

Giving the Past a Future

Essays in Archaeology and Rock Art
Studies in Honour of

Dr. Phil. h.c. Gerhard Milstreu

Edited by

James Dodd & Ellen Meijer



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Giving the Past a Future

Essays in Archaeology and Rock Art Studies in Honour of

Dr. Phil. h.c. Gerhard Milstreu

Edited by

James Dodd & Ellen Meijer

Dedication

In honour of our dear friend, teacher and colleague - Gerhard.

Thank you for making so much possible.

This is for you.

Access Archaeology



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Cover illustration: Part of the panel from Bro Utmark (Tanum 192:1). Photo: Tanums
Hällristningsmuseum Underslös

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Errata sheet

Giving the past a future.

**Essays in Archaeology and Rock Art Studies in honour of Phil. Dr. h.c.
Gerhard Milstreu**

Page 1

Last paragraph. Penultimate line: internally should be internationally

Page 2

Saturday 28 July 2018 should be Friday 27 July 2018

Page 7

There is a full stop missing end of 1st paragraph.

Page 194

Conclusions heading should be in 11pt



Editors Preface

This collection of works celebrates the work of Dr. fil. h.c. Gerhard Milstreu in connection with his 40th year as director of Tanum Museum of Rock Carving and Rock Art Research Centre, Underslös, Sweden. In 1978, Gerhard took over the directorship of Tanum Museum of Rock Art, Underslös and the associated Bohuslän Rock Art Research Archive from the Danish Artist, Fred Gudnitz, whom Gerhard has already worked with over many years following his education in Visual Arts at The Royal Danish Academy of Fine Arts.



DR. PHIL H.C. GERHARD MILSTREU. PHOTO HENNING PRØHL

Under Gerhard's leadership, the role of prehistoric art and rock art within the spheres of both the academic world, and that of the general public, have been significantly advanced through the integration of this unique visual information in archaeological discourse. Gerhard started the annual working seminar and transformed the museum's dedicated journal on prehistoric art, *Adoranten* (which was initiated by Gudnitz). At the working seminar, archaeologists and members of the general public alike from around the world, can come to learn the ins and outs of rock art documentation. The seminar, which began in 1978, was the first of its kind in the world, and has established the framework that has been applied in many countries around the world. The workflow developed by Gerhard and the museum is now also becoming incorporated into archaeological teaching practices at both Masters and Undergraduate level in Sweden and Denmark. *Adoranten* has blossomed to become an internationally acclaimed, peer reviewed journal, distributed to museums, universities and rock art experts in 26 countries.

Collaboration and dialogue at a local, national and international level has also been a keystone of Gerhard's strategy for the Museum. Time and again he has brought people and groups together, to share knowledge and encourage understanding, thereby assisting in the achievement of results that are far greater than the sum of their constituent parts. Perhaps key to this is his sense of the importance of inclusivity, his ability to listen and his respect for other people and their views.

A sign of the success of these attributes can partly be gauged by the level and amount of Underlsös Museum's activities on an international level. The Museum and Gerhard have been part of several major national and international collaborations, including several major projects part financed by The European Union. Partly because, and as a result of these efforts, Gerhard's network is enormous. Those that have been asked by the editors to contribute here represent merely the common nodes within our networks. Therefore, as the editors, we apologize to anyone not included in advance!

We believe that all the above-mentioned achievements are the direct result of 40 years of inspiration, dedication, hard work, love and engagement from Gerhard. All these achievements are especially noteworthy considering that everything at the museum is done completely voluntarily.

Here, a feast of scholarly contributions from across Europe, at all levels of study have been collected. Each and every one of the following works addresses aspects connected to the work Gerhard has done over the last 40 years. Through their words and images, these pay respect to and acknowledge Gerhard's achievements in the fields of rock art documentation, research, international collaboration and outreach.

Lastly, it is pertinent to give the reader an explanation of our choice of title for the volume. One of Gerhard's slogans, as well as the title of a project to document the rock art on the island of Møn, Denmark, is "give your past a future". To understand this saying, is to, at least partly, understand the philosophy and rationale behind Gerhard's life work. The images have a timeless, artistic quality. They are a unique and, thanks to natural and human degradation processes, disappearing source material. The knowledge thereof and the skills employed in the study of these representations from the past is not solely about the present. It is about the future. One aspect is what we leave behind for future generations to behold in the records. The other, as important, if not more important, is about involving and motivating the next generation to continue. Gerhard has given, and is still giving the youth the possibility and the means to preserve the past: both for the present and the future. Therefore, we entitle this work in his honour 'Giving The Past A Future'.

