree with this? SHOW CARD
   1. Agree absolutely
   2. Agree more or less
   3. Doubtful
   4. Do not quite agree
   5. Absolutely do not agree

33b. If you think about too many facts when forming an opinion you get lost, and it is not necessary to go so far. SHOW CARD
   1 2 3 4 5

33c. It is a matter of principle what opinion you hold regarding a question and nothing in the world can change what you feel is right. SHOW CARD
   1 2 3 4 5
Attitudes and Corresponding Behaviour

Theoretically we can predict quite different outcomes with regard to the relations between attitudes and behaviour due to whether or not there is a predominance of independent or dependent emotive meaning of the attitudes involved. In cases of independent emotive meaning of attitudes the correlation between attitudes and behaviour will be weaker than in cases of dependent emotive meaning. The only kind of behaviour we can expect in cases of independent emotive meaning is what I have called symbol acts, the act of verbally repeating, paraphrasing or making rhetoric out of the verbal content of the given attitude, but not applying it in practice. There would be no motivation left for practical application in the case of independent emotive meaning of attitudes – unless such motivation was provided from other sources than the attitudes involved, and this could be controlled for. Here below I will present the results of some empirical studies corroborating some of my theoretical predictions.

Originally I was assuming a linear negative relationship between the $L$-variable and the concordance between the given attitude and its corresponding behaviour such that persons with high $L$-values would exhibit a lower correlation between attitudes and corresponding behaviour than persons whose attitudes exhibit low $L$-values. The latter could be expected to show the highest correlation between attitude and corresponding behaviour. The main emotional gratification in this latter case depends on what you think and feel in direct encounters with referents of those attitudes, in accordance with the attitude expressed. In between those two poles of the $L$-scale I expected a gradual linear decrease of the attitude-behaviour correlation. However, my empirical results, as shown in several projects, surprisingly indicated that the highest correlation between attitude and corresponding behaviour appears among those who occupy the middle of the $L$-scale, persons with medium-$L$ values. This implies a curvilinear relationship between the $L$-scale and the degree of closeness between, in this case, environmentalist attitudes and environmentalist consumer behaviour, as indicated in Fig. 1. My empirical study in this case dealt with environmentalist issues as reflected in attitudes and behaviour. Even though the attitude-behaviour correlation was highest for medium-$L$ respondents, it still also turned out to be higher for lo-$L$ than for hi-$L$ respondents, as theoretically predicted.
Theoretically the kind of outcome illustrated in Figure 1 below, and in some other studies, can be explained in the following manner: The medium-L position is supposed to represent an involvement in a psycho-linguistic dynamic where a thorough factual knowledge and a practical know-how regarding the objective referents of symbolically expressed ideas turn out to be as important as the involvement in, and symbolic elaboration and verbal clarification of these ideas themselves. We assume a mutual interplay between acts on the symbolic-ideational levels and the level of objective referents - a mental interplay that helps to bring verbally expressed ideas, and actual behaviour or action with respect to corresponding referents closer together.

My notion of the semantic field as having a bifurcated structure can further help to explain the power of medium-L in bringing verbally expressed attitudes and corresponding behaviour closer together. In geographical bifurcations we sometimes find cross-flows between bifurcated branches of a river, connecting again those two parallel downstream branches. Similarly the ‘downstream’ verbal flow of an attitude and the parallel stream of referent acts can be seen as interconnecting again in the case of medium-L due to the special kind of bifurcated structure involved; a cross-river again connecting the two bifurcated streams that were one stream from the beginning.
The findings summarised below in Table 2 clearly support our hypothesis regarding a curvilinear relationship between the \( L \)-variable, and the degree of concordance of the relevant verbal attitudes, and corresponding non-symbolic behaviour.

### Table 2

**Correlation of environmentalist attitudes and corresponding behaviour by various levels of independent/dependent emotive meaning of attitudes (the L-Scale).**

<table>
<thead>
<tr>
<th></th>
<th>Low-L</th>
<th>Medium-L</th>
<th>High-L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation Coefficient</td>
<td>0.23*</td>
<td>0.36*</td>
<td>0.19</td>
</tr>
<tr>
<td>Regression Coefficient</td>
<td>0.19</td>
<td>0.31*</td>
<td>0.17</td>
</tr>
</tbody>
</table>

**Note to Table 2:** The overall correlation between the L-scale and the Behaviour scale is 0.03; and it is 0.05 between the L-scale and the Environmental attitude scale. Therefore the findings reported in Table 1 cannot be explained as a result of confounding effects. Asterisks * indicate that a correlation coefficient is statistically significant. The consumer choice behaviour scale used in our study was based on responses to four questions which had turned up with particularly high factor loadings in a factor analysis of a much larger number of behavioural questions. For further methodological references on this empirical study, see Himmelstrand 1994.

