



Making Sense of Things

Archaeologies of Sensory Perception

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PAG - Postdoctoral Archaeological Group
Fredrik Fahlander & Anna Kjellström (Eds.)

Stockholm Studies in Archaeology 53, 2010

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Preface

In 2008 a number of postdoctoral researchers at the department of Archaeology and Classical Studies at Stockholm University founded PAG, the Postdoctoral Archaeological Group. The aim of the group is to encourage discussions and research between scholars of the different disciplines within the department (e.g. osteoarchaeology, scientific archaeology, classical history) and to promote activities such as workshops and conferences.

One such event was held 26-27 November 2009 in the form of a workshop and an excursion. The theme of the workshop was *the archaeology of the senses* (Sinnenas arkeologi), which aspired to explore the multi-sensuous dimensions of past worlds. The workshop was attended by ten researchers working in different areas of archaeology and history. A pioneer in the field, Professor Stephen Houston from Brown University, USA, was invited as discussant.

The present book consists of elaborated versions of all but a few of the presentations from the workshop with a commentary by Professor Stephen Houston. We wish to express our warmest thanks to Stephen for promoting inspiring discussions during the workshop as well as for taking the time to write the commentary essay for the publication. We also wish to extend our sincere thanks to the Department of Archaeology and Classical Studies for support of the workshop and to the Berit Wallenberg Foundation for enabling this book to be published.

Stockholm 2010 Fredrik Fahlander Anna Kjellström

Beyond Sight: Archaeologies of Sensory Perception

Fredrik Fahlander & Anna Kjellström



The ‘archaeology of the senses’ became a subject in the 1990s and developed various offshoots at the beginning of the twenty-first century (e.g. Campbell & Hansson 2000, Houston & Taube 2000, Hamilakis 2002, Houston, Stuart & Taube 2006, Joyce 2008). The aim of such studies is to expand the horizons of archaeology, discussing and evaluating how a broader spectrum of human sensory experiences as they appear through sight, hearing, smell, taste and touch can be understood through materialities of the past. Previously, certain strands of evolutionary and cognitive archaeologies have explored these issues, but from a general perspective, arguing that archaeologists need to acknowledge the mediating role the senses play “between the external real world and the inner world of the mind and the ability of sensory observations to alter conceptions relating to the real world” (Trigger 1998:23). The recent school of sensory archaeology tends to be more specific and puts greater emphasis on the significance of sensual impressions in relation to more functional and rational dimensions.

Of the five Aristotelian senses, *sight* is definitely the most prominent sense to be explored and employed in both archaeological practice and interpretation. There is no room here to cover the great body of work on the visual; suffice it to mention a few archaeological examples. For instance, the possible importance and symbolism of colour has been emphasised recently (Jones & MacGregor 2002; also see Thedéen, this volume). Also, the aesthetic qualities of artefacts have been discussed as one parameter separating ‘female’ from ‘male’ stone tools

(Hinnersson-Berglund 2005). Perhaps the most explicit discussion on the importance of sight is found in phenomenological landscape archaeology (Tilley 2004, 2008). The focus of such studies is generally ocular, stressing sightlines and visibility between monuments and their location in relation to environmental features such as rock-outcrops and other conspicuous elements of the landscape.

The phenomenology of space has also spawned interest in other ambient aspects of the landscape such as 'soundscapes' (Tilley 1999:180, Lefebvre 1991:197). Sound is often forgotten in our images of the past although it is often a vital component of any place. For instance, we may consider Joakim Goldhahn's (2002) discussion on the roaring sound of the streams at Nämforsen as one component making the site rich in rock carvings. Another example, as noted by historian Alain Corbin (1994), is how the range of the parish church-bell can have unintentional effects as an acoustic marker of territory. By its sound (which normally has unique audible properties) each bell assists in including and excluding people, and is almost as effective as any natural or cultural physical enclosure.

The so called lower three senses - smell, touch and taste - are employed to a lesser extent in archaeology, possibly because they are normally more difficult to detect or infer. Smell is most commonly mentioned with regard to foul odours, such as smelly places unsuitable for habitation or the stench of decomposing bodies (Nilsson-Stutz 2004). Positive aromas such as the sweet scent of flowers or the appetizing smell of food-preparation are rarely concerned (but see Fahlander in this volume). However, smellscapes may be as important as physical locales or soundscapes (Porteous 1985:369). Furthermore, the control of smell, for example in the church of a medieval abbey, reflects a clear but subtle authority (Regner 2009). In the same way as familiar sounds may define 'home' the particular combinations of smells that impregnate a settlement may be a part of the distinction of ethnicity and place. Touch, or 'feel', has long been advocated as a diagnostic trait to distinguish certain kinds of pottery from other wares (Orton 1993). 'Feel' is also frequently employed in excavation to separate different layers or features, for instance, sun baked clay tiles, which under certain circumstances are impossible to distinguish from the identically coloured surrounding soil by visual examination only. The social importance of touch is, however, rarely addressed in archaeological interpretation (but see Myrberg, this volume). Chris Tilley (2004) is one of the few scholars who has

incorporated the 'feel' of the stones of megaliths as a parameter in addition to type of rock, form and colour, but unfortunately without delivering any substantial conclusions of its importance in choosing stones for megalithic monuments. Another example is the perceived power of sacred objects and the transmission of energy through touching these items (e.g. Dahlerup Koch 2000).

These brief examples generally focus on the importance of a single aspect of the landscape or material. In most cases, however, we are more likely to encounter combinations of sensory input that need to be examined together. One example is the preparation and consumption of food. Here all senses are activated in processing the crunching sound while biting a fresh apple, the fizzling sound, the smell and colour of meat being grilled, the taste (smell) and feel of tender meat in the mouth. Another less pleasant example concerns the decomposition of the dead human body. Dealing with dead bodies is a recurring 'problem' in most societies that involves the whole gamut of sensory experiences, from sight, smell and touch to sound - and perhaps even taste. When the body stiffens as a result of rigor mortis, it swells up because of gases, changes colour, and it starts to smell and leak fluids. It makes noises and can even explode when the gases have built up to a critical mass (Roach 2003, Nilsson-Stutz 2004; see also Nyberg, this volume). Certain rituals, such as a cremation, often involve a combination of sensory inputs: the pyre itself provides a variety of visual effects, smells and sounds. These inherent elements can be manipulated for different reasons, exaggerated or disclosed. By using a special kind of wood or other materials in the pyre more pleasant fragrances can be produced, partly disguising the smell of burning flesh (cf. Oestigaard 2005).

Exactly how many senses there are, and the precise definition of what constitutes a sense, is still debated among neurologists. Among the commonly accepted senses, aside from the Aristotelian, are: *thermoception* (the experience of heat and cold), *nociception* (the unconscious perception of physical pain), *equilibrioception* (the awareness of the body's position and acceleration), *proprioception* (the perception of the physical body), and *interoception* (the awareness of the body's inner physiology). Although in large controlled by the physical body, even these senses are culturally and individually affected. To these accepted senses we may also add 'non-sense'. That is, experiences believed to be sensual, but which cannot be measured or substantiated. One such non-sense is what is commonly referred to as 'the sixth sense'. Although it is not a sense per

se, it is often experienced as such in many cultures. This might include various situations where a supernatural presence of ghosts, the dead and other immaterial entities are sensed by some. It does not matter if such entities actually exist; they may still have a social impact. Even though the supernatural cannot be proved, the actions taken based upon such experiences or beliefs may leave traces. One example may be seen in cases of post-depositional manipulations of burials in which a faulty ritual is corrected to please the dead (Gansum 2008, Fahlander 2010). Two other more concrete and physical examples of non-sensing, though with very different expressions, are phantom pain and the complete lack of bodily perception due to neurological disabilities. Both may be considered in connection with finds of skeletons exhibiting severe traumatic or pathological changes (Kjellström 2010; Kjellström, this volume). The lack of a sense is difficult to identify in archaeology, but surely it would have had social consequences. For example, during the seventeenth-century witch trials the ability to experience physical pain was an important demonstration of being human (Johannison 1998).

Making sense of archaeology

Archaeology of the senses does not necessarily aim to explore and develop a 'softer' side of prehistory. On the contrary it may concern as much hard science as any traditional area of research. However, it is obvious that sensory experiences are often quite closely tied to a repertoire of feelings and it is difficult to omit that from the discussion. The obvious problem is that feelings in general are considered relative on both the individual and cultural levels. Indeed, it is often easy to find diametrically opposed examples concerning the same issue: the loss of a relative can cause bottomless grief or sheer happiness; certain foods may result in utter disgust or the ultimate satisfaction; a face or body shape may be repugnant and ugly to someone, while to others it is handsome and attractive, and so forth. There cannot be any doubt that feelings emerging from sensory impressions are as important as rationality or economic calculations, but in order to appreciate their role and impact they need to be discussed on a particular level in order to make sense. Because of the close relationship between the senses and individually or culturally regulated experiences, the discussions must almost inevitably include a rhetorical or hypothetical analysis.

At a methodological level, the archaeology of the senses is indeed a challenge (Houston & Taube 2000:290). It is difficult enough to interpret similar kinds of information in contemporary society with living informants, and the degree to which it is possible to conduct analyses and access or rescue this type of information from the depths of history may be questioned. But on the other hand, to discuss things, images and other remains of the past one-dimensionally would not be desirable either. The inclusion of more senses certainly enriches our understanding of the past. In their book *The Memory of Bones: Body, Being and Experience among the Classic Maya* (2006) Houston, Stuart & Taube discuss how the Maya experienced their world through smell, sound and sight. They argue that the Maya viewed these aspects as invisible but important phenomena, which created vitality and meaning in the world. The sensory organs like the eye were believed to possess a kind



Fig 1. The 'Fuller Brooch' (Anglo-Saxon, late ninth century) supposedly depicting the five Aristotelian senses. Sight is in the centre, Taste (upper left), Smell (upper right), Touch (lower right), and Hearing (lower left). Photo: The British Museum.

of independent agency; the gaze affected and thus altered that which was in its realm, creating fear and respect. This can be inferred from the arrangement and structure of buildings, but first and foremost in the images of faces on monumental art. Here the eyes are often exaggerated and accentuated, and many of these were intentionally mutilated in order to stop their gaze (see Normark, this volume).

It does, however, become painfully clear that much of Houston, Stuart & Taube's vivid discussion of the sensory aspects of Maya culture is possible because of the rich Maya pictorial art and script. It is far more problematic to grasp similar sensory aspects to the same extent and detail when working with pure prehistoric contexts with little or any iconographic evidence. The senses seldom leave a direct imprint in the archaeological record and more typically must be implicitly inferred. It may, in some cases, be possible to gather and stretch elements of written sources a bit back into prehistoric contexts, but such procedures which involve 'running the film backwards' are not without pitfalls. One always runs the risk of 'contaminating' the otherness of the past with modern rationality, similar to the way in which ethnographic or contemporary analogies/inferences can permeate the past with western colonial ideas of the primitive (Fahlander 2004).

One way forward is to seek and define relationships between different senses. Normally one sensory impression triggers another one, such as when we hear a sound and point our gaze in that direction. There is also the 'Madeleine effect' where one sensory experience (cookie and tea) evokes feelings and memories. On a general level, Tilley's (1999) discussion of metonyms and metaphor may offer one way of exploring such unconscious relations between sensory input and its materialisation. But a more promising perspective may be to explore the various ways in which people seek to manipulate the scope of sensory input: the gaze can be prohibited or encouraged, smell can be hidden or masked, taste manipulated or accelerated, the surface of an object can be made smooth or rough. Many such procedures have material connections and such 'material engagement' or 'entanglement' is indeed an important factor in the formation of social conditions (DeMarrais, et al. 2004, Tilley 2007; Back Danielsson, this volume). The research on the socialness of things has developed rapidly in recent decades from a variety of perspectives from existential hermeneutics to almost functional approaches all emphasizing the relationship between the material and the social. The just 'add things and stir' approach to social theory has resulted in a wide

range of examples of how the material and the human domain recursively interact with each other. The relationship between materialities and the environment is obvious in the way they are experienced as well as the way they may act back on the social context by its affordances and restraints (Fahlander 2008). For instance, Bradley suggests that the building of monuments changed the experience of time and place in the Neolithic as an unintended consequence of the changes of the landscape (Bradley 1993:21). Peter Wilson presents similar ideas of a 'domesticated human'. He suggests that the concept of the house and the establishment of permanent settlements were the major formative aspects of the Neolithic, far more important than the practice of agriculture. Peter Wilson argues that the experiences of enclosing concepts such as the house (and tomb) initiated new social strategies (Wilson 1988). There are also cases when the material and the body are conjoined in an almost cyborg-like way, working as extensions of bodily senses, such as glasses for the myopic or the stick of the blind (Merleau-Ponty 1994, Knappett 2005, Latour 2005).

The outline of the book

The theme of this volume is to explore how human sensuous experiences through sight, sound, taste, smell and touch can be studied in past worlds. The authors discuss a range of different topics such as the materialisation and symbolism of colour, the multi-sensuous dimensions of commensality and cultural constructions concerning pain and odour. The articles comprise examples from various regions and time periods from Scandinavian Iron Age burial rites to classical Maya monumental art and issues of death and burial in eighteenth-century Sweden. In all, these examples demonstrate new and interesting ways of working with the material record, adopting an approach which is not normally recognized in archaeology.

In the first paper, *A Peaceful Sleep and Heavenly Celebration for the Pure and Innocent. The Sensory Experience of Death during the Long Eighteenth Century*, Jenny Nyberg discusses various sensory impressions that people may have perceived in association with death and funerals among burghers and nobility in eighteenth-century Sweden. She draws on material from the Royal Naval Church (Karlskrona, southern Sweden) to demonstrate how items in graves reflect a sensorial setting, including sight, smell, hearing and touch, where death becomes a beautiful peace-

ful sleep. Furthermore, pillows, winding sheets, caps, kerchiefs, gloves, burial coronets, adorning flowers and lace, diminish the experience of corporality and create metaphors of celebration and wedding. The body and the processes of decay are effectively and efficiently masked and suppressed. Nyberg's study thus shows that the materialities of death are culturally controlled and imbued with a strong emotional and sensorial meaning.

A wide scope of sensory input is also the point of departure for Fredrik Fahlander's contribution, *The Nose, the Eye, the Mouth and the Gut. Social Dimensions of Food-Cravings and Commensality*. In his text Fahlander aims to emphasise the multisensuous dimensions of eating and its many social implications. The consumption of food and beverages may entail pleasant sensory experiences of smell and colour, taste and feeling of being sufficiently full, but may also involve tension and conflict, feelings of disappointment, disgust, hunger, and fear of poisoning. A sensory perspective on food and food ways, he argues, can open up new perspectives in many traditional research areas. For instance, Fahlander suggests that cravings for certain tastes may actually have been an important factor behind mobility and contacts between different groups in the past. He also stresses how food and technologies associated with food preparation may have been significant for group sodality and ethnicity in the same way that material culture and language often are.

While Fahlander's paper primarily focuses on desirable sensory experiences, Anna Kjellström investigates a bleaker side of everyday existence. In her paper, *Tracing Pain: Identifying Suffering in Skeletal Remains*, she scrutinizes the possibility of identifying pain in archaeology and physical anthropology. Pain is both a symptom of physical disorders and a sense of distress and negative emotions, and it may be discussed in various frameworks. It is suggested that an understanding of how pain affects single individuals as well as the general public may contribute to the intelligibility of a particular society. Kjellström stresses that pain can be considered to be a general physiological process, which is individually experienced but culturally expressed. Acknowledging these different processes helps to recognize and to examine differences and similarities in time and space. Furthermore, both a quantitative and a qualitative approach are advocated which helps to recognize the experienced and culturally governed sensation of pain.

Johan Normark's article, *Face/Off: a Neomaterialistic Study of the Face*, also concerns sensory detriment and mutilation – although from a more

metaphorical perspective. Normark builds on a Deleuzian framework in his study of how the senses of the Maya kings are materialized in monumental architecture. The human subject, he argues, is always in a state of becoming. It emerges through morphogenetic processes that from a broad set of component parts create an assemblage that we call a human subject. Normark focuses on the intentional and partial destruction of monumental art in the Maya area in southern Mexico and northern Central America. On several occasions depictions of the king's face have been destroyed, especially the eyes, ears and mouth. It appears that the goal was to deprive the king of his main perceptive capabilities, suggesting that he was thought to have kept his sensory abilities even after his death. This defacement, argues Normark, indicates that the portrait was not only an index of the king and the divine power the ruler was considered to manifest. It was also an important part of the State.