James Dodd & Ellen Meijer, Editors

Tanums Hällristningsmuseum Underslös

The Annual Celebration Friday 27 July 2018



Tabula Gratulatoria

There is only a small Tabula Gratulatoria in this book. Gerhard's network is so vast with so many colleagues and friends all over the world, that it was impossible for us to contact them all. Moreover, where do we draw the line? The connections are varied, from: colleagues to artists; to students; participants to the annual international workweeks and so on. We have therefore decided to concentrate on the actual content to produce a worthy tribute honouring Gerhard for decades of hard work. He has been, and hopefully will be for a long time to come, a pioneer and ambassador for the rock carvings, not just in Sweden, but worldwide.

This book comes with a heartfelt gratitude, admiration and best wishes from the board and all members of the Scandinavian Society for Prehistoric Art, friends, colleagues, students and all individuals that have enjoyed and / or supported the important work done by Gerhard from 1964 onwards to protect, document and promote the beauty of the images.

Henning Prøhl, Humlebæk
James Dodd, Aarhus
Inger Marie Aicher Olsrud, Moss
Marijke Houwink, Sandhem
Ann-Zofie Duvander, Stockholm
Mette Johansen Rabitz, Copenhagen
Stefan Nilsson, Malmö
Ellen Meijer, Maassluis
Elisabeth, Jarl, Maria & Catarina Nordbladh, Gothenburg
Johan Ling, Gothenburg
Ulf & Catarina Bertilsson, Gälltö
John Koch, Aberystwyth, Ceredigion, Wales
Kristian Kristiansen, Gothenburg
Tertia Barnett, Edinburgh
Sophie Bergerbrant, Gothenburg
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Magnus Tangen, Fredrikstad
Alberto Marretta & Sara Rinetti, Capo di Ponte
Umberto Sansoni, Capo di Ponte
Elena Man-Estier, Paris
George Nash, Macao, Portugal



Chapter 10

Women on the move in the Nordic Bronze Age: a case study based on rock art and costume

Sophie Bergerbrant and Anna Wessman

Keywords: Östergötland, Sweden, clothing, migration, mobility, gender, petroglyph

Introduction

Traditionally the Bronze Age has been seen as a man's world, with travelling chiefs (e.g. Kristiansen 2017; Kristiansen and Larsson 2005), active bronze smiths (Goldhahn 2007) and men acquiring bronze via long distances contacts (Ling and Uhnér 2014). A structure based on alliances and gift exchange prevailed (e.g. Kristiansen 1998:85-98; Rowlands 1980). In these interpretations, women have been viewed as 'the supreme gift' (Lévi-Strauss 1969:65), with an otherwise limited role in Bronze Age society, not as actors in their own right (see Bergerbrant 2007: chapter 7 for further discussion).

Despite this role as a supreme gift, females are virtually absent from rock art research. One might have assumed that rock art representations could be associated with dowries or depict processions of people going to important events such as the sealing of alliances, e.g. weddings. Instead, rock art research has focused on ships, warriors and travellers (Kristiansen and Larsson 2005; Ling 2008; Winter 2001), all of which have been assumed to be associated with males. There are a few noteworthy studies (e.g. Bengtsson 1999; Goldhahn and Fuglestedt 2012; Horn 2017; Mandt 1987) that focus on possible female representations in rock art. Based on a study of rock art in North America by Heys-Gilpin (2004: 29-36), Horn (2017: 240) has suggested that there are certain anatomically-related features that can be used to locate females in Scandinavian rock art, e.g. images that depict birthing, specific body shapes such as hips and waists, female breasts, genitalia, pregnancy and sexual intercourse. Surprisingly, clothing and costume were not included among these criteria for identifying gender in rock art. Later in the article, Horn (2017: 247) also argued that female figures are connected to a limited range of things, mainly ships and clothing. In this study we will use individual pieces of clothing and costume in an attempt to gender individuals in a particular scene from rock art, Östra Eneby 27:1.

In the archaeological record, strontium research on the Egtved and the Skrydstrup burials (Frei *et al.* 2015; 2017) has recently shown that there were a variety of possibilities within female movement patterns. In the case of Skrydstrup, it is evident that there has been one long-distance journey in the woman's life (Frei *et al.* 2017), and for the other, Egtved, multiple journeys can be seen (Frei *et al.* 2015). A picture is unfolding that includes complex travel patterns for both males and females, as can be seen in a number of other Bronze Age European studies as well (e.g. Bergerbrant *et al.* 2017; Knipper *et al.* 2017; Sjögren *et al.* 2016; Wahl and Price 2013; cf. Oletze *et al.* 2012). Some researchers have even argued that "[t]he results also attest to female mobility as a driving force for regional and supraregional communication and exchange at the dawn of the European metal ages" (Knipper *et al.* 2017: 1).