As indicated by a lot of earlier research on correlation between attitudes and behaviour we can never expect a particularly high correlation between attitudes and corresponding behaviour due to a number of intervening factors of a physical or social nature that make it difficult, costly or sometimes impossible to implement fully your attitudes in actual practice. The correlation with the highest magnitude in Table 2 only amounts to + 0.36 - but still it is a statistically significant correlation, and higher than in the other cases.
High-L rather represents, as explained earlier, a situation where the affective meanings of ideas and related symbols have become emotionally gratifying in themselves independently of the objective referents to which these symbols refer in a strict sense. Therefore behaviour or action with regard to these objective referents also remain rather independent of what the respondent says or endorses on the symbolic level. In the case of low-L the respondent is gratified mainly by relating directly and behaviourally to the objective referents of symbolic behaviour. Therefore we speak of dependent emotive meaning; the corresponding symbolic or speech acts do not have any independently gratifying emotional power of their own, but only fulfil a representational function depending on what you think, feel or do with respect to the objective referents of symbolic behaviour. Symbolic action thus comes to depict and to represent corresponding non-symbolic action; this implies a higher correlation between symbolic and corresponding non-symbolic action than in the case of high-L (independent emotive meaning), but not as high a correlation as in the case of medium-L.

Another theoretical prediction that has been made, and tested in an empirical study, deals with the amount of attitudinally relevant knowledge expected due to the degree of dependent versus independent degree of emotive meaning of the given attitude. I will now present empirical results from that study.

Attitudes and Relevant Knowledge

As explained above the sponsor who financed this study, wanted it to be carried out on a national sample of young men, 20 – 30 years of age. It dealt mainly with party political attitudes, behaviour and voting but also included a scale of political knowledge regarding the meaning of a number of items that were salient but not always well understood by those young men at that time (the late 50s) in Sweden – concepts such as credit restrictions, free competition, investment, subsidies, progressive taxes, jointly responsible wage policy, etc. The sponsor of our study suggested these items. A Guttman scale of political knowledge was constructed on the basis of replies to these questions. (see Himmelstrand 1960: 194 f). This scale was dichotomised into hi-k and lo-k, as seen in Figure 2.
Obviously political knowledge of this kind would also depend on the educational level of the respondents and on their general exposure in everyday life to mass media and other political information. Therefore a summarising index of exposure to political information – $Pi$ – including educational level was created and controlled for in my study (op.cit. p.186) in order to single out the importance of our main explanatory variable – the $L$-scale. Other possibly influential background variables that were controlled for in our analysis were political cross pressures and intergenerational party shifts in relation to family of origin. According to cognitive theory the cognitive dissonance produced by political cross-pressures and party shifts could possibly have stimulated a search for more information and knowledge about the alternatives involved.

Our empirical findings are accounted for in Figure 2 and they support our theoretical prediction that attitudes with an Independent Emotive Meaning ($hi-L$) will turn out to be associated with lower scores of attitudinally relevant knowledge than attitudes with a dependent emotive meaning ($lo-L$), controlling for other possibly confounding non-attitudinal or information variables.
Other attitudinally relevant variables that I studied empirically – the saliency of attitudes, the cognitive differentiation of attitudes, the affective differentiation of attitudes and the internal consistency of miniature personal ideologies – will not be accounted for here. I will mention some of these attitudinally significant variables in passing.
with references to the literature where they seem to me relevant for my concluding remarks. These remarks concern Hans L. Zetterberg’s (2002: xxxiv) interesting notion of maturity in the formation of opinions and of attitudes. But first some reflections on Louis Guttman’s theoretical notions of attitude components and their relevance to a study in depth of the multifaceted structure of the semantic fields associated with social attitudes.

**Louis Guttman’s research on attitude components**

I will not be occupied here with those aspects of Louis Guttman’s theory of attitude components, which are derived formally from a mathematical theory that to me seems unrelated to my present concerns, and also unrelated to common socio-psychological theory of attitudes and behaviour. What is interesting to me, and hopefully to my readers, is the similarity between what I have found in my own research on attitude components, and Guttman’s theoretical and empirical findings regarding his attitude components closure and involution (Guttman 1954).