The material dimension of the senses is also touched upon in Nanouschka Myrberg's contribution, *The Colour of Money: Crusaders and Coins in the Thirteenth-Century Baltic Sea*. Myrberg investigates how colour in the European Middle Ages may have been perceived quite differently from how it is today, and evoked different values and concepts. Myrberg focuses on medieval heraldry, which combines colours, brilliance, and patterns, in an intricate way to express symbolism. The medieval colour, Myrberg argues, is a *texture* just as much as a *hue*. One example is found on thirteenth-century Gotlandic coins, where associations between sight and touch may have been used in a cross-modal way to represent colour on the metallic objects. In this case the important symbolic colour of the red cross of the crusaders was evoked through the feel of its hatched surface on the coin. Perhaps touching the 'red cross' of the Gotlandic coins brought forth the spiritual content of the symbol, revealing its immanent realities to the user.

Colour, or rather the lack of colour, is also the subject of Susanne Thedéen's contribution, *Immortal maidens: The Visual Significance of the Colour White in Girls' Graves on Viking-Age Gotland*, where Thedéen emphasises the visual symbolism of the colour white and its apparent association with young girls in Gotlandic society during the Viking Age. Much of the bijouterie found in the graves is quite colourful including yellow, green, red, blue and turquoise beads as well as those of exotic materials such as carnelian, amethyst and rock crystal. White shell-beads occur much less frequently and are generally only found

in the graves of the female sex - especially young girls. This pattern, Thedéen suggests, is an important key to understanding the stages in the young girls' life-course. The colour white not only refers to social status, but may also be linked to the buried girls' identities as maidens, or to signal the future fertility and progeny of the kin.

Sensory aspects of the materiality of death are also the concern of Ing-Marie Back Danielsson's contribution, *Sense and Sensibility: Masking Practices in Late Iron Age Boat-Graves*, in which she deals with the significance of masking practices in Late Iron Age boat-graves in Scandinavia. With the helmets of the boat-graves at Valsgårde and Vendel as the focus, Back Danielsson's main theme is an investigation of how the helmets affect, distort or even deprive the senses of both wearer and spectator. The masks should therefore not be regarded solely as disguise or protection, but also as a way for the owner to transform into something else, a new persona or spiritual being. The helmets and other war-related paraphernalia in the boat-graves can be seen as markers of a high status martial and masculine identity, further highlighting the multi-sensuous character of the boat-graves. She demonstrates that the senses invoked through the burials played an important role in the public ritual as a means to entrenching memories of a past, establishing a lineage with ancestors as well as pointing to, and projecting, a desired future.

The final text in the volume consists of a commentary essay, *The Inescapable Body*, by Stephen Houston, one of the key figures in the formation of the archaeology of the senses who was also discussant in the workshop.

Despite the common theme, the articles in this volume do not form a coherent body of thought. There is no 'ready-made' theory and method available especially designated for an 'archaeology of the senses'. Undoubtedly, such an apparatus would be a strange creation of little use. The aim of the volume is rather to open up windows and to widen our perspective on how the materiality of the past can be interpreted by emphasising a broader range of sensory experiences and sensations 'beyond sight'.

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A Peaceful Sleep and Heavenly Celebration for the Pure and Innocent. The Sensory Experience of Death during the Long Eighteenth Century

Jenny Nyberg



Death is the one thing that impacts life more than any other. The death of a loved one evokes feelings and leaves footprints on our minds. The experience of watching a close relative of mine slowly dying of cancer in a hospital ward is one that I will probably carry with me for the rest of my life. A couple of months ago when washing my hands I was immediately flung back to the feelings I had while visiting my relative in hospital. The cause of this déjà vu was the smell of the soap, which had the exact same fragrance as the one used in the hospital. Standing there washing my hands I felt depressed and powerless. This very personal example illustrates the power of sensory impressions on our emotions.

Trying to make sense of senses and emotions

Both sensory impressions and emotions are biological in the sense that we experience them through physical reactions in our bodies (Houston & Taube 2006:135; Tarlow 2000:728). At the same time they are both culturally conditioned. Ideas about the senses in a particular cultural context impact the way the sensory impressions are experienced (Houston & Taube 2000:262). The sensory impressions from the same stimuli can be valued differently over time and space, but the ability to experience them is nevertheless universal. Emotional reactions, such as grief or fear, also vary socially and culturally over time, between societies and between different social groups within the same society. Both the

cues - such as sensory impressions - to an emotional reaction and how that reaction is experienced are culturally specific (Tarlow 1999:33f). It is also fair to assume that a sensory impression can be perceived differently depending on the emotional state of the receiver.

Sensory impressions can trigger highly individualized emotional responses. Roland Barthes, focusing on the sense of sight, aptly illustrates this in *Camera Lucida. Reflections on Photography* originally published in 1982 (Barthes 1993). Barthes speaks of two different levels of meaning in relation to the photographic image. The *studium* stands for its denotative qualities which bear culturally specific connotations (Barthes 1993:26; Tilley 1999:271). The second level of meaning, *punctum*, is a highly personal response resembling a prick or a pin-point. A detail in a photograph can give the viewer a psychological sting, causing him or her to remember and associate, thereby evoking emotions (Barthes 1993:26f). Christopher Tilley has pointed out that material metaphors can work in the same punctual way. He argues that the punctum of the artefact is “the mental image analogies and associations” that it conjures up when “seeing a thing, or an aspect of a thing such as its colour or shape” that “stings the memory into recalling other artefacts experienced and used in prior actional contexts” (Tilley 1999:271). Tilley is here referring to the visual aspects of the artefact, but I would like to widen the discussion to incorporate all senses. It is my belief that all senses can be understood to work on our minds this way. As pointed out by others before me, one of the strengths of material culture is its three dimensionality and ability to work on all our senses, thereby evoking memories and emotions through sight, smell, taste, touch and hearing.

Thoughts on death can be so deeply rooted that they are taken for granted and never put into words. The study of material practice may be a way to reach them, and particularly the study of metaphor in material culture (Tarlow 1999:46ff). The metaphor redescribes reality. It can make us understand and experience something in terms of another experience. This is often done by using concepts well known from the physical world to understand more abstract, emotional and unknown concepts (Tilley 1999:17f) such as death. Material metaphors play an important part in rituals by linking the indescribable with the experience of concrete sensory impressions. Objects given metaphorical qualities are active in the ritual and can be loaded with meaning, memories and therefore also with emotion (Tilley 1999:10, 75).

The early modern body as materiality – a study of burgher and noble society

I consider the dead body to be active in the creation of social practices and therefore regard it as materiality (Nilsson Stutz 2008:23). The manipulation, masking or enhancement of the sensory impressions when viewing and perceiving the dead body can tell us of the emotional attitudes towards a body on the brink of putrefaction. By studying the material prerequisites for sensory impressions and the redescription of metaphor in graves we can reach the associations ascribed to death and get closer to the emotions the participants of the funeral were meant to feel.

Research on the senses has often regarded the Early Modern period - presenting major changes such as the printed word, the Reformation with its focus on the scripture and movement away from the sensual culture of touching of relics and scenting of the divine, and the Enlightenment with its emphasis on empirical, visual observation - as the time when sight came to take its place as preeminent among the senses (Smith 2007:21ff). This view has been contested by others who call attention to non-visual senses such as touch, taste, and smell as being critically important to the development of modernity (Smith 2007:31, 80ff, 65). No one has ever experienced the world through only one sense. In real life all senses appear together, sometimes in complementary fashion, sometimes in tension. In order to get closer to the lived experience of people in the past the analysis benefits from taking all sensory inputs into account. Of interest for this study is how the senses work together to create the whole perceptual field.

In this article the emotional attitudes to death within the eighteenth-century burgher and noble society of Sweden will be analyzed through the study of coffin burials. The material content of coffins, i.e. the remnants of how the bodies of the deceased were prepared, dressed, adorned and equipped, will be discussed in relation to four of the five Aristotelian senses - namely sight, smell, hearing and touch.

The makings of a grave

Throughout the early modern period in the Western world dying was, if not hindered by sudden deaths from illness, accidents, crime or warfare, done at home. The ideal way of passing was in the presence of relatives who would gather and live in the home of the dying person to be there

when he or she drew their last breath. The body was subsequently washed, dressed, adorned and shrouded. Throughout the early modern era, and well into the modern, the dead body was shown to family, relatives, neighbors and friends before the funeral either during the wake or when the body was laid in the coffin (Arvidsson 2007:150; Åhrén Snickare 2002:130). The coffin was then kept at home awaiting burial. However, unlike other social groups, the nobility were legally allowed to store the coffin in church before the funeral (Arvidsson 2007:151).

When performing the formalized acts of preparing the dead for funeral the participants share a commitment – an agreement to take part in actions out of the ordinary. Scholars focusing on the ritual from an act perspective, such as Roy A. Rappaport (1979), Caroline Humphrey and James Laidlaw (1994), emphasize this commitment as one of the prerequisites for classifying an act as ritual (Habbe 2005:33, 36). The participant is able to take a stand and make this commitment due to the fact that the form of the ritual is stipulated beforehand. The ritual is perceived of as a predetermined external entity and participants may have their own intentions when partaking without threatening the stipulated purpose (Humphrey & Laidlaw 1994:88f; Habbe 2005:33f). When preparing the dead for funeral there are cultural understandings connected to the ritual act, but that same act can be looked upon as ritual, symbolic or with indifference depending on through whose eyes the act is being seen (Habbe 2005:36, 59). The formality of the ritual both restrains the participants and allows them a space for their own personal motifs. It also sets standards for the appropriate emotional outlet, but can at the same time be said to legitimise the sanctioned way of showing emotion. The ritual thus serves as a way to both channel and restrain emotion (Habbe 2005:49). Above all, rituals are collective acts legitimised by the collective. This collectiveness of the ritual can create a sense of trust and security and at the same time uphold the collective norms and conventions in society (Habbe 2005:49, 56).

How then, do all the individually felt reactions surrounding the dead body make it possible to study sensory impressions and emotions of the past? Emotions are partly constructed through material practice. If certain emotions correspond with the values of a society, they will be created and recreated (Tarlow 1999:35). It is my assumption that recurring patterns in graves concerning preparation, dress, adornment and equipment of the dead body bear witness to a collective cultural understanding – a meaning on the level of Barthes' *studium* if you will.

These patterns may mirror the reflected or unspoken collective emotional attitudes towards death. The material actions triggered by punctual, individual emotional responses might be traced in deviations from these patterns and may indicate individual acts not necessarily performed or supported within the collective context of the ritual.

What we see inside the coffin are therefore the traces of collectively authorized actions but also there must have been room for personal actions towards the dead body as long as it was kept at home. The fact that the priest in 1686 was forbidden to take part in the last rituals held at home before closing the coffin lid and departing to church for the funeral (Arvidsson 2007:240) might have further enabled individual material actions towards the dead.

The royal naval church of Karlskrona

The Royal Naval Church Ulrica Pia is situated in the city of Karlskrona, in the province of Blekinge, on the south coast of Sweden. This parish church for the military and civilian employees of the Royal Naval Base was consecrated in 1685 (Malmberg 1980:7ff). The 23 brick-built burial vaults underneath the church floor contained 401 whole and fragmented coffins when they were excavated during the winter months of 1942-1943. From the documentation it is hard to establish how many bodies were found. The textiles report, which documents the best preserved textiles found in situ, describes the graves of 109 individuals. The total number of individuals found therefore probably exceeds this figure. Many graves can be dated to the mid and late eighteenth century by means of coffin plates, coffin styles or textiles, but burials from the late seventeenth century also occur. The dating must in most cases be regarded as roughly estimated, which makes it difficult to comment on changes in practices over time. The coffins were only partially inspected since no textiles or objects within them were allowed to be moved. Certain aspects, such as objects or clothing underneath the shrouds, may therefore have been overlooked. No osteological analysis was performed. In the report the sex and age of the dead has been determined through coffin plates and estimated through coffin size, with the help of textiles and by observing tooth development (ATA 3260/43). The incertitude in this procedure has been taken into account when interpreting the graves in this article.

For a fuller analysis the graves of the Royal Naval Church are compared to the forty eighteenth-century graves of burgers and nobility excavated

in vaults of the Sankt Olai Cathedral of Helsingør, Denmark, in 2000 (Aagaard 2001:99f). Parallels will also be drawn with graves of the cemetery of Linköping cathedral in Sweden. The excavation there of 2002-2003 gave the opportunity to archaeologically and osteologically document graves dating from AD 1100-1810 (Tagesson 2009:153f) and therefore offers a long term perspective on the burial customs of city dwellers from a wider social strata (Nyberg 2005:8f). Early modern graves are still a limited research area in Sweden. The examples from British burial customs used in this article should therefore be viewed as food for thought – as possible ways of thinking about the Swedish material that may be challenged once a fuller body of material has been analyzed.

Sight

When studying the graves of the Royal Naval Church and those of the comparative material of the cathedral of Helsingør, two material metaphors become evident. They are the metaphors of sleep and of heavenly celebration. As we shall see these material metaphors are created through the complementary work of several sensory impressions.

All the dead in the Royal Naval Church are resting their heads on pillows. They give the impression of having been tucked in, lying under covers or creatively draped winding sheets. Adults are shrouded in plain white cotton or linen fabric, their shrouds draped as shirts or dresses. Underneath they wear shirts and shifts that have been used in life. The visible parts of these, the collars and the ends of sleeves, are decorated with lace and frills. Within peasant society tradition dictated that men and women were buried in their finest shirts and shifts, namely those worn on their wedding day (Troels- Lund 1904:107, 109; Åhrén Snickare 2002:131f; Hagberg 1937:181). This may also have been the custom higher up in society. The fact that the shirts and shifts in the Royal Naval Church have been previously worn is perhaps an indication of this.

The absolute majority of adults, both men and women, have their heads covered. Caps made especially for the funeral occur in both male and female graves. Women and men are also buried in headgear worn in life – either in night caps or caps worn during the day. A few women are particularly warmly dressed, wearing both double caps and a kerchief. A handful of men were buried in their wigs. The dead are also well dressed around the neck, wearing jabots or scarves. Due to the limited

investigation of the bodies the footwear - concealed under shrouds and winding sheets - has been recorded in only a few cases. It appears that wool or cotton socks were the most common wear although a pair of shoes did occur in a child's grave – one of the few graves dating to the seventeenth century according to the report.

In a handful of coffins in the Royal Naval Church the face of the dead was found covered by a face cloth, a paper sheet or a veil. A comparison can here be made to the cathedral of Helsingør where all buried individuals had their face covered this way (Hvass 2001:86). An engraving from 1736 documenting British burial customs shows the gathering around a corpse before the funeral in what appears to be the home of burghers or nobility. A woman in the picture removes the face cloth from the deceased to take one last look (Cunnington & Lucas 1972:162). Here the viewing of the face seems to have been regulated. The mourner could decide for him or herself when it was time to come face to face with the dead. Whether or not the same practice existed in Sweden is hard to tell from the material at hand in this study. There may of course have been regional differences to this practice. Since face cloth is lacking in the majority of graves in the Royal Naval Church it may be that only the faces of badly preserved bodies were hidden. In one grave in particular it is tempting to draw this conclusion since the facecloth was thoroughly tucked in underneath the cap and scarf of the dead woman. Her head had then been covered by a big sheet of paper.

The majority of the dead are wearing gloves, usually made of leather. Decorative bows placed around the wrists, the neck and on the head are a common feature. The skin of the dead is covered to a great extent. It appears as if attention is meant to be drawn to decorative details on clothing and elaborately draped winding sheets. The covering of a putrefying face, and of pale and lifeless hands with gloves, should be viewed as part of creating the illusion of a peacefully sleeping body.