With this background in mind, the aim of this article is to examine whether females — and female travellers in particular — can be seen in Scandinavian rock art. The rock art panel Östra Eneby 27:1 Leonardsberg, Östergötland, provides a case study, and interpreting the costumes worn by the human

representations forms an important part of the interpretation. This kind of analysis is possible through a new approach taken by the authors, first we employed the Structure for Motion (SfM) method to document the scene. This way of documenting rock art has recently become an established method within rock art research (Bertilsson 2015; Bertilsson *et al.* 2014, 2017; Meijer 2015) and involves 3D technology based on overlapping digital photography (Bertilsson *et al.* 2017:293). This documentation was the foundation for the interpretation. In a late stage we got access to a scanning with optical laser (OLS) of the scene made by Ellen Meijer using a Handyscan 700. This is a different way to make a 3D model of rock art (Bertilsson *et al.* 2017; Horn *et al.* 2018). The new approach enables new interpretations and perspectives thanks to the higher resolution and accuracy of detail it provides.

Rock art in the Norrköping area

Norrköping is one of the most famous areas for rock art in Sweden, and with approximately 200 figurative rock art panels it is also one of the largest. The rock art in this area has been known since the eighteenth century (Ljunge 2015:18) and has played a key role in Scandinavian rock art research, not least in terms of dating. Bror Emil Hildebrand (1869) compared the swords depicted in the Norrköping area (Ekenberg) to real bronze swords and thereby confirmed that the Nordic Bronze Age rock art tradition should be dated to the Bronze Age. The rock art is mainly located in the western parts of Norrköping, but is also found to the south, west and north of the city. Most of the rock art is situated near the river Motala ström, which cuts through the modern town. Motala ström is also a passage to lakes and bodies of water that connect the Baltic Sea to the great lake of Vättern in central Sweden. This communicative location in the landscape is typical for Nordic Bronze Age rock art areas, and is often discussed as an indicator of the close connection between rock art and movement, travels and trade (Helskog 1999; Kjellén and Hyenstrand 1977; Ling 2008, 2013; Ling and Uhnér 2014; Nimura 2016).

The largest rock art panel, Östra Eneby 1, is situated in the Himmelstalund area, and contains approximately 1800 motifs (Ljunge 2015:195). Other large and well-known panels are found at Ekenberg and Leonardsberg. Rock art was made here throughout the Bronze Age, although the early periods are strongly represented (Nilsson 2017:65). After cup marks, the ship is the most common motif in the Norrköping area (Hauptman Wahlgren 2002:65; Ljunge 2015; Nilsson 2017), which underlines the relationship between rock art and travel. Animals form the second most common motif, followed by foot soles, indeterminable symbols, humans, circles, weapons and wagons (Hauptman Wahlgren 2002: 69-87). In addition, there is also a group of other motifs that do not fit into any of these categories, which for example include frame figures, cloaks and tree figures (Hauptman Wahlgren 2002: 69-87). Some motifs in this area relate to the real material world of the Nordic Bronze Age, i.e. they depict bronze objects that are also represented in archaeology (Hauptman Wahlgren 2002:80-81). This can be seen both in the choice of subject matter and in the details of the artefacts. This is especially true concerning the swords (Hildebrand 1869), which are depicted with such precision that one can assume that the carver has seen and handled these items. They are often depicted in their actual size and with details that are closely connected to features that are also found on preserved bronze items. These sword details were the foundation for Hildebrand's (1869) chronological work that dates the majority of Nordic Bronze Age rock art to the Bronze Age. Thus, the carver must have been familiar with many of the bronze artefacts from the contemporary world. Curiously, this cannot be seen in the archaeological record of this region, as the bronze finds from this area are rather modest (Baudou 1960; Oldeberg 1974). Despite this, the rock art panels in the Norrköping area include c. 55 sword depictions (Hauptman Wahlgren 2002:80), while only 13 bronze swords dating to the Bronze Age from all of Östergötland are found in the catalogues of Oldeberg (1974) and Baodou (1960). These comprise 12 swords from the Early Bronze Age (Oldeberg 1974) and only one sword from the Late Bronze Age (Baudou 1960).