I knew nothing about Guttman’s findings when I carried out my own research on attitude components toward the end of the 50’s. His empirical research on attitude components are not easily available even today. In several respects I cannot therefore compare my own and Guttman’s research with regard to attitude components. My own theoretical concern was focussed entirely on the role of independent emotive meaning of attitudes as a key variable determining the amount of relevant knowledge associated with the given attitude, the saliency of the given attitude in the every-day life of the respondent, and its cognitive and affective differentiation. In my research these latter variables were conceived as dependent variables in relation to the so-called L-variable which I later re-labeled as the KEY variable. Here I will retain the labels L-variable and L-scale since they fit the diagrams from 1960 that I will copy later on in the present paper.

Guttman’s first attitude component is verbal attitude content as such. His second attitude component – intensity with its U-shaped regression line over attitude content – is well known and relatively unimportant to me right here. The third component Guttman interpreted as closure, and it dealt with whether the given respondent felt
that she was finished with the matter implied by the given attitude – “the matter is closed” – or whether it still was an open issue in her everyday life. A person who definitively has made up her mind with regard to a matter exhibits a high degree of closure. A low degree of closure is indicated if she replies that she has not yet made up her mind about it.

The saliency of an attitude, as measured in my own research (op.cit. pp 166 and 195 f) might be interpreted as the inverse of closure. Someone who returns time and time again to a question has not yet closed her mind. If closure is low, saliency is due to be high in an environment where relevant issues are acute.

Guttman’s fourth attitude component he calls involution. It is a mental trait, which implies that the respondent is brooding over a matter, turning it up in her mind over and over again. It would seem to be the opposite of closure, and perhaps to be a special kind of saliency.

Guttman himself would probably never have introduced the question of attitude components the way I have done. To him the mathematical aspect always took precedence, with an emphasis on the different shapes of regression lines of second, third and fourth degree equations – first with one bending point as in a U-shaped curve, secondly with an N-shaped curve with two bending points, and fourthly with a M-shaped or a W-shaped curve with three bending points. Only thereafter - as Guttman himself accounts for the process - he “discovered” by serendipity or psychological intuition that these mathematically derived regression lines also happened to conform empirically with the N-shaped and M- or W-shaped regression lines of what he identified as scales of closure and involution over basic attitude content.

Guttman’s conception of the closure and involution components of attitudes is quite intriguing and possibly fruitful, and certainly deserving of more research on their interrelations with each other, with attitudes and with corresponding behaviour. Presently this kind of research, unfortunately, seems completely out of fashion. Research by young researchers is needed on the socio-psychological meaning of the attitude components identified empirically by Guttman and by myself, and their usefulness in pointing out what Hans L. Zetterberg has characterised as “the level of maturity” of public opinion (H.L.Zetterberg, 2002: xxxiv).
Commercial opinion researchers are usually satisfied to deliver percentage distributions for different kinds of opinions or reported behaviour in a given population. However, we should distinguish *popularity polling* and *issue polling* on this point. Popularity polling focuses entirely on the percentage of people in a population who can be expected to vote for a given candidate or party in an election, or to favour a particular brand of a commodity in a supermarket, while a *polling on issues* requires auxiliary questions where respondents are queried about their comprehension of the issue, how well her opinions about an issue represents her everyday concerns, or is anchored in her everyday life, and whether she is likely to pursue the matter further in thought or action, or if the matter is closed.

According to Zetterberg & Zetterberg (2005), polling on issues will be more satisfying to its customers if polling reports contain indications of “the level of maturity” of opinions. It is in this regard that Guttman’s and my own research on attitude components may turn out to be a useful addition in ascertaining whether or not public opinion is the result of a mature democratic dialogue in the public arena, or simply turns out to be driftwood floating haphazardly on the waters of opinionation.