In contrast to the rather plain fabrics found in the graves of adults, the children are often clothed and shrouded in coloured or patterned fabrics. Silk fabric is also more common among the young. Another difference is that their shrouds have often been draped in order to imitate clothes worn in real life such as coats, trousers, jackets and dresses. These garments have been decorated with buttons, cuff links and clasp buttons that do not serve any functional purpose apart from creating the illusion of real clothes. Great effort has also been put into arranging the winding sheets in the shape of fans by the children's feet or as halos

round the head. The overall impression is that graves of children are more adorned and they appear more dressed up in their colourful and patterned garments. However, the impression of more exclusive fabrics should, due to the rough dating of the graves, be viewed with slight caution. It cannot be ruled out that the children buried in silk fabric principally belong to the later seventeenth and earlier eighteenth century. The authorities tried to regulate the fabrics of shrouds through laws and ordinances. According to these the nobility were allowed to use silk up until 1731 when the use of linen was commanded (Arvidsson 2007:148). A comparison can be made with smaller studies on graves in Norway which show a tendency of a change towards simpler fabrics among the upper social strata by the mid eighteenth century (Vedeler 2010:254).

The vast majority of children wore burial coronets. They were worn as a single chaplet or in combination with a small cage-shaped crown (Figure 1). The coronets in the Royal Naval Church are mostly made of real or artificial myrtle, although laurel leaf, box and lingonberry sprigs occur as well. Garlands and bouquets of real and artificial flowers also adorn their bodies.

The excavation of the cemetery of the Linköping cathedral showed that burial coronets were introduced there in the late seventeenth century to early eighteenth century, becoming most common in the late eighteenth century and early nineteenth century (Nyberg 2005:21). The coronets in Linköping were mostly made of flowers and decorated with copper spirals, little brass plates or pearls tied around a wire (Tagesson 2009:163). The earliest archaeological evidence of a burial coronet in Sweden is one made of pillow-lace which dates to the later part of the sixteenth century. It was found in the cemetery of St. Nicolai church in Norrköping in 2004-2005 (Konsmar 2007:16f).

In a seminar paper on the graves of Linköping I have previously shown that burial coronets could be worn by children of both sexes and also by young men and women, although there appears to have been a difference in the placing of coronets. Children and young women wore them on the head and young men had them placed on their bodies (Nyberg 2005:19). Graves of women and men in the Royal Naval Church further strengthen this observation. Four women are wearing myrtle coronets whereas a man has twigs of myrtle in his hands and on his chest. Based on the text on coffin plates and tooth development these individuals have been determined to have been young adults.



Figure 1: This picture of buried children evokes strong feelings through time and space. The meticulous care in dressing and adorning is a moving testimony of the emotional reaction upon the death of a child. Notice the artistic fan and halo-shaped drapery by the head and feet and how the shroud to the left imitates a real coat with clasp buttons. The children's heads are crowned with coronets. Photograph: Lars-Göran Kindström, Swedish National Heritage Board, Department of Heritage Resources.

The use of *bridal* coronets has a long tradition in Sweden. Written sources from the sixteenth century describe how the young bride wore a coronet as a symbol of chastity and virtue. Starting in the eighteenth century myrtle crowns in combination with chaplets were worn by brides as part of their bridal trousseau. The use of myrtle at weddings started in towns and spread to the countryside. If short on real myrtle the crowns and chaplets could be supplemented with lingonberry sprigs or imitations made of paper (Mattson & Dackenberg 2005:38ff). It therefore appears that coronets of myrtle were used in both weddings and burials in the eighteenth century.

In my seminar paper on the Linköping graves I discussed the different placement of coronets from a gender perspective. I interpreted the fact that men, unlike women and children, did not wear coronets on their heads as a sign that they were on their way into a more official male sphere. By studying, learning a trade or coming of age, the young man may have been regarded as too old for wearing a coronet (Nyberg 2005:21). The common denominator of women and children is rather that of chastity and innocence. It is clear that a single chaplet could be worn by both boys and girls. With regard to the similarity of the adornment of a bride it may be that the combination of chaplet and crown was reserved for girls. In 1666 a parish priest described in his diary how his little dead daughter was wearing her bridal dress and garb (Hagberg 1937:198). The funeral attire here seems to have gone all out in wedding symbolism.

Within Christianity laurel, which adorned several buried children, has been a symbol of immortality. Tradition maintains that the earliest Christians laid their dead on laurel leaves since “those fallen asleep in Christ never cease to live” (my translation; Dahlby1963:230). The coronets, worn by children and unmarried virgins and made of different materials, thus seem to bear several related connotations. They represent immortality and victory over death. They also stand for chastity, purity and innocence and perhaps also the celebration of triumph over carnal lusts. The full blown wedding symbolism also suggests the celebration of a heavenly marriage to Christ.

The Moravian Church (herrnhuter), a revivalist movement that grew strong in Sweden in the eighteenth century, preached an individual relationship with Christ. This was often expressed as a physical relationship with Jesus where death was referred to as becoming his wife in heaven (Jarrick 1987:30, 37, 40). Although coronets had been

used earlier, the incorporation of the ideas of the Moravian Church into the state church and wider society (Jarrick 1987:53, 63) might have contributed to the popularity of the marriage metaphor as seen in the increasing number of coronets in Linköping during the eighteenth and nineteenth centuries.

The singling out of the young and unmarried from the adult and married, performed through particular and more elaborate adornment, suggests above all a greater emotional hardship in losing someone young who had not yet fulfilled their lifecycle of marrying and having children of their own. Death is portrayed as a celebration thereby focusing on a positive continuation.

Smell

The report on the Royal Naval Church describes three of the buried individuals as 'embalmed'. An additional ten are described as 'mummified'. Since bodies in grave vaults can become naturally mummified (Löwegren 1962:112), and since the investigation of bodies was limited, it is hard to tell how many of the dead had actually been given an embalming treatment after death.

In a publication published in 1775 the Swedish surgeon and obstetrician Herman Shützercrantz describes how the method of dry embalming was used when the body was to be put on display for a longer period of time, such as with royal and princely funerals. The body is then emptied of its intestines, carefully washed on the inside and thereafter filled with aromatic spices and treated with balms (Löwegren 1962:101). According to Shützercrantz the purpose of embalming royal corpses was not just to prevent putrefaction and smell before the burial, but also to enable the possibility of seeing the face and appearance of the royalty on certain occasions in the future (Löwegren 1962:95). Since embalming seems not to have been performed on all bodies it may have been reserved only for those who, due to various circumstances, were prevented from being buried quickly. A simpler way of dampening the smell of putrefaction was through the use of fir twigs found in several graves. In one grave a major's wife was resting under a cover made of fir twigs (Figure 2).

The adorning flowers also would have contributed to the 'smellscape' surrounding the dead body. Myrtle, laurel and box all give a distinct smell. A little girl in the Royal Naval Church was, partly to this end, holding a bouquet of clove and lemon in her hands. In the graves of

Helsingør cathedral twenty types of plants could be identified. They had been used as upholstery in mattresses and pillows for the dead to rest upon and for decorative as well as scenting purposes (Karg 2001:134). Most of the graves had been upholstered with hops which bear an aromatic scent. The tranquilizing effect of hops may also have been thought to symbolise or give a pleasant sleep to the dead (Karg 2001:134, 137). Valerian, which was found in the grave of Swedish king Gustav Vasa, possibly the first person to be embalmed in Sweden in 1560 (Löwegren 1962:86ff; Olsson 1956:55), is to this day used as a natural cure for insomnia.

The fresh fragrance of herbs was meant to lead associations away from putrefaction and to paint a picture of beautiful sleep and celebration. The smell of coronets made of myrtle may even have led associations to the joyous wedding. An individual example testifies to how attempts of scent diversions, through personal association, could have quite the opposite effect. In her autobiography the Danish princess Leonora Christine, daughter of King Christian IV, describes how she developed an aversion to the smell of rosemary after viewing her dead twelve-year-old brother lying in state in 1628 (Bøggild Johannsen 1988:35). Rosemary was found in several graves in Helsingør cathedral (Karg 2001:134). From pictures and written sources we know that rosemary was also commonly used in England to freshen the air around the corpse. Here sprigs of rosemary were both held in the hands of mourners and lain down around the body (Gittings 1984:110, 124). The association of smell and disease existed in different shapes from the Middle Ages well into the nineteenth century (Smith 2007:67). Therefore the perfume of herbs in graves may also have been understood to fight unhealthy impurities emitted from the dead body.

It is evident from several written sources that the smell of decomposing bodies in church was a problem. In 1588 Swedish king John III complained about how the clergy looked after their churches since the stench made churchgoers vomit. And despite efforts to fight the cadaverous odors with fir branches and incense in a Stockholm church in 1686, a meeting for clergymen had to be adjourned due to the terribly disturbing smell (Malmstedt 2002:48). However, the right of the dead to be buried within the sanctity of the church was greater than the need to eradicate the disturbing and possibly dangerous smells for another 100 years. Despite the nuisance, the selling of intramural graves was not forbidden until 1783 (Lindahl 1969:197ff). Already

existing family graves could still be used; the latest coffin plate in the Royal Naval Church dates to 1837. In Stockholm in the late eighteenth century public announcements were made stating that the relatives were responsible for ensuring that the coffin was properly closed with putty and resin, due to the unhealthy vapors from the body (Arvidsson 2007:149f). The coffin lids in the Royal Naval Church were fastened with wooden plugs, but from the mid eighteenth century iron screws were added. The shrouds or winding sheets were laid over the edge of the coffin together with what is described as a red or black lacquer or sealing wax which also helped fasten the lid.



Figure 2: A Major's wife is resting under a cover of fir twigs to dampen the smells of putrefaction. Photograph: Lars-Göran Kindström, Swedish National Heritage Board, Department of Heritage Resources.

Hearing

The fastening of shrouds and winding sheets to the edge of the coffin also must have helped in keeping the body in place and upright. The excavation of eighteenth- and nineteenth-century graves in vaults underneath Spitalfields church in London showed how professional undertakers had used different techniques to keep the body in a precise position. Silk ribbons were used for trussing the body by, for example, tying hands to the body, keeping feet close together and for fastening caps (Janaway 1993:104f). The graves of the Royal Naval Church were not examined closely enough to discover particular examples of trussing since no shrouds were removed. Most hands appear to have been resting freely. In one case the shroud had slipped off revealing a man's feet tied together with a black silk ribbon. In ethnological sources the tying of feet has a basis in folk beliefs of the nineteenth century, where it is explained as a strategy to keep the ghost of the dead from walking (Hagberg 1937:204f). It is hard to tell if this was also the case with this man who died in 1714, several generations before. Dying too hastily or in the wrong way without the gradual preparation and process of dying in the presence of family, kin and friends (Halam, Hockey & Howarth 1999:116) might have prompted extra precaution.

There was no detailed investigation conducted of the upholstery material in the Royal Naval Church. The report only briefly mentions bodies lying on hay. Apart from plants, sawdust and paper shreds were used in the graves of Helsingør cathedral (Hvass 2001:88). The upholstery creates a soft bed for the dead body that appears to be lying comfortably. The dry and porous material also helps absorb liquids from the body's decomposition and keeps the body from moving around and bumping against the coffin walls when being transported (cf. Janaway 1993:102). Both the fixed upright position of the body and the soft bedding must have prevented the limbs of the dead body from moving and making noises. The material testimony of sound in the graves is therefore rather that of no sound. In order to preserve the image of death as a peaceful sleep not a sound should be heard from the body to make anyone believe otherwise.

There seems to have been a fear of burying someone still alive. A contribution to this debate in Sweden was made with the translation of anatomist Jacob Bénigne Winsløw's thesis in 1751 on the uncertainties

of the signs of death and on precipitate burial and embalming. In his thesis he could show proof of 49 live burials and he presented a number of techniques to avoid this; for example by exposing the dead body to strong smells, loud shrieking noises and pricking with pins. Of course one of the safest methods would be to wait for putrefaction to set in (Winsløw 1751). To what extent Winsløw's thesis had an impact on the handling of dead bodies in practice is of course hard to say. It is, however, a symptomatic sign of the importance of the body to be lying absolutely still and quiet throughout the funeral ceremony.

Touch

The experience of touch is elusive in the archaeological record, but at the same time very evident. All that we see in the graves has been made and done with human hands and therefore comes into being through the sense of reflected or unreflecting touch.

In line with Norbert Elias' 'civilising process' the sense of touch underwent a change during the Renaissance and the Enlightenment. Social control was now upheld by keeping one's hands to oneself (Smith 2007:102). As Elizabeth D. Harvey suggests, drawing on Norbert Elias, this disciplining and orchestrating of touch made it emotionally meaningful. While physical impulses were hindered and kept on the inside, tactility became a way to channel physical expression of emotion (Harvey 2003:9).

Through the many steps of preparation there must have been opportunity to touch the body of the deceased. There may have been something almost therapeutic in physically preparing your loved one for sleep and festivity. The dead were dressed in handicrafts such as lace. Lace that comprised textures meant to be touched (Smith 2007:109). The dressing of the dead in fabrics with lacework and frills and the adornment with flowers, making them as beautiful as possible, must have provided an opportunity for the tactile transference of emotions to the dead and thus must have been an important part of the grieving process. The giving of personal objects to the deceased, in the Royal Naval Church exemplified by a snuffbox and a hymn book, in Helsingør by a copy of Voltaire's tragedy *Oedipus* stuck between the mattresses (Hvass 2001:89), and in Linköping shown by wedding rings, clay pipes and an egg found in a child's grave (Nyberg 2005:17f), injects an extra dimension into the creation and recreation of a meaningful relationship with the dead

through material practice. These single objects which do not recur in graves are most likely the results of acts driven and motivated by individual emotions. They either represent an aspect of the relationship with the deceased or were chosen because they represented or were thought to have been needed by the dead. Of course fear of the dead returning may also be represented in these objects.

According to Eva Åhrén Snickare it was not until the nineteenth century that a gradual development towards a professionalization of undertakers started in Sweden, beginning in the higher social strata of society and spreading from towns to the countryside (Åhrén Snickare 2002:127). There had always been caution and particular social rules for handling the dead body (Troels-Lund 1904:163), but now the washing and dressing was left in the hands of others. This process left the bereaved separated from the dead. Not having to feel the cold body of the corpse, but seeing it fully prepared for the funeral, put death a step further away from the living, making the metaphors of sleep and festivity even more convincing.

A peaceful sleep and a heavenly celebration

The material prerequisites for sensory impressions found in graves of burghers and nobility in the eighteenth century show that they were meant to paint an intersensorial picture of death as a peaceful sleep and a heavenly celebration. The senses of sight, smell, hearing and touch all worked together to make death beautiful and to avoid the experience of a body in the process of putrefaction. The metaphors of sleep, celebration and wedding redescribe the abstract and unintelligible death in terms of well known, familiar, safe and even joyous concepts from daily life. These understandings bear culturally specific connotations that may be particular to the social groups studied here. Further studies will have to show if these ideas permeated the wider society and if there are differences in material expressions between social groups over time.

The manipulated sensory impressions of the dead body may not always fill their metaphorical purpose when faced by the individual. For instance, the herbs used to scent the dead body can cause quite the opposite emotional reaction to that intended. They may become associated with death and sorrow. The sensory impression here leads to a personal association, causing emotions that may lead to material actions. The inclusion of personal and singled out objects in graves, only

touched upon in this article and in need of further exploring, should most likely be seen in the light of personal and emotionally driven acts towards the dead body. Acts not necessarily performed within the collective context of the ritual.

When dealing with material traditions that last over several hundred years, such as burial coronets, a question has to be raised regarding the meaning of practices over time. Surely there must have been shifts in emotional meaning over centuries. Part of the reason for upholding rituals and traditions is the feeling of security in doing something your ancestors have done. This creates inertia in the changing of practices. When does material practice go from being emotionally meaningful to becoming convention? Does a material practice cease to be only when performing it is utterly unthinkable to the people involved? These are important questions and it is hoped that more light can be shed on them in the future.

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The Nose, the Eye, the Mouth and the Gut: Social Dimensions of Food-Cravings and Commensality

Fredrik Fahlander



A few years back, Swedish newspapers somewhat reluctantly reported that “the Vikings did not eat meat, but porridge.” The vibrant image of the fearsome Vikings tearing meat off the bones and washing it down with a swig of mead was instantly transformed into a dull and gloomy one of grey peasants quietly eating simple porridge. What happened here? The article was instigated by the results of lipid analyses on food-remains from a couple of pots dated to the Viking period. Why are the rather modest, albeit interesting, results newsworthy for a wider audience? No new finds were discovered and no radical theories had emerged - just the fact that some people at this particular site at this particular point in time mainly had porridge for dinner. The article is but one example illustrating that what we eat is very much about image, cultural values and ideology. Indeed, food and ‘foodways’ are at the heart of most cultures, and in anthropology, sociology and psychology they are central issues that are considered of great social importance. As Counihan and Van Esterik (1997:1) observe: “Food touches everything. Food is the foundation of every economy. It is a central pawn in political strategies of states and households. Food marks social differences, boundaries, bonds, and contradictions. Eating is an endlessly evolving enactment of gender, family, and community relationships”.