Case study: Leonardsberg, Östra Eneby 27:1

Östra Eneby 27 is situated just outside Norrköping in close connection to where the river Motala ström connects to the lake Glan (see Figure 1). This panel consists of 118 rock art features: 36 ships; 7 animals; 2 foot soles; 20 human figures; 3 circles; and 50 geometrical forms and cupmarks (Wessman in prep.). Based on the ship-types (see Ling 2008) it seems that the majority of motifs on this panel were made during Montelius Periods II-III (1500-1100 BC). The motifs analysed here include seven human figures, likely standing in a ship (Figure 2). The motif has been interpreted as a procession by Coles (2003). However, the SfM showed clear indications of a ship in the right side of the frame. The lower portion of the left side was not imaged as comprehensively as it could have been, as the discovery of the ship was a surprise. However, the OSL confirmed the presence of a ship. It is placed in the north-western part of the panel and is between other motifs, mainly ships, animals and other human figures. In the following, five of the seven human figures in this scene will be analysed in terms of age, gender and costume.



FIGURE 1. ÖSTRA ENEBY 27:1 IS PLOTTED ON BOTH THE LARGE AND THE SMALL MAP. THE LARGE MAP SHOWS ITS PLACEMENT IN SWEDEN AND THE SMALL MAP SHOWS ITS LOCATION IN THE LOCAL SETTING.

There are seven complete Early Bronze Age costumes preserved in some of the famous Danish oak-log coffin burials, and these burials provide important clues, by analogy, for interpreting the figures portrayed in Östra Eneby 27. The burials include three females (Borum Eshøj grave C, Egtved and Skrydstrup) and four males (Borum Eshøj Grave A, Borum Eshøj grave B, Muldbjerg and Trindhøj grave A) (Broholm and Hald 1940). There are two different female costumes (see Figure 3), both incorporating a blouse, but one with a long-skirt and the other paired with a corded skirt (Broholm and Hald 1940; Bergerbrant 2007: 54-60). For the men, there are two basic costumes, which include a cloak and a kilt or a wrap-around (Broholm and Hald 1940; Bergerbrant 2007: 50-54; see Figure 4 and 5). There is a possibility of another type of costume as seen in the large textile fragments found in the Nybøl burial, though that is based only on traces, due to the fact that only one of the textiles was completely preserved in that oak-log coffin (Bergerbrant *et al.* 2013). Actual preserved and complete pieces of clothing are only known from Jutland, whereas there are examples of elements of the male costume depicted in rock art in other areas. The latter can mainly be seen in the cloaks that are depicted in several different rock art panels from Uppland to Scania (Almgren 1960:31-37; Coles 2000: 69-74; Goldhahn 2005: 78-79; Hauptman Wahlgren 2002:86-87). There are also some examples that may show a wrap-around dress, i.e. Boglösa 131: Boglösa 138 (Almgren 1960: 32-35), although these have also been interpreted as oxide ingots (Ling and Stos-Gale 2015). However, as Almgren (1960: 33-36) has pointed out, the measurements of both the mantels and the wrap-around match the preserved pieces of costume in the oak-log coffins.

Among the seven figures (see Figure 2), there are two children that are both depicted on the left side of the picture. The first child can only be seen faintly in the SfM and the OSL image (Figure 2), and is not placed on the same level as the other figures. The second child wears either a corded skirt or a kilt, but is not detailed enough to see the upper body or the head, thus it is not possible to know whether a blouse was worn; therefore, the child cannot be gendered. A corded skirt was found in at least one child grave, Trindhøj grave C (Fossøy and Bergerbrant 2013; Bergerbrant 2014: 84). The child in the Trindhøj grave C has no preserved bones, but based on the coffin size and the size of the artefacts the individual has been estimated to have been no more than seven years old, and possibly as young as four (Bergerbrant 2014: 84). The size of child two in relation to the adults indicates that this was also a fairly young child, who would have been somewhere in the age range between four and seven. Children occur only rarely in rock art (Goldhahn and Fuglestedt 2012), and in the burial record children are seldom found in mounds (Bergerbrant 2007: chapter 6); however, children are more commonly found in gallery graves and flat graves dating to the Bronze Age (Bergerbrant *et al.* 2017). To have two children depicted in a scene of seven people makes this representation special.