Level of Maturity in Opinion Formation

My interpretation of the concept of “maturity” of an opinion derives from a certain notion of rationality or reason in opinion formation. I do not have in mind the usual notion of instrumental rationality. I am not concerned with how effective and persuasive we are in showing off an opinion to others. Let me explain what I have in mind instead:

1. Being able to ascertain cognitively the ingredients of what you favour, and their compatibility with each other;
2. Being able to ascertain cognitively the ingredients of what you disfavour, and their interrelationships;
3. Being able to admit and recognise that possibly there are aspects of your favoured alternative that are emotionally less attractive and even distasteful;
Being able to admit and recognise that there possibly are aspects of your disfavoured alternative that are attractive and good; and

Finally that you are able to make up your mind rationally about what you want to favour in the long run in spite of your, perhaps, mixed feelings.  

Opinion formation in a given area has reached its level of full maturity, in my understanding, when it has tackled successfully all these 5 items or steps. It remains to be tested empirically to what extent these items or steps are scalable in a cumulative ordinal sense.

This is my personal interpretation of Zetterberg’s concept of maturity in opinion formation. This also would seem to come close to Guttman’s psychological conception of invention as an attitude component. I have already reported on my own research regarding measures of independent versus dependent emotive meaning (hi- or lo-L), cognitive differentiation (op.cit. p.185) and affective differentiation (op.cit pp. 200ff) of political attitudes which all come close to Zetterberg’s notion of opinion maturity and to Guttman’s notion of invention. Points 3 and 4 in the list above are particularly close to items in my scale of affective differentiation based on replies indicating the given actor’s ability to recognize weak points in her/his own point of view, and strong points in an opponent’s point of view while on the balance still maintaining her/his own conviction. Closely related to points 3 and 4 is homo-political selectivity in sending and receiving messages in communications with people whom you encounter in everyday conversations. This variable of selectivity is positively correlated with the L-scale as expected theoretically, and established empirically (op.cit. pp. 399 - 408).

As indicated already, more empirical research is needed to explore how these variables correlate with each other, and to arrive at a simple auxiliary index, which is informative and cheap enough to be used by issue pollsters to supplement ordinary percentage distributions of public opinion. The main usefulness of reports on “opinion maturity” is that it provides information on how people have been comprehending, or been expressing and defending their opinions in public debate. Such information may serve as points of departure for com-

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4 Is it possible to have mixed feelings and still be rational? I refer to lexicographic preference theory as explained in Ulf Himmelstrand, ed. 1992, Chapter 14.
ments, analytical remarks and predictions of corresponding behaviour. If I were to endorse a particular item-saving method to produce such background information helping us to interpret findings from attitude research or from polling on issues, I would suggest a condensed version of my *L*-scale since it correlates significantly with attitudinally relevant knowledge, cognitive-affective differentiation and with attitude-behaviour concordance.

**Piaget and the Moral Development of Children**

In the further development of sociological thought it sometimes turns out to be fruitful to study and explore events, which seem smallish and very far removed from the common grounds of sociological research. For most sociologists children’s playgrounds are such unusual grounds for research. Having noticed similar features between common places of sociological observation and a situation of a more special character - such as a playground for children - may unexpectedly bring about a special sense of discovery to an inquisitive sociologist, and I therefore wish to report what Jean Piaget found in his conversations with children at the playgrounds of Lausanne. According to his famous book (1932) on the moral development of children, Jean Piaget asked the children who might have conceived the rules of marbles once upon a time. The youngest children suggested that it must have been some emotionally authoritative figure such as the Lord Major of Lausanne, or perhaps Grand Father with his long grey beard. Children of somewhat older age suggested that the rules of marble might have been invented by previous generations of marble players who took into account what seemed fair and just. Now it turned out that children with patriarchalist or authoritarian views concerning the origins of rules did not comply with those rules as minutely as children who considered marble players themselves as being the originators of the rules of the game. It would seem to me that this paradoxical outcome – rules understood as authoritarian-generated being obeyed less minutely – reminds us of the weak correlation we have found between given verbal attitudes and corresponding behaviour when the verbalisation of those attitudes was emotionally rewarding in itself independently from what they were all about otherwise. Let us remember this.
Concluding Remarks

The hegemony of thought in sociology has been stamped for many decades by a belief in a certain kind of causality, namely causality of a normativistic nature, its basic postulate being that social and cultural norms have shaped society and culture in processes called socialisation and acculturation. In those processes attitudes are seen as links between social norms and behaviour.

Meanwhile our sister discipline Economics from its very beginning has emphasized rational choice and reasoned action rather than normativity as its basic mechanism of explanation and prediction. However, usually this explanatory assumption has been made a priori in an axiomatic manner making it superfluous to prove empirically that rationality is or has been involved in decision-making and action. This lack of empirical evidence does not seem to have bothered most economists. But sociologists have been concerned about these matters.