In archaeology, the discussion concerning food and ingestion has primarily focused on diet, i.e., *what* people have eaten (e.g. Gosden & Hather 1999). Large quantities of deposited animal bones have been analysed over the years and complex scientific analyses of human bones have been carried out in order to establish nutrition and subsistence via 13^C and other isotope analyses. When you think about it, it is a little puzzling why so much effort has been invested in establishing variation in prehistoric diets, yet there has been little interest in elaborating on the social dimensions of commensality. In recent years there has been an increasing interest in the ritual use of food and especially the social dimensions of the feast, potlatch or symposia (e.g. Bray 2003, Wright 2004, Craven 2007, Twiss 2008). Still, missing from the debate are elaborated discussions about the daily gatherings around the pots and pans. The daily dinner is not just a matter of consuming nourishment; it involves planning and gathering ingredients, and thinking about ways of cooking them and how to combine them. Eating and drinking require a number of key social elements such as materiality, spatial arrangement and place, bodily experiences, mental expectations, and bonding/exclusion. There is a considerable social dimension in food that goes far beyond pure biological needs. In many ways, food culture may be a more important trait for social groups than their material culture, let alone style and design of pottery.

The material facet of eating also needs further elaboration: there is probably great potential in more detailed analyses of the various traces of food preparation, cooking and consuming, but also in investigating the idea that certain foods and beverages can work as *actants* with a potential to initiate social change. To pursue such a 'culinary archaeology' it is vital to recognise the multi-sensuous dimension of food. Food and foodways are very much about sensory perception, feelings and desires. The everyday meal often involves the pleasant experiences of smell, taste and colour, and feelings of comfort and satiation, as well as tension and conflict, feelings of disappointment, disgust, hunger, and even fear of poisoning. Social, material and sensuous dimensions of foodways can thus be a fruitful entrance to any social analysis of the past, whether it concerns materialities, social organisation, gender, place and space, culture-contact, change and development, settlement or ritual, etc. In this text, I wish to explore some of these issues, evaluating how a deeper understanding of commensal politics may help to elaborate upon our pre-understandings and fictions about prehistoric life in order to better make sense of the archaeological record.

The crumbs of the table: the socialness of food

How often and how much did people eat in the past? How and when did they eat? Was it mostly snacks ingested during the day rounded off with a shared supper in the evening? Although we know a lot about what people ate during different time periods and regions, we have very few clues of how, when, where, what and with whom food and drink were consumed. As foodways are in many ways culturally specific there is little point in searching for cross-cultural similarities or average numbers (Fahlander 2004). But, on the other hand, since the archaeological data is generally thin on such information it may be justified to survey how daily meals generally are arranged in small scale societies – if mainly for the purpose of broadening our horizons and to tickle our imaginations. Judging from a random pick of anthropological literature it appears that food in small scale settled societies by and large is consumed two times per day, particularly at noon and in the evening (e.g. Firth 1943, Richards 1939:72, Weissner & Schiefenhövel 1996, Weiss Adamson 2004:155, Serra & Tunberg 2009:7f). The most common dish, depending on season and biotope, is often some kind of porridge based upon the local crop (i.e. maize, jams, cassava, etc.), which is repeated on a daily basis with the occasional exception of stews made from fish or meat. A recurring theme that may strike a European as odd is that it is less common for food and beverages to be ingested simultaneously. When you eat, you eat, and you drink when you are thirsty. Another aspect that may be noteworthy is that frequently food is both cooked and consumed outdoors depending on the climate. These examples alone are important reminders that contrast with our regular hours and daily variation in the west, where we generally eat indoors with cutlery and at a table. How many would generally picture, let's say, the average Iron Age dinner taking place outside the long house?

The many social aspects of commensality are well investigated in the social sciences. For instance, many psychosocial studies point out how sharing food brings about a semiconscious sense of intimacy (Goody 1982; Miller *et al* 1998:423; Smith 2002; Marte 2007). Eating together often conveys a sense of belonging and tightens the bond between members of a household. Perhaps it is the positive feelings of satiation and lack of fear of starvation that somehow percolate through and create a sense of intimacy? But, on the other hand, a food custom is also an opportunity to distance oneself by refusing to conform or eat what is offered. To share

food cooked by someone else always involves some degree of anxiety or fear of being poisoned (intentionally or unintentionally by mistake). However trivial it may seem, eating together is thus a way to build relations and express confidence (Bloch 2005:45, 56). In this sense, the common meal constitutes a social arena where hierarchies, social structure and gender relations are renegotiated and sustained (Marshall 1961; Hastorf 1991; Fiske 1993; Smith 2006:205; Jones 2009:7). Such structured practice, or 'gastro-politics', Appadurai argues, can be 'read' as deep play, similar to Geertz's example of the Balinese cock-fight (cf. Appadurai 1981:509). Concerning Indian food culture Appadurai writes:

"Food taboos and prescriptions divide men from women, gods from humans, upper from lower castes, one sect from another. Eating together, whether as a family, a caste, or a village, is a carefully conducted exercise in the reproduction of intimacy. Exclusion of persons from eating events is a symbolically intense social signal of rank, of distance, or of enmity. Food is believed to cement the relationship between men and gods, as well as between men themselves. Food is never medically or morally neutral" (Appadurai 1988:10).

However, the daily supper can also be an occasion where social distinctions are temporarily dissolved and transcended. In his book on the medieval mountain village *Montaillou*, Le Roy Ladurie (1990) describes the typical evening meal as an intersectional social event. Gender and social status normally determine who sits where and who eats what and the order in which it is eaten, but aside from that formal structure, the evening meal constitutes a 'middle ground' for all members of the household, including children and servants, where matters are discussed and gossip is debated. Information about the multi-layered village life is thus spread horizontally and vertically among the different social categories of the village. The way in which people eat can thus be important for how the society in general is structured - especially considering its daily recurrence. This is perhaps one reason why externally forced change in subsistence can have a profound impact on societies even if sufficient alternative forms of nutrition are found in other niches.

Did the Great Auk taste like chicken? Food and the senses

How important were taste and appetising aspects of food in the past? On a basic level, there are evolutionary grounds for our most cherished tastes: sweetness, it is argued, signals the presence of energy in the form

of calories, and saltiness indicates the presence of the sodium ion (Na) necessary for the body's fluid balance. The general dislike or aversion most have to bitterness is argued by some to be a protective mechanism against poisonous substances, etc. (Katz & Woys Weaver 2005:252). It is not surprising that we tend to crave what we need, but that still does not explain the time and effort that gets put into processing, refining and cooking raw, yet edible, foodstuffs. For example, many of our favoured tastes such as grain, nuts, beans, and meat are edible, albeit not especially appealing, in their raw, natural state, and a wild boar burned in wildfires does not smell like bacon (Anderson 2005:71). There may be several reasons for processing and heating food before eating, but without a doubt one is to release volatile oils and to change the texture in order to enhance the sensory experience. Although food in most small scale, premodern societies probably was not too extravagant, this is not to say that it was tasteless, unanticipated or unappreciated (cf. Richards 1939:72; Houston, Stuart & Taube 2006). On the contrary, processing and consuming food inspires a smorgasbord of sensory sensations and feelings.

Of the five Aristotelian senses, *Taste* is, perhaps a bit surprisingly, probably the least important sense involved in ingestion. Most people can tell the difference between sweet and sour, bitterness, salty, umami etc., but we experience taste and gastronomic sensations mostly through the nose (Anderson 2005:70). *Smell* is often enhanced by temperature to release volatile oils in otherwise essentially odourless ingredients. The smell of cooking can also bestow smellscapes around the habitation area, which like soundscapes can work to evoke a sense of hominess or, by contrast, a strange smell of the foreign 'Other' for outsiders (cf. Tilley 1999:180). *Sight* is perhaps the second most important sense when it comes to food. The appearance of the dish, such as its colour, is important for how it will taste to us. For instance, to an American the ideal colour for butter is white, whereas most Europeans would regard this as a tasteless industrial product. A warm yellow colour (even if it is artificial), on the other hand, is more appetising to Europeans. *Touch*, or feel, are also important parameters. For instance, the texture of the food affects the eating experience (think overcooked vegetables) and can also be an indication of freshness. *Hearing* is probably the least important sense involved in ingestion, but it is noteworthy nonetheless: the crunch when biting a fresh apple not only tells us that it is fresh, but also adds to the experience of its taste. These sensory aspects are not exclusively

about gastronomy, but may have both unintentional social effects as well as being employed consciously by people to achieve certain goals and means. For instance, Appadurai (1981, 1988) has shown how the sensory nature of food, and its ability to evoke memory and create associations, is a powerful element within contemporary Hindu politics and culture (cf. Anderson 2005: 77).

The main problem in considering the sensory aspects of foodways is that the qualities are experienced quite differently not just from culture to culture, but also among individuals of the same community. Taste is generally learned by repeated exposure or cultural perception of food (Anderson 2005:73). Although most people have a natural palatability for sweetness and fatty foods for evolutionary reasons, most studies still suggest that the desire for goodies goes beyond sweet/sour, bitter or sweet (Katz & Woys Weaver 2005:3). There is thus no way for us to claim that a particular taste or food must have encapsulated the ultimate pleasure and was sought after by all. Alan Outram (2007:42) provides a telling

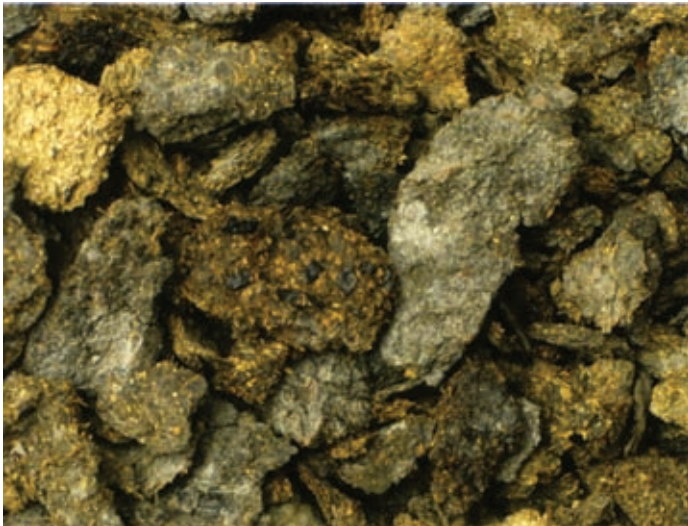


Figure 1: A preserved Bronze Age coprolite recently found in the Hallstatt salt mines. Here the archaeologists were not satisfied only to establish its contents, but they commissioned a student to go on a special diet and examined the faeces to confirm the precise mixture of the dish (Kern 2008:92-95). Unfortunately they did not ask the student how it tasted.

example of when he was offered a jar of fermented mare's milk from a Kazakhstani horse herder. He writes: "To the modern western palate it is utterly vile. It provokes all the body's natural reactions to rotten food. Traditional Kazakhs love it". We do not need to resort to exotic cases for similar examples; most of us are disgusted by something within our own culture's cuisine. Food preference is surely something relational, cultural and often something that is acquired rather than biologically determined. Although we cannot be sure why a certain commodity was harvested or sought after, a culinary perspective still adds a dimension to many general archaeological questions.

You are what you eat: foodways and ethnicity

An overlooked aspect of food preferences is that in many cases they can be more rigid than material culture (Smith 2006; Nukaga 2008). Judging from the archaeological data, it seems quite mundane to use an axe of 'foreign' design, but to eat unknown and strange looking food can be much more difficult. Food preferences are a powerful social/ethnic marker that can reinforce group identity while at the same time distinguishing it from that of the 'others' (Parker-Pearson 2003:9; Anderson 2005:124ff). An interesting example is found in the social complexity of the south Scandinavian Middle-Neolithic (c. 3300 – 2350 BC). The period is traditionally perceived as a phase of cultural pluralism in which several, more or less contemporary, material complexes have been identified. In southern Sweden the traditions of the early Neolithic Funnel Beaker Culture (TRB) continue into the Middle Neolithic, whereas the Pitted Ware Culture (PWC), and the Battle-Axe Culture (BAC) emerge as what has been considered to have been different traditions (e.g. see Malmer 2002 for a general discussion). The appearance of what seems to be three different sets of materialities, with different primary subsistence strategies, choice of biotope, and burial practices, have fostered an idea of the Middle Neolithic as a multicultural period. Indeed, the stable isotopes of a few skeletons from inland BAC and TRB contexts suggest a primary terrestrial diet while the stable isotopes from costal PWC sites indicate a primary marine diet (Eriksson *et al* 2008). Recent genetic analyses of human bones have also suggested that individuals of the Gotlandic PWC generally seem to have been lactose intolerant in relation to the contemporary inland farming communities (Linderholm 2008, but see also Ahlström 2009:111f). Although the distinctions

between the different Middle-Neolithic complexes are generally based on differences in pot design, types of axes or burial customs, we might add a culinary dimension to their relations. This is an underestimated social aspect of diet that may in some cases be more important than, for instance, differences in material culture, dress and ideological beliefs. Among many societies, including western ones, there are ideas that people take on the properties of the food they eat. If you eat boar the personal character is believed to be more boar-like in relation to, for instance, individuals in a seal-eating culture (Miller *et al* 1998:424). Such ideas taken together with more or less arbitrary opinions of what foods may or may not be proper to ingest are likely to create and maintain ethnic distinctions. Studies of contemporary societies have shown that difficulties with ingesting dairy products are often closely related to taste. For instance, intolerance can make some people abhor milk (Outram 2007:55). Imagine the reaction of any Battle Axe group member that would visit a shore inhabited by the Pitted Ware hunter-fishers. The smell of seal ought to be quite different from that of roasted lamb and baked bread at the inland sites. On the other hand, consider a member of the Pitted Ware Culture visiting a Battle Axe group vomiting the milk that he/she had been offered to drink. Commensal politics, in the sense of what you eat and how you eat it, surely has great potential for a better understanding of the social structure within a group as well as how they relate to other groups.

A passion for taste: cravings for ingestible sensations

Although the sensory experiences of different edibles are varied and indeterminable, they still have indirect and unintentional effects in many areas of social life. Consider, for instance, the process during the early Neolithic from hunting and gathering towards settled farming and herding. This quite complex social process is often rationalised in evolutionary terms, but some scholars have also argued it to be partly because of a growing desire for alcoholic beverages (e.g. Kuijt 2009). Of course, the same arguments would also be valid for culinary aspects such as the smell and taste of freshly baked bread or a desire for certain dairy products (milk, yoghurt, cheese, sour cream, kefir, koumiss). Following such reasoning, sensory sensations of food and beverages may thus potentially work like social prime movers, or actants, to use the terminology of Bruno Latour, and if not initiating it, may at least be

a contributing factor in social change (Fahlander 2008). One modern day example of such a case is the desire for mimosa gum among certain Australian aborigines (Sahlins 1972:7). When it is mimosa season, large numbers of dispersed people, whose contact with each other is otherwise limited and sporadic, assemble at the places where it grows. The mimosa thus works as a powerful medium for drawing the groups together on a regular basis, something they normally would not have done, resulting in a whole range of important social implications.

The power of cravings for certain tastes and commodities is thus an interesting path worthy of further investigation. In humanist and social sciences the desire for power and valuables has often been taken for granted as a driving force in social change. It is not too far fetched to add food cravings to the list as one of the many potential social prime movers that may help us to better understand agency and social practice in the past. One example concerns the highly sought after cacao bean in many Mesoamerican societies (Houston, Stuart & Taube 2006:113). The evidence for the special role of the cacao bean is found in texts, iconography and inscriptions, and its social importance for the American societies can hardly be exaggerated. The cocoa bean was an important commodity highly appreciated mainly for its sensory aspects rather than any nutritional value. It was traded extensively, not unlike the Greek and Roman wine trade. One example is the recently discovered village in the lower Ulúa river valley of north-western Honduras (c. 1100-900 BC). The excavators argue that its particular location is explained by its suitability for growing cocoa-beans destined for the Olmec cultures in present-day Mexico (Henderson & Joyce 2007). It is quite clear that the craving for cacao on the part of the Maya kings is an important factor with a great range of implications for the Maya society.