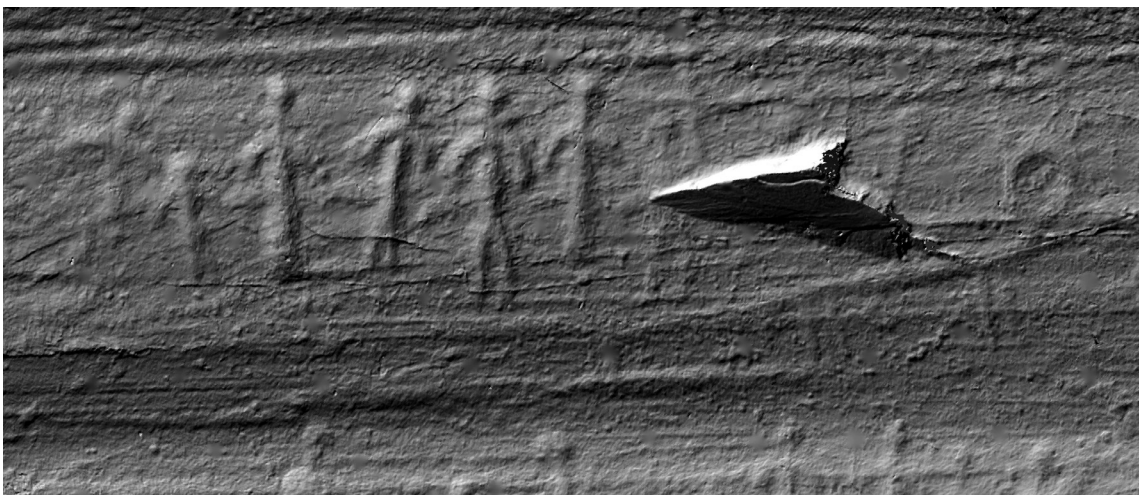


FIGURE 2. OSL IMAGE OF THE SCENE IN QUESTION FROM ÖSTRA ENEBY 27:1 © SHFA, E. MEIJER 2017



FIGURE 3. A FEMALE WEARING A CORDED SKIRT AND ANOTHER WITH A LONG SKIRT. ILLUSTRATION: RICHARD POTTER (FROM BERGERBRANT 2014).



FIGURE 4. MALE DRESSED IN A KILT, BORUM ESHØJ GRAVE B, RECONSTRUCTION BY SIGYN STENQVIST, ©BERGERBRANT & STENQVIST 2007. FROM BERGERBRANT 2007: 51.

Based on costume, figures three and six are probably female. Both appear to be wearing a long skirt secured from their waist/hip and covering their feet, with an overhang of textile on the hip/bottom as is seen in the Skrydstrup burial (Broholm and Hald 1940; Bergerbrant 2007: 55-54; Figure 3). It is more difficult to discern the pieces of clothing on the upper body, although the upper arm to the elbow area seems considerably thicker than the lower arm, indicating that the women wore blouses. Figure three seems to have an elaborate coiffure, like both the women wearing long skirts in the Skrydstrup and Borum Eshøj burials (Broholm and Hald 1940). This seems likely for figure six as well, though that is more difficult to confirm due to the quality of the rock art. Both women appear to be adults, though adulthood in the Bronze Age seems to begin around age 14-15 (Neugebauer-Maresch and Neugebauer 1988: 30, Simoniet 1996: 353), so all we can say is that they are most likely over 14-15 years old.

Figure seven is partly damaged and heavily worn, but seems to be slightly shorter than the other adult figures, so perhaps this individual was an adolescent. The figure wears a piece of clothing that ends above the knee and seems to have fairly short hair that can be seen on both sides of the head. One could possibly compare her with the Egtved burial (see Thomsen 1929). One of the few pieces of evidence we have about the corded skirts is that they seem to be short and end above the knee, as seen in the Egtved and Gindrup examples (Bergerbrant *et al.* 2012; Fossøy and Bergerbrant 2013). Hypothetically, this figure could be another female, but it may alternatively be a male wearing a short kilt or wrap-around. The gender of the figure could not be determined with any kind of certainty.

Figures four and five are probably both male based on the clothing. Each seems to be wearing a wrap-around, a piece of clothing that covers the body from about upper chest to the knees, just like the men in Muldbjerg and Trindhøj grave A (Broholm and Hald 1940). The men are not wearing cloaks, as both arms can be seen, and they appear to have short hair.

Based on the size of the figures and their clothing, the panel appears to portray two children and one adolescent, none of which could be positively gendered based on the clothing due to the preservation of the rock art, though it is possible that two wore corded skirts. Four of the individuals were adults, two women and two men.

Thus, it seems that these figures represent different genders and age groups. Through the detailed carving of proportions and parts of costume adorning these figures each has been given an identity. Their likely placement is on a ship, though the ship is not carved as deeply as the human figures. If not passengers on a ship, the group is at least situated in close proximity to 35 depicted ships, situated in a communicative landscape (see Figure 1).

To conclude the discussion relating to this scene, it seems likely that it portrays a group of people who were on the move. The people are dressed as was typical in Bronze Age Denmark and Scania, as confirmed through archaeology (Bender Jørgensen 1986; Bergerbrant 2007, 2014; Broholm and Hald 1940), showing that this fashion was known in detail, and was probably worn by some people in the area around Norrköping. The rock art scene shows us that people travelled in larger groups rather than individually or in pairs (cf. Berntsson 2005:198-199). It also demonstrates that men, women and children all participated in different journeys. Rock art has often been connected to the ritual sphere (Goldhahn 1999; Kaliff 2007; Kaul 2004; Kristiansen and Larsson 2005; Larsson 1999; Skoglund *et al.* 2017; Thedén 2004), so is this depiction a mythological scene or would it have been regarded as an accurate portrayal of a Bronze Age reality? In order to better understand this we need to examine other kinds of evidence for female travel in the archaeological record.