More recently questions and assertions on rational choice have indeed emerged also in sociological theory, because sociological theories of normative compliance obviously could not cope with problems of innovative social change and political decision-making. Sociologists have thus been logically compelled to take account of rationality as well as normativity in their theorising (cf. Lars Udéhn 1996). However, in sociological thought rationality is not usually taken for granted a priori (as most economists and rational choice theorists have tended to do) but must be explained theoretically and accounted for empirically both when rationality emerges as an active force, and when it is conspicuously absent, leaving space for foolishness.

In providing explanations for the presence or absence of rationality in social action we have noticed how the pronouncing of normative precepts in itself sometimes becomes so imbued with independent emotive meaning that those norms are transformed from rational directions for action into emblems of identity and legitimacy serving nothing but the continuation of established normative power and status, but not serving the actual performance of the action prescribed. Observations of this nature were one of the starting points for my adopting concepts and measures of independent emotive meaning of attitudinal and normative language – the conceptual bases of my L-scale.
Another starting point was my observation that it would seem to be impossible to account for rationality or of its absence, without bringing emotionality into the picture. In folkloristic understanding emotion is an antidote and enemy of common sense and reason. But folklore tends to be oversimplified. To me the relationship between emotionality and rationality depends on the focus of emotion - whether the emotional focus is on the words and symbols by which an attitude is verbally expressed or focussed on the very referents or objects spoken of or dealt with in action – on form versus content. In the latter case information-generating feedback loops emerge from actions with regard to those objects, and therefore also cues and incentives for rationality. The reiteration or echoing of honorific words on the other hand while generating a minimum of informative feed-back may produce a great deal of boredom in the long run requiring some emotional refill and revival.

All of these points turn out to have been well served by my focus on the “key” $L$-variable, that is on the independent versus dependent emotive meaning of the language involved in a given area of social change. Both theoretically and empirically it can be demonstrated that the role of rationality and knowledge become more pronounced when the given semantic field holds what Stevenson calls a dependent emotive meaning ($lo-L$ in our earlier labeling), and the reverse when an independent emotive meaning ($hi-L$) is predominant in attitudinal and normative language. However, as shown by the $medium-L$ case this is more complicated than we thought originally. In between the polar opposites of $lo-L$ and $hi-L$ we find indications of an interplay of emotive and descriptive meaning ($medium-L$) which is even more conducive to knowledge and rationality than in cases of $lo-L$. More research is needed on this interplay of emotion and cognition in attitude formation and performance as illustrated here, and on different patterns of bifurcation of emotion and cognition in attitude-behaviour relations.

This kind of research is also needed to help overcome two kinds of theoretical hang-ups confronting us social scientists when we try to pursue the further development of social theory in sociology or economics. One hang-up is the tendency of economists to make rational choice a self-evident ingredient within an axiomatic theoretical framework thereby also making it superfluous to prove empirically that rationality is present in human decision-making, or to explain its absence in obvious cases of foolishness. Another hang-up is the norma-
ativistic *a priori* of sociologists who tend to explain virtually every kind of social behaviour in terms of socialisation or acculturation processes where social or cultural norms are supposed to inculcate social and cultural behaviour by way of punishments and/or rewards, leaving reasoned action completely out of the picture.

Our theoretically and empirically based findings on the knowledge-promoting effects of lo-L and medium-L, and of the knowledge-reducing effects of hi-L in attitudinal and normative language contexts, help us to offer evidence for or against rational choice interpretations in social theory, and to find out what fits best in a particular study of social behaviour - explanations in terms of reasoned action or in terms of normative compliance. Not only knowledge-promoting effects can be substantiated or falsified with this kind of research; it also explains how incentives for action in the form of symbol acts or referent acts are generated due to the given actor’s pattern of emotional attachments either to symbols or to concrete referents.

The cognitive interplay of symbols, referents, and varying patterns of emotional attachments (Hi-L, medium-L or Lo-L) constitute the explanatory matrix that we have focussed upon. What remains outside is the input of material circumstances, the menu of concrete external challenges that feed into such a matrix. That is another chapter altogether requiring its own serious analysis (see Erik Allardt, 1965)

**Bibliography**


ALLARDT, Erik (1965), Samhällstruktur och Sociala Spänningar. Tammerfors.