In societies such as the Roman Empire or the Maya civilization, exclusive tastes are often hierarchical and status ridden, and generally only a matter for the elite (Appadurai 1988:10). It is also mainly in such contexts that we find the explicit fascination with exotic edibles that did not necessarily have to taste good. In the everyday life of small-scale societies, however, taste probably goes before exclusiveness. A special category of edibles that seems to have been appreciated from early on includes products that are not eaten alone, but which can be added to enhance the flavour of certain foods, such as honey, salt and peppers. In the Andes there are indications of early domestication of the chilli that point to deliberate production of products with special tastes (Outram

2007: 59). Salt in various forms has been explored at least since the Mesolithic. At *Muntanya de Sal* on the hills of Catalonia, to the northwest of Barcelona in Spain, salt has been mined from c. 4000 BC. In America special clay trays have been found which seem to have been manufactured specifically to extract salt via evaporation of salt water (Outram 2007: 57). Honey is another sought after taste that involves rather painful measures in order to obtain. In *Cueva de la Arana* (the cave of the spider) in Spain there is a painting dated to c. 5000 BC. that some argue depicts an act of honey-collecting (Toussaint-Samat 2009:15). Traces of honey have also been found in pots, like in the case of the Bronze Age Egtved burial in Denmark (Outram 2007: 56; Ikram 1995:170).

It is, of course, difficult to argue that it was primarily the sensory experience of these commodities that was sought after and not the preserving effect they all have on food. But we should not exaggerate the need for preservatives in prehistoric societies; there are easier ways to obtain that result (smoking, drying, graving etc.). Considering the time and effort that was invested in extracting or finding these edibles it does seem that most were first and foremost collected for their sensory value. For instance, Richards (1939:55) describes the great appreciation of salt among some peoples in present day Congo. Here, salt is extracted in small amounts from a special kind of river-grass, a very tedious and painstaking process.

Although, the objects for sensory desires may change according to time and place, the possible importance of cravings should not be underestimated. On the contrary, a culinary perspective can provide new ideas and interpretations for familiar data. Consider, for instance, the massive layer of snail shells in the Frankhthi Cave, dating from c. 10,700 B.C., which is overlaid by with bones of red deer and, then, nearly four thousand years later, tuna bones (Fernandez-Armesto 2002:57). Is this a case of prehistoric gluttony or simply a resort to different nourishments when others were scarce? The same reasoning can be applied to the shell-middens of the European Stone Age. This is not necessarily the remains of a widening of subsistence base caused by a dearth of wild game, but may also be the result of a desire for a special tasty (and salty) commodity. We can add a wide range of other possible commodities, such as hazelnuts, seal, pigs, birds and other small game etc. that might have been collected and/or domesticated mainly for sensory pleasures or ethnic food preferences. We will probably never know if the extinc-

tion of the great auk is a result of it being easy to catch or if it actually tasted especially good and was therefore in high demand. It cannot be doubted, however, that the sensory aspects of food are rewarding to consider when discussing traditional archaeological questions such as the distribution of temporary camp sites, long distance travelling and cultural encounters, and so forth (Fahlander 2007).

With an appetite for change: expanding our fictions of the past

In their influential book on the sensory worlds of the Maya, Houston, Stuart and Taube confess that: “The senses of taste and touch are left for last because the evidence for them is relatively weak” (2006:175). Indeed, it is difficult to prove beyond all doubt the importance of certain tastes and preferences in prehistoric contexts. Although many aspects



Figure 2: A Late Palaeolithic/Mesolithic cave painting from the Cave of the Spider, near Bicorp, in eastern Spain, depicting people collecting honey (Modified from Toussaint-Samat 2009: 15).

of particular foodways are immaterial and thus seem difficult to grasp, there are nonetheless indirect traces and ways to explore and pursue the subject. For instance, we may benefit from discussions on the materialities being used in terms of sets of plates and pots, which may give us clues as to how food was consumed (e.g. Parker Pearson 2003; Eriksson 2008). Also, extraordinary sites such as the 'Bronze Age Pompeii' at San Paolo Bel Sito in Italy can provide valuable insights into everyday consumption of food. San Paolo Bel Sito comprises three well-preserved Bronze Age houses (c. 1800-1600 BC) with their furnaces, pots and pans left in situ after the inhabitants fled from the erupting volcano (Livadie 2002). More 'ordinary' sites also generally contain remains of food processing such as facilities for storage, distribution, fermentation, evaporation smoking, etc. in addition to the obvious traces from cooking (e.g. hearths, cooking and storage pits). Such features are, however, rarely elaborated upon in archaeological analyses (if there is no ritual aspect that can be tied to them). There certainly is a hidden potential in this category of features, ready to be explored in conjunction with expanded discussions of a wider range of cooking techniques and associated practices (see fig 1). The different ways in which we prepare and consume food affect what constitutes the archaeological record and with greater concern



Figure 3: One traditional way of cooking food by putting heated stones into an animal-stomach container. Cooking in skin is a method that has been used by Mongols, American Indians and even Scottish soldiers in the Middle Ages (modified from Toussaint-Samat 2009:9f). How did the heated stones affect the taste of the food prepared?

for formation processes, for example, it might be possible to say more about such specific practices (cf. Isaksson 2010).

In this text I have emphasized a number of themes related to the sensory dimension of foodways that have to date seldom been elaborated upon in archaeology. In a general sense I have sought to stress the multi-sensuous dimensions of consuming food and its social consequences for the structuration of a social group. Food is about image. There is a considerable social dimension in food that goes far beyond biological needs. The way in which people eat, with what, and where and how is equally important to understanding both change and tradition in a particular society. Sharing food is repeated daily and is a practice in which hierarchies and social distinctions are maintained in intricate ways. Food-culture is also an ethnic trait, separating people with different traditions from each other by differences in smells, tastes or ideas of what is edible. In many ways it can be argued to be an important ethnic marker (barrier) surpassing corporeal traits, style and form of material culture. The materiality of foodways is thus a neglected part of material culture studies. One interesting aspect lies in its potential to evoke and initiate agency. For instance, certain valued commodities such as alcohol, fresh baked bread or dairy products may very well have been stimuli for a change to settled farming during the Neolithic. Also the limited distribution of certain sought after commodities with a high degree of tastiness such as salt, cacao, honey, hazelnuts and chillies may under some circumstances be important social factors behind the spatial distribution of both temporary and permanent sites. Certain commodities can have interesting social side effects, such as in the case of the mimosa-gum, which initiated annual gatherings of otherwise dispersed hunter-gatherers who would not have met in a similarly positive context without the mimosa as a catalyst. Certain tasty commodities may also evoke trade and long distance relations with other groups and thus constitute a link between the local sphere and the world outside. However, although the smell of bread may be pleasant, it alone is not reason enough to explain the extraordinary change in lifestyle represented by settled farming. Nor is it plausible, for example, that the Pitted Ware Culture emerged as a different tradition due to cravings for seal. But by including a 'culinary' perspective we might be able to develop more complex fictions about everyday life and may be able to deliver new answers to old questions. Although food preference may be a matter of taste, it is a matter that matters.

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Tracing Pain: Identifying Suffering in Skeletal Remains

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Pain is part of life. This is an obvious truism for most of us, at least at some point in our existence. From an historical perspective, the view on pain has changed enormously over the centuries. In antiquity, pain was believed to be cured with pain and it was considered an integral part of life and of what it is to be human. No clear distinctions existed to separate the body from the soul. Socrates put forward that the mere absence of pain is pleasure, though he considered the entities inseparable (Rey 1995:38). A common view was, in line with other contemporary stoic beliefs, that pain existed to be endured. In contrast, according to the Epicureans all types of discomfort were evil and should be avoided. During the Middle Ages in the western world, the antique stoic principle of suffering was retained, now bolstered by Christian beliefs. The affliction of Christ, the *persecution* of saints and the horridness of purgatory is meticulously depicted in paintings and described in texts where pain and suffering is closely linked to salvation and redemption. It has been suggested that the medieval Christian ideas of pain as a 'divine gift' or sacrificial offering was an attempt to make sense of the physical suffering of the times (Rey 1995:49). In the nineteenth century the association between pain and religion weakened, and it was instead considered a physiological state and a medical challenge. This is also the starting point for a more systematic exploration and study of drug treatment and pain relief.

Within different belief-systems, both religious and ideological/political, pain has been used as a threat for control and punishment as well as a way to salvation. Current debates regarding the right to inflict torture, and whether the end justifies the means, show that pain still plays an important political role in society today (Rejali 2008). Flagellants or other types of self-tormentors display their devotion and the strength of their beliefs through agony. Pain may also be associated with a variety of social inactions of a more sublime character. Gender related regulations exist in a more or less manifest way in most societies (Johansson 2004). In some groups both boys and girls undergo rites of passage (or basic discipline) that includes a physical procedure where pain, though not the fundamental goal, is an unavoidable component. Childbirth in connection with ideas of womanhood is another area where gender ideology and pain are closely intermingled (Callister et al. 2003; cf. White 2004:1489). Socio-cultural notions about beauty and social status make people endure painful physical transformations in the form of tattoos, scarring, piercing, hair plugs or more advanced plastic surgery. Social factors may also affect the allocation of pain in medical disorders such as fibromyalgia or chronic fatigue syndrome (Buskila and Cohen 2007; Deary et al. 2007).

Pain is the most common reason for seeking medical care and is of help in diagnosing a disease and its subsequent treatment. There is an immense quantity of research about pain today within a variety of disciplines from medicine to philosophy (e.g. Aydede 2009). Since the word *pain* is synonymous with both experiences related to physical malfunctions as well as a sense of distress and negative emotions, it may be discussed in a variety of contexts (Perl 2007). This brief survey strives to focus on questions associated with pain in bioarchaeology which have not been adequately explored, and where the theoretical discussion about pain experienced is first and foremost as bodily phenomena. A method is suggested for how to interpret pain in an osteological context. The discussion should be regarded as a tentative effort to grasp an elusive, but unquestionably universal, part of human existence.

The physiology of pain

Pain is a warning signal showing the body that there is a risk of injury. The sensory system, including peripheral nerves in the skin, muscles and viscera, reacts from different stimuli such as cold, heat, pressure, and

touch. At the end of the nerves stimuli-specialized *receptors* transduce the electric impulse to the spinal cord and the brain. Due to over-stimulation of these receptors, or because of a reaction caused by tissue damage (a release of molecules from destroyed cells) in the free nerve endings, the *nociceptors*, a perception of pain may arise (Carlsson and Nachemson 2000). For instance, an inflammation is a tissue-damaging stimuli which activates a *nociception*, i.e. the objective “reception, conduction and central processing of noxious signals” (Ward and Linden 2008:119). However, this is not actually synonymous with *pain*, which is a more subjective sensation. Depending on affected tissue an allocation is made between visceral (located in the internal organs) and somatic pain (located at the skin muscles and joints). Somatic pain may further be subdivided into superficial and deep pain. The former is often associated with well-defined localized pain (e.g. piercing of the skin) whereas the latter (pain in muscles, bone or joints) is generally diffuse and dull (Ward and Linden 2008:119). Pain also differs in intensity between an initial acute phase, where the pain is sharp, followed by a second delayed, number sensation (Julius and Basbaum 2001). In response to these processes the suffering individual may start to sweat, blood pressure may drop and nausea may occur. The same physiologic processes displayed in humans today and investigated by modern clinical pain researchers were most likely also experienced by humans in prehistory.

Even though there are no objective methods for measuring pain, attempts have been made to employ a subjective scale (e.g. VAS – visual analogue scale) to approximate the intensity of pain based on the self-reports or observations of the patient (Jylli 2001). The imprecise character of this scale attests to the fact that the sensation is a complex combination of different parameters. Based on the mechanisms causing pain there are four different types: nociceptive pain (pain associated with tissue damage); neuralgia (pain due to damage to the nerves); idiopathic pain (pain with an unknown cause); psychogenic pain (pain associated with mental illness). Furthermore, according to the *International Association for the Study of Pain*, pain has been defined as an “unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage” (IASP 1994). In all, it is clear that a person does not need to be physically ill or injured to suffer and experience discomfort. Pain has several complex dimensions and is closely linked to our ability to recollect preceding actions, i.e. the body is affected by our mental state and a ‘pain memory’ may develop.

For example, due to previously experienced pain, fear may lower the pain threshold (Carlsson and Nachemson 2000:267). Even though we can endure shorter periods of pain it is exhausting and difficult to adapt to longer periods of chronic pain (Frew 2004). After a while a hypersensitivity of the injured area may develop and it is possible to experience pain even from normal activities. This hypersensitivity may remain for a long time after the original wound has healed and the chronic pain may develop into a medical condition of its own.

Depending on genetics and general physical condition, and exactly like other senses, pain may vary in intensity and time due to cognitive and emotional factors. Clinical studies have shown that factors such as the meaning of pain; the expectation of pain; the education and belief system of an individual and the options for controlling pain, affect the intensity (e.g. Assarsson and Persson 2006; Ericsson and Silvennoinen 2006; Deary et al. 2007). This shows that physiological and cultural factors play an important part in the experience of pain.

How can we acknowledge pain in prehistory?

In discussing pain in Scandinavian prehistory it is essential to acknowledge a three-step process which can be associated with the sensation. (1) *The general physiological process* which is (2) *individually experienced* but (3) *culturally expressed*. These three steps can be further dissected.

The physiological process

With modern research and technology at hand it is possible to understand the first stage almost to the full. As long as we can accept the notion of uniformitarianism for the sensory system over time (i.e. natural processes operate the same today as they did in earlier times) it is possible to obtain information about physical factors relating to pain and associated mechanisms from standard medical manuals.

The individual experience

The second step is impossible to deal with if we are trying to reach the innermost feelings of a particular individual. However, by using analogies with patient anamneses from history and social anthropology we may at least come closer to understanding some of the suffering

an individual had to endure in life. However, in historical records it is primarily in the ideas of scholars where one finds traces of pain being acknowledged, not directly described by the sufferers (e.g. Rey 1995:4; Qyartsell 2004:355). However, there are exceptions. The seventeenth-century English physician Thomas Sydenham suffered from gout and described the pain in agonizing detail:

“The pain which is at first moderate becomes more intense. With its intensity, the chills and shivers increase. After a time this comes to its height, accommodating itself to the bones and ligaments of the tarsus and metatarsus. Now it is violent stretching and tearing of the ligaments. Now it is a gnawing pain, and now a pressure and tightening” (Rey 1995:84).

Anthropological research, defined as comparative studies of human behaviours, demonstrates the complexity of the concept of pain where cultural differences control beliefs and practices (e.g. Oknuki-Tierney 1981; Brihaye et al. 1987; Kleinman 1988; cf. White 2004:1489). The spectra of different actions in relation to pain could be turned to our advantage giving new ideas of how pain as a concept was treated in prehistory. Furthermore, anthropological research presents telling examples of culture clashes when the caretaker and caregiver have different cultural backgrounds (for an overview see Free 2002). As pointed out by Free (2002:144), although the behaviour of an individual is idiosyncratic, “it is most often shared with a significant number of other members of one’s cultural (or subcultural) group”.

According to phenomenological principles it may be possible to widen and discuss the experience of pain (Bengtsson 1988; Kvale 1997). Couceiro-Bueno (2009) who has outlined the full phenomenology of pain on a philosophical level, describes pain as an ontological item. Within modern medicine, phenomenology has been used as an analytical tool to reach a better understanding of different patient groups’ experience of pain and the reactions of relatives (e.g. Svenaeus 2003; Herrman 2006; Richards & Hubbert 2007; Kjellstedt and Grönqvist 2010). According to theories of descriptive phenomenology the focus of research is the experience of a phenomenon by an individual (Polit and Beck 2004). In these studies the researchers try, through in-depth interviews, to describe and fully understand the essence of the pain experienced or its treatment. The results help to highlight significant features and specific factors from the experience of pain among the patients and could be applied to studies of prehistoric societies.