Migration, movement and travel

Migration, movement and travel have often been taken for granted in archaeology, and few researchers have proposed theoretical strategies for the study of interaction (see Kristiansen and Larsson 2005: chapter 1 for further discussion). It has been pointed out that migration contains a number of processes: cultural, economic, mental and social. Migration is two processes at the same time: emigration and immigration (Alsmark *et al.* 2007: 7-8). Migration, whether small or large-scale, therefore has an effect on not just one society but two. Despite the fact that migration has become a buzz word in archaeology lately, especially concerning aDNA (e.g. Allentoft *et al.* 2015; Cassidy *et al.* 2016; Haak *et al.* 2015), very little has been done in Western Europe in terms of theory (e.g. Anthony 1990, 2007; Chapman and Hamerow 1997; Cassel 2008).

There are a number of different ways to define migration (Chapman and Hamerow 1997: 1). Tilly (1978: 50) argues that there are two different types of movements of people. The type of movement that occurs is dependent on the distance and the break with the area of origin. The most common type of movement is mobility that consists of a move that “involve[s] too little distance and/or too little break with the place of origin to count as migration at all” (Tilly 1978:50). The other type of movement of people/individuals is migration. Based on Tilly (1978), Anthony (1997) discusses five different types of migration: Local migration, Circular migration, Chain migration, Career migration and Coerced migration (for a short definition of these concepts see below).



FIGURE 5. MALE WEARING WRAP-AROUND, TRINDHØJ BURIAL, RECONSTRUCTION BY SIGYNN STENQVIST, ©BERGERBRANT & STENQVIST 2007. FROM BERGERBRANT 2007: 52.

In general, mobility comprises the shorter movements, the ones we undertake every day, or shorter trips. These are movements of individuals that do not place them out of their social contexts for an extended period of time (Tilly 1978: 50).

According to Tilly, local migration “shifts an individual or household within a geographically contiguous market” (Tilly 1978: 51). The break with one’s place of origin is likely to be small. This type of migration is probably the most common type migration (Anthony 1997: 26). In archaeology this might be visible in the movement of a household, setting up a new household for a new generation.

Circular migration “takes a social unit to a destination through a set of arrangements which returns it to the origin after a well-defined interval” (Tilly 1978: 52). This includes movements relating to seasonal work, such as moving area to work with harvest (Tilly 1978: 52). Anthony (1997: 26) adds mercenary soldiers and points out that this is migration with the intention of return. If the migration completes its circle this could be difficult to catch archaeologically, unless we are as lucky as in the Egtved case (Frei *et al.* 2015) to have material that can show short term movement.

Chain migration involves the movement of socially-related people from one area to another (Tilly 1978: 53-54). This is a kind of informed mobility. Frequently, this is characterised by the movement of one category of people, often individuals within a specific occupation. An example of this, as noted by Tilly (1978: 53-54), is the movement of Spanish women from Spain to Rome to work as courtesans. Anthony (1997: 26) adds that this movement category has a specific aim, and intervening areas are left untouched, and so this can often be regarded as the so-called leap-frog type of migration. This type of migration can have implications on the genetics of populations, as he argues it is often kin-structured (Anthony 1997: 26). The Lüneburg foreign women found in Scandinavia can probably be seen as the result of this type of migration (Bergerbrant 2007: 119-123).

Career migration involves “persons or households making more or less definitive moves in response to opportunities to change position within or among large structures: organized traders, firms, government, mercantile networks, armies, and the like” (Tilly 1978: 54). Tilly (1978: 54) argues that this type of migration is not based on social bonds at the emigrant’s area of origin, but is based on the larger structure. Anthony adds that this would include any prehistoric specialist in a hierarchical profession, such as soldiers and artisans (Anthony 1997: 27). In some cases, this category of migration is probably archaeologically visible, for example in Roman burials.

Coerced migration is a term defined by Anthony (1997: 27), although Tilly (1978: 57-63) mentions that some of the great flows of migration were due to force. Anthony argues that this includes “displaced persons, refugees, slaves, and social pariahs [who] migrate not because they choose to, but because they are forced from their home ranges or regions” (Anthony 1997: 27). He also observes that people do not move randomly, even in distress (Anthony 1997: 27).