The cultural expression

The third step in dealing with the cultural expression of pain, as with other types of sociological interaction in archaeology, could be discussed through the material culture. In medieval settings, for instance, artefacts associated with medical care have been found such as tweezers, irons for blood-letting (Kjellström and Wikström 2008:212) and copper plates to splint fractures and prevent infection (SHM 18393). The different types of instruments for trepanation that were deposited as sacrifices at Illerup Ådal, Denmark, which date to the Iron Age (Frölich 2009), are another example. The finds present information about treatment and the general level of medical knowledge in the society. In some contexts it is possible to identify separate buildings associated with the treatment of the sick. Admittedly, many metal objects or institutions such as hospitals are a modern Christian phenomenon. However, there are significant opportunities for obtaining information about health through depictions, representations and iconography, often in societies of great antiquity. A Paleolithic cave painting in Gargas, France, displays negative imprints of hands believed by some scholars to have been mutilated (Napier 1993:129). Various figurines from southern Europe exhibit Pott's disease and endocrine disorders (Wells 1964: plate 52, 64). In addition to cave paintings and sculptures, it is assumed that the tattooed skin of a mummy has offered new knowledge about pain and pain treatment. The tattoos of the south Tyrolean ice-man Ötzi, a 5,200 year old mummy, correspond to lines of skin acupuncture and are believed to signify treatment for pain due to arthrosis (Dorfer et al. 1999). In the same context stone tools such as scrapes, blades and pointers may of course have been used in a variety of ways, but also at least suggest the range of possibilities at hand when dealing with the sick. (Only a handful of European examples have been mentioned above. If pottery, masks, paintings and figurines of Egyptian, American or Asian origin are included, the source material is considerable). Furthermore, biological artefacts such as shells from calcified parasites or micro bacterial DNA offer direct information about prevailing infections and subsequent suffering. In combination with data connected to the climate, economy and diet, a well-founded theory may be proposed about various aspects of health in a particular society. This could be used as the background and introduction for discussions about pain.

Signs of pain and suffering in the osteological record

Even though pain must have had both a direct and indirect affect on people investigated in bioarchaeology very little is written about it. None of the often-cited paleopathology textbooks has the word *pain* in its index (Steinbock 1976; Ortner and Putschar 1981; Roberts and Manchester 1997; Aufderheide and Rodriguez-Martin 1998; Ortner 2003; Pinhasi & Mays 2008; Waldron 2009). The same dearth is generally found in osteological journals, although one paper has been found which deals with back pain and the implications for the bioarchaeological record (Faccia and Williams 2008). The reason for the almost total avoidance of the subject most likely relates to the difficulties in dealing with such an individually perceived and culturally controlled issue. Nevertheless, despite the silence in both the literature and the archaeological record, e.g. descriptions of different diagnostic features of particular illnesses or accounts of the outcomes of diseases, information about pain in prehistory *is* readily available, quite literally, because in many cases it penetrates to the bone. Skeletal changes are therefore our key to unlocking the narrative of pain in history.

Skeletal changes and physical pain

In larger osteological assemblages the signs of skeletal changes due to pathologies or trauma are widespread, but the variety of bone changes in life are limited. Simply put, paleopathology is a science that deals primarily with the imbalance between two processes: abnormal bone reduction by osteoclasts or abnormal bone formation by osteoblasts (Ortner 2003:48). Besides the limitation caused by the fact that only trauma or diseases that affect the skeleton are preserved, there is a risk of misinterpretation and an alternative diagnosis should be offered in ambiguous cases. Nevertheless, the skeleton characteristically reacts to universal parameters active during human life, which can be of fundamental value when discussing the concept of pain. Since the skeletons *are* in fact the individuals under study, the osseous material and associated changes must be considered the primary source. Well-preserved teeth offer good opportunities to investigate oral health in past societies. Caries is multi-factorial in origin and have been found in varying frequencies in almost all documented skeletal collections (Figure 1). Aside from dental diseases, the most common skeletal changes are

displayed on the joint surfaces. A combination of factors such as genetics, age, movement, and obesity cause the articular cartilage to break down in a final stage resulting in new bone formation, pitting on the joint surface and eburnation (Ortner 2003). In addition, it is not unusual to explore high frequencies of signs of periostosis (i.e. including changes of both inflammatory and of subperiosteal haemorrhage origin) to varying degrees (Figure 2). These pathologies are of course only minor examples of the different types of abnormalities that may show on bone from the prenatal phase to the death of a human.

If left untreated, pathologies may develop in teeth and bones generating intervals of destructive forces, which make the disease chronic. In most cases a wound must have persisted for a long time before the bone was affected. Using histology studies on a single bone it is possible to investigate repeated outbreaks of an infection (Schultz 2001). To a certain degree these studies make it possible to even explore the time elapsed between the attacks. A trauma is usually a more acute process where a considerable amount of energy has been transmitted to the bone, forced it beyond its limit of plasticity and caused it to break (Figure 3). The bone surface may reveal further information about how the lesion healed. Rounded smooth fracture edges are a sign of repair and recovery, whereas sharp bone ends indicate that the victim did not survive long enough for the healing to show. Irrespective of a chronic or acute cause



Figure 1: Lesion from caries in the lower jaw of a medieval teenager from the Humlegården block, Sigtuna (Id 3365).

the tissue damage shows that the person was exposed to suffering and pain. For example, the abovementioned study by Faccia and Williams (2008) clearly demonstrates that the presence and location of Schmorl's nod (a minor defect of the vertebral body) can be associated with pain. Hence, the osteological record can be used as a direct documentation of pain. The degree and effect of pain experienced is another matter.

Skeletal changes and emotional pain

The relation between signs of skeletal change and the burial context is also of value when discussing the consequences of disease or trauma. This subsequent 'pain' is not of physical character but of a more psychological and cognitive nature. For instance, finds of the severely sick and disabled in the skeletal record indicate the level of support of people with less 'economic value' (Roberts and Cox 2003: 39). In a mobile society it is likely that the fitness of a member decided if she or he could survive and it is not too bold to suggest that the severely wounded could sometimes be left behind in groups of hunters and gatherers. In such cases feelings of pain and fear of the person must have been intertwined. In some societies certain diseases could have evoked feelings of disgust making the sufferer an outcast. It has been stated that social roles in medieval society, for example, were defined through bodily appearance



Figure 2: Periosteal new bone formation of a left fibula and tibia from an adult man (the Humlegården block, Sigtuna Id 3093).

and capability (Jonsson 2009:162). In some medieval churchyards the locations of the graves of individuals affected by leprosy, a disease that may fairly easily be identified in a skeleton, suggests the low social status of the afflicted (Arcini 1999; Kjellström 2010). This social stigma most surely has added to the physical pain of the individual. Likewise the guilt or shame that may be associated with a venereal disease such as syphilis, also possible to diagnose in bones, may have increased the pain of the infected. This pain is known as ‘moral pain’ and has been described as “a pain that dominates us, vague and imprecise, but undeniable” (Couceiro-Bueno 2009).

Lack of pain from both physical as well as mental causes should also be considered. A few diseases such as congenital analgesia or nerve damaging syndromes such as leprosy desensitize the afflicted to pain. As a result of this inability to feel, infected wounds may be left untreated, which can progress to sepsis and bone necrosis (Losa et al. 1989). Aside from demonstrating the importance of this sensation, it also highlights the difference between being physically ‘normal’ and ‘abnormal’. To put it bluntly, a normal person experiences pain and an abnormal one does not. However, in a study where people suffering from congenital insensitivity to pain (CIP) were explored to see how they perceived the pain of others, it was clear that empathy is not connected to our physic and personal experience (Danziger et al. 2006). On the



Figure 3: Fractures of a right ulna and radius from an adult man (the Humlegården block, Sigtuna Id 3335). The fracture of the radius is malaligned and the distal part of the ulna is completely destroyed, presumably due to resorption caused by bone necrosis.

other hand, how was a person with CIP or a nerve damaging disease (i.e. someone unable to feel pain) perceived in prehistory? If the ability to experience pain meant being human, was insensitivity a curse or a gift? Although these people were few in number, they were different. Insensitivity to pain could also be a result of a more psycho-chemical character. Clinical studies have shown that stress-induced analgesia may occur in fear of bodily harm due to increased hormonal exudation (Frew 2004). In military settings, an increase of the pain threshold has been observed in groups of soldiers that were investigated (Yamaguch et al. 2003). This implies that the emotional state and motivation of a fighter in a battle situation is of importance. Furthermore, this could be used as an explanation for the mental strength and control of pain individuals have endured in archaeological contexts with skeletons bearing multiple signs of sharp force trauma (e.g. Kjellström 2004). A variety of examples of trepanned skulls are recorded from different periods throughout the world (Arnott et al. 2003)). Whatever the reason, a person must be highly motivated to control pain, fear and anxiety to agree to this operation.

A possible approach to investigating pain in an osteological context

The possibility of contextualizing pain and the osseous material have been discussed above. The remaining problem is the idiosyncratic nature of pain. Even though this aspect cannot be avoided it may be possible to roughly investigate and compare pain in different skeletal assemblages, at least at a theoretical level. As with analyses involving sociological content, both quantitative and qualitative methods (Neuendorf 2002) may be used, but here drawing upon the osteological record rather than written texts.

A quantitative approach towards the study of pain could be used in ordinary archaeological analyses. The goal in quantitative research is the counting of key categories and measurements (cf. Neuendorf 2002:14). When analyzing skeletal populations it is expected to sort the pathologies and trauma in groups due to causative agent (e.g. congenital diseases, deficiency disease) or affected regions (e.g. joint disorders). The most specific skeletal changes with pathognomonic features of disease could be picked out and associated with clinical data concerning pain for that disorder. Information such as VAS-charts or drug rank orders from modern anaestesian research in relation to intensive care could be used. The classification should end in a coding scheme where osteological

features are ranked from 'low pain' to 'extreme pain'. For example, a minor sign of arthrosis or gout indicates very different types and levels of pain if modern data are applied. The distribution and frequency of some skeletal changes could then function as a crude measurement of pain in a population and comparisons can be made with other population groups. Note, this is not the same as simply comparing frequencies of similar skeletal change. To achieve a consistent result it is of great importance to only acknowledge skeletal changes that leave clear information about pain at different levels. Furthermore, the pathologies and modern pain research must be combined with demographic data such as sex and age of the affected, as well as general health. This positivistic procedure rests on the assumption that people of all times experience pain in the same way, which may be preposterous to presume following the above discussion about the complexity of this sensation in mind. Nevertheless, not neglecting complicating factors, this procedure could be the starting point for discussions about different levels of pain in prehistoric societies.

In a qualitative approach, analogies with ethnographic sources could be of use together with theories in sociological science concerning e.g. notions about identity and intersectionality. Generally, qualitative research includes methods such as participant observation and in-depth interviews (Mack et al. 2005). Since the victims of pain in this context are silent, it may be of interest to interview informants who personally have experienced the recorded medical or physical disorders both as patients and as professional caregivers. Furthermore, following the guidelines for qualitative research, generalizations should be avoided and each new context treated specifically. This should result in thorough descriptions of people's experience of pain rendering a possible reflection of the phenomenon in the prehistoric sample being investigated. As mentioned above, the archaeological context makes it possible, through the depositional context of human remains in relation to bone pathologies, to discuss the social role of the diseased in the society under investigation. Pain and suffering are not synonymous, i.e. an extreme skeletal change does not always mean severe agony, and different people suffer to varying degrees due to different cultural factors. Hence, the interpretation of the archaeological parameters is, both in detail and in sum, of immense interest to the pain analysis.

The proposed dualistic investigation of pain in skeletal assemblages surely will not result in a comprehensive image for any society. The results may,

however, offer a narrative interpretation of suffering at a specific site. Even though no universal 'truths' may be reached this approach is both consistent, site specific and potentially informative.

Some concluding remarks

Bioarchaeologists frequently deal with questions concerning the quality of life. Recording and describing numerous skeletal changes as well as analyzing the remains from infants most often reveal a harsh environment. Is it reasonable to assume a more general acceptance of pain in past societies where people had to adapt to the situation to survive? Experiencing pain is not the same as experiencing a smell. Although unpleasant at first, you can get used to most odours. Chronic pain constantly preys on your health and decreases your tolerance of painful stimuli, and thereby has a profound impact on your quality of life (cf. Frew 2004:57). In a pre-modern environment without an easy and steady access to analgesics, pain was a common factor making it less likely that people complained and whined about minor bruising. It was a part of life. Cultural rules regarding the general tolerance of violence in society, including for instance domestic abuse and torture, also adds to the agenda of how to respond to and publicly display pain. To punish and discourage future offenders, pain could have a very textual function. When an individual revealed the perceived pain to the dependants a shift in identity is implied. The individual went, as a result of the skeletal changes caused by a chronic or acute process, from a strong healthy state to becoming an individual with pain and thereby perhaps even a burden to others. This transition or even metamorphosis need not have been permanent, but surely had an effect on both the individual's outlook and his or her reputation. This shift could resemble the progressive change in physical strength with age; from being a caregiver to becoming a valetudinarian.

Since pain is a subjective sensory and emotional experience it may not be possible to identify the perceptions of particular individuals in prehistory. As with the other senses, we are left with our contemporary preconceptions. We can only speculate about the type of suffering, fear and anxiety that the lesions observed in bones may have caused. Nevertheless, patterns of disease in the archaeological and osteological records show that pain was a part of everyday life in the past. Despite its complexity, this universal component of human existence should not be neglected.

Abbreviations

IASP: International Association for the Study of Pain

SHM: Statens historiska museer

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Face/Off: A Neomaterialistic Study of the Face

Johan Normark



*He lost all his power
The king has lost his face*
(Dirkschneider, et al. 1980)

This text shall focus on some of the sensorial parts that create a human subject. It shall therefore focus on 'prehuman' processes in the sense that the human subject emerges from non-human components. The human subject is always in a state of becoming and it emerges through morphogenetic processes, not from a predefined genetic design. She is an emergent whole, emergent from a broad set of component parts that create an assemblage that we call a human subject (DeLanda 2006; Deleuze and Guattari 1987; Ingold 2000; Protevi 2009).

Of interest here is the treatment of senses, or rather their associated organs, in art. Fairly common in the Maya area in southern Mexico and northern Central America is the intentional and partial destruction of monumental art, especially monuments with the king's face (Fig. 1). Apart from the eyes, the ears and the mouth were sometimes destroyed in the same act of mutilation of monuments. It appears that the goal was to deprive the king of his main perceptive capabilities. This defacement indicates that the portraits were vital and that the face was crucial for the king's identity (Houston et al. 2006). However, the portrait was not only an index of the king and the divine power the ruler was considered to manifest. It was also an important part of the State.

Assemblages

The subject of this text should be seen as an example of the lowest scale of a multi-scalar and non-anthropocentric approach based on Manuel DeLanda's (2002, 2006) *assemblage theory* which is an elaboration of Gilles Deleuze's and Felix Guattari's (1987) ideas. In recent years, the assemblage concept (*agencement* in French) has become increasingly important in the social and human sciences. The concept has been used in the actor-network theory (Callon 2005; Latour 2005), but above all it has been used in Deleuzian perspectives. An assemblage is formed of interacting heterogeneous elements (*multiplicities*) that create an emergent whole which has a territory consisting of two axes. One axis opens up (*deterritorializes*) or closes (*territorializes/ homogenizes*) the assemblage and the second axis performs material and expressive functions (Deleuze and Guattari 1987). Every deterritorialization leads to new constellations through *reterritorialization*.

Buildings, artefacts, sculptures, and portraits are multiplicities consisting of many histories that link to other multiplicities and draw some attributes but not others. Further, "multiplicities are not like the



Figure 1: Part of Panel 3 from Cancuen. Copyright Jorge Perez de Lara.

interlocking pieces of a jigsaw puzzle, which fit together to reveal a single picture. Histories may overlap and contradict each other, have varying intensities, durations and stabilities” (Murphy 2006:12). Hence, instead of asking what a portrait was I will be focusing on its connections through *involution* (or how the interior of one entity connects to its exterior). The portraits, buildings, etc. were only what they were depending on what they connected with, not because of an essence (Normark 2010). There are variations of flows of humans and materials that can create diversifying yet stable formations by linking parts with other parts. These assemblages can never form a united whole like a jigsaw puzzle (Murphy 2006).

Murphy defines an assemblage as an “arrangement of discourses, objects, practices and subject positions that work together within a particular discipline or knowledge tradition. It is not the list of elements that make an assemblage consequential, it is what they made possible by the ways they articulated each other” (Murphy 2006:12). Hence, “an assemblage, in its multiplicity, necessarily acts on semiotic flows, material flows, and social flows simultaneously” (Deleuze and Guattari 1987:22-23).

The process of emergence of assemblages is similar to the one found in complexity theory (Beekman and Baden 2005; Protevi 2009). Heterogeneous elements reach a self-organizing transitional phase (deterritorialization) where the new assemblages emerge (reterritorialization). These assemblages form a new population that generates other assemblages, etc. This multi-scalar approach works from a heterarchical ontology of flows. There is no hierarchy between what is socially constructed and a real world. There simply is a real world that is constantly in a process of change.

Saddle, horse, bow and rider form an assemblage as do car, driver and road. These are all arrangements of discourse, objects and practices that work together. The assemblage must be a working unit but the component parts can be part of other assemblages as well and the assemblage may be a component part of another assemblage. The assemblage is lived and produced rather than being symbolic, representational and signifying. Functions, such as sensing, singing, eating and mating, are therefore territorialized within the assemblage (Parr 2005:68).

Likewise, a portrait of a king is the territorialization of kingship. The greater assemblage we are concerned with in relation to the royal portrait is therefore that of *ajawlel* (kingship). This consists of the king

in person, the royal court, buildings, monumental art, artefacts, estates, etc. It also consists of titles and activities such as dedication, feasting, calendar rituals, and so forth. The king is the focal point around which the assemblage takes shape. The smaller assemblage we are concerned with in relation to this portrait is the sensorial assemblage related to the depicted organs.

The assemblage of senses

DeLanda (2006) begins his assemblage analysis with subhuman parts, such as the senses, that create a human subject. The subject emerges through external relations, i.e. it can only emerge and exist if the components interact with other components and assemblages (involution). The senses must therefore interact with external features. The Maya area offers a rich source for studying the senses from such a perspective. Houston and others (2006) show how the senses, experience and emotions were represented and manifested during the Classic period. In their book the authors primarily follow the Aristotelian senses (sight, hearing, smell, taste and touch). However, since a sense is a psychological method for perceiving the world and oneself, a capability to register external stimuli, contemporary neurologists suggest that there are at least five additional senses among humans and even more among other animals. People also have thermoception (perception of heat and cold), nociception (perception of pain), equilibrioception (experience of position and acceleration, i.e. balance), proprioception (perception of one's own body), and interoception (perception of the body's internal physiology). Undoubtedly, the Maya material can be used to understand some of these perceptions as well, particularly heat and cold. However, in this text the focus will be sight.

A subjective experience is created through distinct and individual sensory impressions according to DeLanda. Every form of impression (visual, auditory, passion, desire) is a singular individuality and existence (*a haecceity*). They are heterogeneous and cannot be reduced to their component parts. Ideas that arise from these impressions are direct copies without any representational filter. An idea only has a lower intensity than the impression. Our habits of grouping ideas and comparing them transform a population of individual ideas into an emergent assemblage. Habitual repetition creates a stable identity for the assemblage and habits

sustain the association of ideas. Hence, the human being is habitual and creative at the same time (DeLanda 2006).

To believe in the ideas brings them closer to the impressions. However, it is often the intensity of a belief that drives social action rather than its linguistic proposition and semantic content (DeLanda 2006). Thus, human agents probably did not understand the monumental iconography from the cosmological and symbolic details described by various Mayanists. Instead, monumental iconography worked like Gell's (1998) sense of art and agency. The iconography directly affected the viewer. It was designed to affect, not to be analyzed. It was the intensity of the beliefs associated with the impressions of viewing the iconography that created a ritual arena. The iconography was also a way for a ruling regime to direct the ideas into a homogeneous form (what often is termed ideology). These ideas would then affect their components (the impressions) as well. This brings me to the *regimes of signs*.

Regimes of signs and perceptibility

Deleuze and Guattari (1987:111) "call any specific formalization of expression a regime of signs, at least when the expression is linguistic. A regime of signs constitutes a semiotic system. But it appears difficult to analyze semiotic systems in themselves: there is always a form of content that is simultaneously inseparable from and independent of the form of expression, and the two forms pertain to assemblages that are not principally linguistic."

Thus, the regime of signs emerges from an assemblage and therefore linguistic expressions and iconography are always part of a greater assemblage. For example, the word for face (*baah*), the baah hieroglyph, a depicted royal face and the real royal face are always part of the ajawlel assemblage that is emerging in different contexts. The signs are emergent properties of a flow. This means that I am not primarily looking at iconography as representations of a world 'out there'. At best, the images and words point towards something other than the object itself since depictions of faces are something other than the faces they are believed to represent. They are singular existences and create their own realities, but they are always part of a greater assemblage. From this assemblage meaning may arise, but never without the parts being interconnected.

These regimes of signs are also regimes of perceptibility. Murphy (2006:24) calls “the regular and sedimented contours of perception and imperception produced within a disciplinary or epistemological tradition its ‘regimes of perceptibility’ /.../ Produced by assemblages that are anchored in material culture, regimes of perceptibility establish what phenomena become perceptible, and thus what phenomena come into being for us, giving objects boundaries and imbuing them with qualities. Regimes of perceptibility populate our world with some objects and not others, and they allow certain actions to be performed on those objects.”

Hence, what we know, express, perceive and write has a non-linguistic material and prediscursive content (Kullenberg 2008). Therefore, I do not ground my interpretation in ideology/cosmology. The regimes of signs and perceptibility are more complex than being reducible to ideology/cosmology. Deleuze and Guattari define four regimes of signs but they believe there may be more. These are: *presignifying*, *signifying*, *postsignifying* and *countersignifying*. They tend to be found in all social formations in a mixture. A social formation is not synonymous with a regime of signs.

The presignifying regime is pluralistic, heterogeneous and polyvocal and cannot be defeated by the deterritorialized *master-signifier* (a sign that moves around and determines and territorializes expressions into homogeneous forms) (Bonta and Protevi 2004). The king is such a master-signifier and as a sign it can emerge at many places (as portraits, temples, etc.) and capture the ‘meaning’ of the place, to interrupt the presignifying flow. On the other hand presignifying signs do not become self-evident meaning as in the signifying regime. This is a rather ideal state of affairs since a presignifying regime is always affected by prevailing signifying regimes of various scales. From a perspective where we see the whole Maya area as a culture, the Maya iconography could be seen as heterogeneous and polyvocal since there are great differences between various regions. However, on the level of the polity the iconography is less heterogeneous. Here the polyvocality has been captured/*overcoded* by a master-signifier. Overcoding overrides heterogeneous codes and creates a homogeneous substance, a signifying regime of signs.

In signifying regimes signs only relate to another sign through the master-signifier. The master-signifier is the Despot/king and its hierarchy. Everything can be accounted for by the signifying regime of kingship in the Maya area during the Classic period. The king is the centre and everything emerges from or is linked back to him. The monumental

faces/masks that emerged on Formative period monumental buildings indicate the beginning of this signifying regime. The signifier itself is nothing but a black hole, devoid of content. It is covered up by a *Face* to hide its own emptiness, such as the Christ or the Virgin or the State itself (Bonta and Protevi 2004:142). In Prehispanic times the Face would be the royal face on stelae and other monuments, only there to give an impression that its signifying regime/ 'ideology' can account for everything.

However, signifying regimes emerge at many levels, from the family to the State. The Father is the master-signifier in the patriarchal family and the head of the Catholic Church. The Father overcodes other expressions of the mother and the child. The signifying order can therefore overcode the presignifying regime or other signifying regimes by populating it with signifying signs, such as monumental architecture, stelae, etc. (Bonta and Protevi 2004:130). This is what occurred in the Maya area.

The postsignifying regime is that of betrayal and escape from the signifying regime. It forms the autonomous subject which is rational and conscious. However, the vanguards of the postsignifying regime, such as missionaries and scientists, only establish the signifying regime that follows them (Christianity and Major Science). They implant subjectification in presignifying regimes (Bonta and Protevi 2004:129). The king's royal court was populated by scribes and other specialists. These were the ones aware of the flaws of the signifying regime emerging from the ajawlel assemblage and they had the potential to betray and escape it but they still maintained it through their actions. They were the ones overcoding the presignifying regimes with royal architecture and sculpture. However, I would not stretch the argument and say these people were part of a postsignifying regime because in the postsignifying regime the Book ('Bible') takes the place of the Despot's (the ajaw's) face. In Deleuze and Guattari's (1987:140) own words: "*The book becomes the body of passion, just as the face was the body of the signifier. It is now the book, the most deterritorialized of things, that fixes territories and genealogies.*" No such scripture existed in the Prehispanic Americas. Popol Vuh and earlier codices did not have such a function although Popol Vuh established genealogies.

Finally, the countersignifying regime relates to free-moving ('nomadic') thought and works as a *War Machine* against the overcoding of the State (Bonta and Protevi 2004:73). I will return to this last regime of signs and the War Machine below.

In Deleuze and Guattari we have a far more complex scenario than simply ideology or cosmology. As they show, there are many expressions circulating simultaneously which the defaced monuments probably indicate.

Sight

Faciality is the expression of the signifying regime and the Face is its reterritorialization (Bonta and Protevi 2004:84). Whenever the royal Face was carved the signifying regime of *ajawlel* was reterritorialized. All depictions of faces are not expressions of the signifying regime but the signifying Face goes back to a master-signifier: the king or kingship. By constantly showing his face, the king projected his central role in the signifying regime. The king striated space, i.e. placed signs (temples, range structures, ballcourts, stelae, etc.) that overcoded otherwise heterogeneous expressions. Symptomatically in Classic Maya iconography, the king was portrayed as the centre, an egocentric space. The royal body was a static point around which everything else circled but he was also a restless force from which other activities emerged (Houston et al. 2006:7). The king was the source for fertility, etc. This was an overcoding of the actual presignifying processes that do occur in 'nature.'

What we know of past senses in the Maya area derives from a signifying regime and the *ajawlel* assemblage which the glyphs and depictions were parts of. There appears to have been a perceptual and interactional field that included at least royal and divine bodies and actions. The *y-ichnal* expression of the Classic period is cognate to the contemporary Yucatec *y-iknal* (Houston and Taube 2000:287). *Iknal* is either a habitual place with a fixed position in space or it is a corporeal field of interaction that is not fixed in space. It is connected to the corporeal actions of an agent, often in front of the body (Hanks 1990:91). The *ichnal* may have shifted as deities associated their *ichnal* with different place names. *Ichnal* also related to what was 'down' and to the 'left' from the ruler's point of view. Thus, it seems that broad visual fields emerging from the king were more important in the architecture than sightlines through different openings or corners (Houston and Taube 2000:288). Therefore, Houston sees *ichnal* as a possessed particle that may explain the concern with certain architectural forms, such as the plaza since these can be observed from one point (Houston 2006:140). Plank (2003) has further argued that buildings had their own *ichnal* and hence they were part of the king's person. The very portrait had its own *ichnal* or was part

of the king's distributed ichnal and they were placed in open areas and the king's perception was therefore widely distributed.

The signifying regime indicates that the individual organs of the king could make their own decisions. The eye was procreative since it affected and changed the world which it saw. It was not a receiver but reached out to absorb the world (Houston 2006:141). The sun was also associated with the eye, perhaps because of the sun's association with light. The solar sign *k'in* sometimes replaced the eyes in the iconography. One of the royal titles was *k'inich ajaw*, meaning 'sun-faced' or 'sun-eyed' lord (Houston and Taube 2000:282). Hence, the eye formed assemblages with the sun, much like Schiffer's (1999) *externs*.

In *Popol Vuh*, the early Colonial period Kiche account of creation, the first humans were blinded so that they would not be all-seeing and all-knowing like the creator gods themselves (Tedlock 1996). The destruction of the ruler's eyes may have been part of an act similar to the one mentioned in *Popol Vuh*.

What happens when we no longer have sight? Here the blind person's experience of the world may be of interest. Ingold (2000:271) asks "can the blind person /.../ ever enjoy an experience comparable to that of the sighted of being placed in something like a landscape that can be taken as a totality, with its infinitely variegated surfaces, contours and textures, inhabited by animals and plants, and littered with objects both natural and artificial?" The rationale for this question is that it is usually argued that it is with our sight we get an instant feeling of being in a landscape. Likewise, the ichnal of the portraits of the king had both an instantaneous and a durational coverage of the locations where they were installed. However, a blind person needs to touch his/her surroundings and it takes a great deal of time to experience the surroundings. Hearing is also experienced as being directed since sounds often come from one location and disappear quickly. Sounds are fragments of the whole world the sighted can see. Therefore, can a blind person sense the surrounding landscape in an instant and carry on doing so like a person with his/her sight intact?

According to John Hull, who was not born blind but became blind later in life, rain can create such an experience. Rain drops fall everywhere and at the same time around the blind person. They reveal the details of the surfaces where they fall. Rain therefore brings contours to everything and a steady rain creates a continuous acoustic experience. Ingold (2000:271) concludes that "rain does for the blind what

sunshine does for the sighted, bathing the world in sound as the sun bathes in light.”

Whereas hearing can be used to experience the surrounding world, the eyes are more crucial for one's identity. Our own visibility, our own identity, is confirmed through others' sight. To see a person is to know that one can also be seen. But not being able to see creates a feeling of not having a face. If one is invisible to others then one is also invisible to oneself. I can feel my own face and others can see it, but it remains invisible to me. Where others see my face I see the world (Ingold 2000). Maybe this is a reason why mirrors were important in the royal courts of the Maya area? In this case they may have been a way to confirm one's own identity rather than to see into a spiritual world, which is the usual interpretation.

In John Protevi's study on political affect he shows how one's 'humanity' is recognized through the sight of the face. Early on infants can recognize faces, which creates emotional bonds and protoempathic identification. People often read subjectivity behind the face (they form a theory of mind) (Protevi 2009:128). Thus, most human beings have a strong inhibition against face-to-face killing since one identifies oneself with the victim. Military training has to overcome this inhibition (Protevi 2009:146). Thus, the "face of the enemy has profound inhibitory effects; the blindfold on the victim of a firing squad enables the shooters by breaking eye contact between victim and executioners" (Protevi 2009:28).

To remove the eyes and sight of the royal Face may have allowed an affective break with the king or the State. Without sight, the face, assemblage, and identity began to be deterritorialized, to be forgotten (Mock 1998). Without the sight or other perceptive senses of the king's distributed portraits the signifying regime associated with the ajawlel assemblage could be deterritorialized.

War Machine

The royal body, face, sight and identity were parts of a political and military assemblage. Hence, the royal face and its senses mirrored social and political conditions. The Face in Maya monumental art was a crucial part of the State Apparatus. Its defacement indicates a process counteracting the workings of the State Apparatus. This gives me reason to mention the War Machine, which is a logic that coun-

teracts the State's striations, it *smoothens* space. Thus, for Deleuze and Guattari (1987), war (or conflict) is separate from the State since the War Machine is decentralized and self organizing, a deterritorializing process opposing the territorializing State. Still, the State attempts to control the War Machine for its own use, in the form of military institutions. Although no standing armies are known from the Maya area they had martial organizations (Hassig 1992).

There is always a tension between the State and the War Machine. Usually the War Machine is controlled by the State but in for example fascist states the War Machine has constructed its own State Apparatus. The danger with this, as Deleuze and Guattari exemplify with the Nazi regime, is that the War Machine is suicidal. It will destroy itself and if it has taken control of the State, the State will go down as well.

I argue that it was this War Machine, and its associated counter signifying regime, that defaced the master-signifier of the State Apparatus – the royal Face. This includes buildings and other objects as perceptive entities. The destruction of perceptive organs in monumental art and termination rituals of buildings was a deterritorialization of identity and of the king's political-military assemblage. This does not mean, however, that the War Machine was that of another polity. It may just as well have emerged within the same territory.

Still, the likelihood is that it was usually a 'foreign' War Machine that brought about the defacement, but we seldom have evidence of who committed the act despite the common correlation between defacement and warfare. For example, in the Upper Pasión area in Guatemala, the small centre of Cancuén emerged as a major political actor in the mid to late eighth century AD. King *Tajal Chan Ahk* ruled the site from 757 to around 799. He is also responsible for the construction of a large palace complex at the site. Judging from his royal titles (the emblem glyphs), he also controlled a neighbouring site called Machaquila. He was succeeded by *Kan Maax* who apparently did not rule for long. Around 800 Cancuén was attacked, probably by Machaquila. The king was killed and buried in a shallow pit. Over 30 people were executed and deposited in a water cistern (Barrientos 2008).