Tilly (1978:50) argues that the different types of migration have different gender patterns, where circular migration in particular has a tendency to concern just one of the sexes, while local and career migration does not show any major sex selection. The gender concerned depends on which occupation is involved, whereas in chain migration the sex-selection often changes over time (Tilly 1978:50). This can be an important clue when we discuss prehistoric migration. Are we talking about single sex migration or migration of both sexes? Tilly continues that a high proportion of individual migration before the twentieth century AD consisted of transfer of labour among households. Further on he writes that the marriage and the termination of marriage were probably “the most significant demographic spurs to migration” (Tilly 1978, 66).

Many of these patterns of movements are archaeologically visible, though some are more difficult to discern than others. The different categories of migration undoubtedly produce different material traces. In the discussion below the scene from Östra Eneby 27:1 will be discussed from a migration perspective with a special focus on possible female migration.

Women and travel in the archaeological record

Until recently, as pointed out in the introduction, migration, journeys and travel have been associated with the male sphere. The high precision analyses of Egtved (Frei et al. 2015) and Skrydstrup (Frei et al. 2017) with a number of strontium isotope analyses on teeth (Bergerbrant *et al.* 2017; Knipper *et al.* 2017; Sjögren *et al.* 2016) have shown that women have taken journeys and migrated, and that travel and journeying were therefore not an exclusively male activity in the Bronze Age. Below both archaeological and strontium isotope data for females who have journeyed, migrated and/or travelled will be discussed.

Traditionally we have seen the movement of women through the so-called foreign women (women buried with costume that are from a different area than the one in which they were buried). Jockenhövel (1991) argues that the women in the Middle Bronze Age (1600-1300 BC) in present-day Germany have a mobility pattern where a woman generally moved between 50-100 km, even though there are also a few cases of women who moved more than 200 km. However, there are just a few cases of so-called foreign women; viewed from the archaeological material, most of the Bronze Age women moved only within the local or regional group (Bergerbrant 2007: 119-121; Jockenhövel 1991). In southern Scandinavia the so-called foreign women from Period II (1500- 100 BC) and Period III (1300-1100 BC) are buried in the costume belonging to the Lüneburg culture group (Bergerbrant 2007: 119-121). It is possible that the Late Bronze Age had a different pattern, as a female with Nordic Bronze Age objects has been recovered in Switzerland. These objects have been interpreted as possibly having arrived in Switzerland as bridal equipment (Thrane 1975: 225-228). In other words, there may have been a change in the migration patterns or in the kin patterns, and the Lüneburg women buried in Scandinavia are probably part of an informed, chain migration. This migration is likely to have been related to kin structure and a long history of contacts. We have very little evidence of foreign women in the Late Bronze Age, or for that matter of migration at all. Only a few studies have been conducted on the Scandinavian material (Bergfjord *et al.* 2012; Harvig *et al.* 2014), although as the research project *Tales of Bronze Age Women* (Nationalmuseum) involves both Early and Late Bronze Age material, there is some promise for a future understanding of this change.

Strontium isotope analyses have given us a new angle from which to study the movement of people (see e.g. Montgomery 2010 for details about possibilities and limitations of strontium isotope analysis). Strontium isotope analysis from many parts of Bronze Age Europe has shown that a person could be buried in a geological area outside the one in which he/she was born (Knipper *et al.* 2017; Sjögren *et al.* 2016; Wahl and Price 2013), and that this happened more frequently than previously thought. Few studies have been conducted on Nordic Bronze Age material to date (Bergerbrant *et al.* 2017). However, the high precision studies of Egtved (Frei *et al.* 2015) and Skrydstrup (Frei *et al.* 2017) reveal that these two women were nonlocals and that their travel patterns differed widely. This has forced us to reconsider our previous interpretations and to explore the idea that women travelled for a variety of reasons. A study including 28 individuals in Scania dating to the Early Bronze Age did not detect any movement among the children, although it revealed that 31% of the adults, both men and women, were buried in an area that was different from the one where they grew up (Bergerbrant *et al.* 2017).

Here, contrasting this with earlier interpretations of movement of men and women in the Bronze Age, we will highlight just one example. Rowlands (1980) argues for Late European Bronze Age based on early Greek texts in which men who had not achieved the absolute top level of society married the daughters/sisters of top level men in order to enhance their own status. Men who were ranked at the highest level either married their daughters/sisters to men of the same status in other areas, or to men in the same area who were of lower status than their own. He then uses this model to interpret alliances and kinship in the Late Central European Bronze Age. Following this, the so-called foreign women must have been the wives of chiefs, and most likely the daughters or sisters of foreign chiefs. This type of marriage pattern must also be viewed as a gender-informed migration pattern.

Were these women used passively, as pawns in male power strategies, or are there other ways to view these women who clearly travelled at one or more times in their lives, including those in the scene from Östra Eneby (Bergerbrant 2007; Bergerbrant *et al.* 2017; Frei *et al.* 2015; Frei *et al.* 2017; Knipper *et al.* 2017)? Sørensen has pointed out that the supposed foreign women carry the complete costume from their area of origin. According to her, this should mean that it is the mature woman rather than young woman who moved between the different regions (pers. comm. Marie Louise Stig Sørensen 2007-03-13). However, the Lüneburg woman buried in Flintbek, Schleswig-Holstein was buried in the complete Lüneburg costume and is aged to just 15 years old (Bergerbrant 2007: 116-117; Zich 1992 A & B), indicating that the picture is more complex. It has been shown in ethnographic studies that in many societies females gain an increased mobility after reaching the menopause. This is related to the fact that a woman's sexuality no longer results in children, and therefore the woman cannot disgrace the family, as well as to practical considerations, i.e. the lessening of limitations due to the menstruation cycle. Some anthropological cases show that some women have been able to go on pilgrimages, start trading and travel to distant family after the menopause (Brown 1982). The anthropological examples also include societies that are matriarchal, i.e. where the men move into the woman's home (Sanday 2003), hence the young women would not move to the family of their partner.

The scene in Östra Eneby 27:1 provides an illustration showing that all groups of Bronze Age individuals — children, women and men — probably travelled. The reason for the different ages and gender groups' migration could vary; for the children it could be a short trip to visit family, i.e. mobility within the social group (Tilly 1978: 50), a longer trip made as a group but with the intention to return, i.e. a circular migration (Tilly 1978: 52), or it could be in order to become an apprentice and learn a new skill, a career migration (Tilly 1978: 54). The same could be said for both the men and women, and based on a rock art scene it is difficult to impossible to say anything about the intention behind prehistoric movement shown in the scene. We do not know if the scene depicts a ship from South Scandinavia with long distance guests coming to Östergötland, or if it tells the story of local people setting out on a journey/migration to an unknown destination. Based on the archaeological record in combination with strontium isotope analysis it seems that women in Northern Europe during the Bronze Age might undertake many types of migration, from the small mobility (Tilly 1978: 50) that is not visible in the archaeological record, to chain migration (Tilly 1978: 52) as seen in the foreign women from Lüneburg, to circular migration (Tilly 1978: 53) as evident in one of the Egtved woman's journeys (Frei *et al.* 2015), or career migration (Tilly 1978: 54).

The fact that the artefacts depicted on rock art in the Norrköping area are characteristic of the period, but cannot be found in the local archaeological record in combination with the scene at Östra Eneby 27:1 supports the idea that both objects and people moved. Thus, it is most likely that many people, both men and women, did not stay in the same area throughout their whole lifespan. Rock art is fixed in the original context, in contrast to a migration in which people move from one place to another. A rock art scene shows one moment in time, or if re-cut (Milstreu 2017) depicts the remains of an important occasion that might change its meaning through history. Taken together, the archaeological record and the strontium analyses suggest that the rock art scene at Östra Eneby 27:1 depicts a real-life occurrence of people moving in the

Bronze Age rather than a mythological one, though over time and with possible re-cutting it could have turned into a mythological journey. Furthermore, this close connection to the material reality provides some interesting possibilities for obtaining insights into the part of the Bronze Age society that remains hidden behind the rock art.

Conclusion

It has been shown through both the archaeological record and rock art that females in the Nordic Bronze Age moved and travelled. This paper has also shown that it is probable that the costumes known from Denmark were used as far north as Östergötland, or at least were known to the people in that area. The fact that we can use dress to see females in the Nordic Bronze Age rock art allows for new possibilities in our interpretations. It not only gives us new openings for analysing gender-relations in both rock art and in Bronze Age societies from a larger perspective, but the costumes depicted make it possible to connect the rock art to yet another material sphere: textile. This is relevant, not only due to the social aspects of textile and costume, but also in relation to chronology. The costumes depicted in rock art provide an opportunity to date the rock art from yet another perspective. Interestingly, the dating of the costumes depicted at Östra Eneby 27:1 is in accord with the dating of the ships in the same panel.

The scene analysed in Östra Eneby 27:1 and recent strontium isotope analyses demonstrate that all age categories and genders travelled, not just men. In a way that is different but complementary to the handful of high precision cases provided by the Danish oak-log coffins, this rock art scene, and possibly many others, can be used to discuss how people travelled in the Bronze Age. This study also demonstrates the importance of combining multiple sources of evidence when discussing migration as relevant to both men and women in the Bronze Age.

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