Panel 3 at Cancuén is a ballcourt panel showing the preceding ruler, *Tajal Chan Ahk*, a *sajal* ('subordinate lord') and an *ajk'ubun* ('bookkeeper') (Fig. 1). All have their faces mutilated, probably as a result of this attack. This is the last we hear of Cancuén. Its political assemblage was absolutely deterritorialized. Whether foreign enemies

destroyed the eyes on the ballcourt panel as part of the destruction of the polity, or the remaining population did it as an act of veiling the preceding dead king's eyes, is not known. In any case, the kingship of Cancuén lost its Face and power.

However, there were other processes going on where it was the State Apparatus that blinded the ichnal of the portraits or buildings, but did not necessarily deterritorialize the identity; rather, it territorialized it by concealing the ichnal from the surrounding world by protecting the Face. This concerns the common practice of covering older temples and monuments by a new building, such as Rosalila at Copan (Agurcia 2004) or Stela 31 at Tikal which had been partially defaced. Here the perceptive organs were veiled by construction masses, but this was done by the State Apparatus rather than by the War Machine. This was like wrapping the temple or the Face in a bundle (Wagner 2006). We know that some monuments were 'unwrapped' when they were dedicated which may indicate that they were wrapped with cloth like a bundle during the transport from workshop to the place of dedication or final carving. The king was also 'bundled' into accession (Houston et al. 2006:83). The unwrapping of both king and monument was a way to create new assemblages where the portrait's face gained sight and identity and became part of a greater assemblage. The other process, to be bundled up, territorialized an already existing identity and protected it from the deterritorializing War Machine.

At the end of the Classic period the ajawlel assemblage disintegrated throughout the lowlands. It's regime of perceptibility ended. Every regime of perceptibility creates its own modes of imperceptibility. The regime of ajawlel therefore produced domains of imperceptibility that fell outside the possibilities of knowledge. To create knowledge means to create a tunnel where other things are not chosen (Murphy 2006:91). Countersignifying regimes that emerged in other assemblages may have picked up what were imperceptibilities in the ajawlel assemblage and formed new regimes of perceptibilities. The very act of defacement may have been a way to end one regime of perceptibility.

Conclusion

So what can a Deleuzian perspective tell us that has not been said before about the defacement of monuments in the Maya area? Firstly, it sets the act as an expression of one or several regimes of signs/perceptibili-

ties. Hence there is not one 'meaning' behind the act, nothing that can be reduced to an arborescent model of interpretation such as Maya culture or Maya cosmology. Secondly, the 'agent' behind the act is not reducible to a single human agent either. The very act was the result of an assemblage that intensified in a particular time-space segment (the monument). Thirdly, by viewing the Face as not just a representation of a king /despot, but also as the expression of the greater State assemblage, it is pointed out that the defacement of monuments and covering of monuments were related acts, but with quite different expressions.

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The Colour of Money: Crusaders and Coins in the Thirteenth-Century Baltic Sea

Nanouschka Myrberg



The colourful dark ages

This paper investigates how colour was perceived differently in the European Middle Ages and carried significance beyond what we ascribe it today. It also considers how the various colours worked as important carriers of values and concepts in this context, where pigments were rare and expensive. A way to access the medieval understanding of colour is through heraldry and its colours, the *tinctures*, which combine hard and soft materials, even and three-dimensional surfaces, in a way that evades present-day definitions of colour. Medieval people used their senses in a cross-modal way to perceive colour and connect it to an intricate world of symbolism and values. To them, it is argued, colour was a *texture* just as much as a *hue*. The aim of the paper is to investigate this relationship between colour, ideas and materiality, filtered through the senses, and made manifest in a group of thirteenth-century Scandinavian coins. Were coins actually perceived as coloured?

Several studies have elucidated the idea that there are ways of perceiving, understanding and classifying colours other than in the modern western sense. Importantly, features other than hue or shade may be considered as defining factors and are specified by names. These features are due to cultural factors, separated from the pure biological preconditions of the human organism (Jones & MacGregor 2002:5f). Examples

include degrees of wetness and dryness (Conklin 1952), darkness and light (Rosch 1972), or brilliance (Morphy 1989). Apparently, more than one sense is put to use in the understanding of colour, and the cultural framework one belongs to is of crucial importance.

To achieve an understanding of how colours were perceived and applied in past societies, the multifaceted theoretical framework of the field that could be described *an archaeology of the senses* is of great interest. Colours are something in themselves (pigments, frequencies of light), but they acquire their meaning in relation to human senses and human cultural practices. Both the natural and the cultural aspects of colours can and should be investigated. Still, to make such a line of study interesting it is vital to connect abstract matters such as colour perceptions and symbolism to matters of materiality (Jones & MacGregor 2002:3), that is, to relate associations and conceptions to tangible material remains and archaeological sources.

Examples provided by Houston & Taube (2000) underline the close relationship between different sensorial stimuli, like how smell, sight and hearing trigger each other, and how this may be deliberately implemented to create various effects. Some senses apparently overlapped in ancient Mesoamerican thought. Thus, the sound of speech or song could be metaphorically expressed through beautiful or aromatic flowers, or through shining jade. Sound and scents were integrated with concepts of the soul and afterlife. Through architectural design, mixing symbols with icons and speech rolls, and scent, ancient Mesoamericans communicated and staged moral and hierarchal valuation. Also, the same style that was used to indicate senses (gently curving volutes) was used when depicting beautiful 'sensual' clothing or human bodies (Houston & Taube 2000:289), thus underlining the connection between senses and emotion.

The relationship between *senses* (sensory impressions) and *emotions* (thereby triggered internal processes) is an important link in the investigation into past perceptions and uses of colour. Here it is important to generate an understanding of how the material nature of colour affects the perception of it and its social deployment (cf. Jones & MacGregor 2002:3). In the case below, the focus will be on *touch* and the resulting arousal of emotion and mnemonic processes. When trying to access and understand past mentalities and what certain symbols or concepts may have meant, emotion, as a prerequisite for motivation and social agency, must not be omitted (cf. Tarlow 2000:717f).

Indeed, 'emotion' is intimately related to meaning, to symbolic and abstract thought and to language use. Societies are characterized by culturally shared emotional values, inherent in small-scale, local and personal interactions. Shared cultural understanding of emotion informs our material practices as well as the language and metaphors we use. While it may be difficult to study individual, subjective emotional experience, emotional values on a societal level may be more accessible to archaeological study (Tarlow 2000:728f).

This paper follows these strands of thought on senses and emotions, using a combination of archaeology and written sources to explore how some such societal emotional values were solidified in language and material remains, and how these emotions were triggered by a cross-modal use of concepts of colour in Medieval Scandinavia. I will focus on three main topics: how colour perception was different for the European Middle Ages compared with that of the present day; how colour was expressed and perceived – without colour; and the relationship between visual and physical expressions and the ideas behind them. The otherwise abstract concepts are grounded through a discussion of coins and heraldry from the thirteenth century, specifically a group of coins from the island of Gotland in the Baltic Sea, from the middle of one of the most emotionally fraught contexts of the period: the Crusades.

The historical context of the gotlandic coins

The coins in question were minted on Gotland, starting c. 1220 (Figs. 1, 2). The coins were anonymous and only later variations show cryptic combinations of letters (BBBB, ABOE, etc.). This group of coins is the successor of another group, which are closely related and attributed to Gotland (c. 1140-1220) on archaeological and numismatic grounds (Myrberg 2008). The main difference between the two groups is a change in iconography. If the first coins were inspired by contemporary Frisian or North German coins, through trading partners and allies in that area, the later ones are not easily classed in a similar scheme. While they initially kept the earlier clover-leaf cross on the obverse (Fig. 1, left), the reverse experienced a dramatic change, and instead of a depiction of an unspecified church, now exhibited a cross of a type that is typical for the crusader iconography of the time (Fig. 1, right). This iconography was adopted despite the fact that the Gotlanders, as far as is known, did not participate in the crusades or explicitly support them.

These coins are of special interest to the historical archaeologist because they constitute a comparably large group within the thirteenth-century coins found around the Baltic Sea, in particular in churches on Gotland. They also form part of a somewhat enigmatic coinage that was one of the largest and most influential of the Early Medieval Baltic Sea area in the twelfth- and thirteenth centuries. The issuer is not mentioned on the coins and the contemporary written sources remain silent as well. The iconography thus remains one of the main clues – aside from the archaeological data – as to the circumstances around their issuing, and accordingly continues to attract attention.

The crusades here referred to were launched eastwards in the Baltic Sea on several occasions during the twelfth and thirteenth centuries. The crusading movement as a whole emanated from religious and church-oriented political desires in the eleventh century, and several crusades were launched against the Middle East and other areas during the following centuries. It became a mass-movement, the wish and duty for pious and sword-bearing men, and there are many accounts of the religious fervour with which kings, nobles and their men 'took the cross' to follow the pope's exhortations. In the Baltic area, the crusades aimed for colonization of land as well as for conversion of heathens. In fact, it is likely that the people encountered in the eastern Baltic States and



Figure 1: Coin with 'clover cross' (obverse) and 'hatched cross' (reverse), minted on Gotland c. 1220 (-90). Coin from the collections of the Royal Coin Cabinet, Stockholm (KMK 105035). Photograph: N. Myrberg.

Finland were already familiar with Christianity. These northern crusades thus used the spreading of the Word as an excuse for other ambitions, with the establishment of the continental Church and the conquering of land for the Danish crown a primary focus. One major agent in this story in the years around 1220 (when the coins mentioned above started to be minted), was the Danish archbishop Anders Sunesen, acting together with the Danish king; another was the German bishop Albert, acting on behalf of the archbishopric of Hamburg-Bremen. The Swedish king, Johan Sverkersson, also made an attempt to conquer Estonia in 1220, but the Swedish crusade ended in disaster. It is likely that they all, Germans, Danes and Swedes, sailed via Gotland towards their final destinations (Lind *et al.* 2004; Harrison 2005; cf. Blomkvist 2005).

While the Danes had their main interests in what is now northern Estonia, the Germans primarily focused on, and with time were based in, what is now Latvia and southern Estonia. The city of Riga was founded on Albert's initiative during the first years of the thirteenth century, replacing the former bishopric of Ikšķile (Üxkull) further up the Daugava River. The story of 'how the East was won' was related by



Figure 2: The Baltic Sea area and some places mentioned in the text. The map is for orientation only and does not always correspond with thirteenth-century names or borders. Map drawn by Christina Larsson and modified by the author.

Henry of Livonia, a priest who was close to Albert, in one of the most important sources for this time and its events, the *Henrici Chronicon Livoniae* (German edition: Arbusow & Bauer 1955).

Bishop Albert had a new order established to back up his missionary expeditions, the *Fratres Militiae Christi*, the 'Brethren of the Sword'. The order was approved by the pope and started its work in 1202. The name derives from the Order's insignia: a red cross and sword on a white cloak. These symbols were probably used from the beginning and definitely by 1210 (Harrison 2005:313). This order was inspired by the Cistercian ideals and rules, as were several other orders like the Knight's Templars or the Teutonic Order. The Brethren of the Sword were very successful in gaining land for themselves and the Church, but later on this actually created a conflict with the Bishop who thought they were becoming unsettlingly strong and independent. In 1220 the Danish king allowed the Brethren a part of Estonia as their share of the conquered land, clearly against Albert's wish (Lind *et al.* 2004:221), an indication that the former allegiance was not a top priority to the Brethren at that point. Still, their connections to the Danish king were not of a lasting character. By the 1230s they had lost much of their former authority in the area, eventually dissolved, and were incorporated into the Teutonic Order in 1237 (Lind *et al.* 2004:228-31).

Several important battles were fought in the area and the alliances and rights shifted. As for Gotland, the island is assumed to have maintained a fairly independent status through all these events. This was probably made possible through constant negotiation with different powers, and an ability to use the island's geographical position to their advantage. It is known that the Danish archbishop, Anders Sunesen, visited the island several times around 1220 and played an active part in codifying their relationship with the Church, possibly also with the intention of founding a see on the island. It is also known that Bishop Albert used the island as an assembly point for his crusaders, among these surely his *Fratres Militiae Christi*. Finally, it is likely that the Gotlanders themselves were mostly uninterested in participating in the crusades and continued to do business as usual with the 'heathens' in the East (cf. Myrberg 2008:35f, 172).

The Gotlandic coins are executed in a very particular way which distinguishes them from other coins minted in the area, and the Baltic coins which appear later in the thirteenth century look very different, though often using a similar standard of weight and fineness. It is thus

fair to say that the group here discussed represents a continuation of the twelfth-century Gotlandic coins and therefore did not arise as a direct result of the crusades, or of the German or Danish military presence in the area. This said, the radical change in iconography from the older coins to the more recent group should still be regarded as a consequence of the times, i.e. it was a way of complying with the increasing presence of the crusaders, and their political and religious rhetoric. *Why* the reluctant Gotlanders allowed their coins to carry the crusader iconography remains a key question.

Heraldic colour and coin iconography

Using heraldry and coats-of-arms on coins is a common feature from the beginning of the development of the medieval heraldic system. It may be regarded as a simple continuation of the earlier employment of distinct symbols of the ruler or religion on coins, but stylistically it represents a shift into a more complex morphology of northern European coin iconography. This was not always put to its full use on lower denominations or smaller coins, but eventually flourished on the later and larger medieval coins. In the early phase here discussed, though, the coins were mainly small and rather simply executed, somewhere between the early symbolism and the later, elaborated forms. For the later medieval phase it is therefore not too difficult to imagine that the coats-of-arms shown on coins were fairly well-known among the users, who were quite able to identify the shapes and at the same time evoke the heraldic colours in their inner eye, though the coins themselves were monochrome. Though a similar familiarity with heraldry cannot with certainty be established for the people of early thirteenth-century Gotland, I here wish to argue that such a system of understanding colours-without-colours may be traced back to that time.

Medieval Italy provides us with an early description of a coats-of-arms. In 1251 the arms of the city of Florence were changed due to political events. The new arms were described as “il campo bianco e ’l giglio rosso” (Villani, VII:XLIII); that is, a red lily on a white field (background). The physical execution of that description may be seen on a gold coin, a *forino d’oro*, from 1252 (Fig. 3a), and in a picture from the Museo dell’Opera del Duomo in Florence (Fig. 3b), red lily on white marble (probably from the fourteenth century). The lily on the coin shows a diamond-chequered pattern (diagonal cross-hatching). One interpretation could

be that the pattern illustrates a shadowing to make the flower look more realistic on the monochrome coin; another may be that the die-cutter intended to evoke the idea of the red-coloured Florentine lily. There is no way of proving either interpretation, but the *fiorino* may serve as an example of the techniques used on coins to extend the limited artistic possibilities and to arouse different associations.

The Gotlandic coins have a similar pattern of cross-hatching on the reverse cross (Fig. 1). It appears as if the Gotlandic coins actually display a 'St. George's cross', using the cross-shape that is often associated with that saint in Scandinavia (a *cross pattée* with triangular cross-arms). The arms of St. George (well-known to all Brits and used in many other contexts) are blazoned, or described heraldically: *argent, a cross gules* (on silver, a red cross). The icon of the Gotlandic silver coin seems to fit in well with that description, but a specific worship of St. George is not known from thirteenth-century Gotland (though the saint surely was known at the time). Rather, the iconography of the coins seems to use elements commonly in use within the crusader sphere, but not in a way which can be easily tied to a specific power or Order. The exact shape of the cross also varies slightly and the cross-arms are sometimes more straight than triangular, or more curved (*Mantua cross*). It thus seems as if the precise shape is not of crucial importance here, but that



Figure 3: Argent a fleur-de-lys flory gules; on silver, a 'flowery' red lily. Coat of arms of Firenze, Italy, seen on a fiorino d'oro coin from 1252 (left) and on a marble inlay (right). Not to scale. Photographs: Gabriel Hildebrand, Royal Coin Cabinet, Stockholm (coin); Nicolò Orsi Battaglini, Opera di S. Maria del Fiore, Florence (arms).

it serves to allude to the idea it embodies. The idea of the red cross may be thought-provoking, but seems quite logical when related to the medieval heraldic system of colours; it definitely opens up the field for new and interesting studies of coins and coin agency.

There is colour – and ‘colour’

One striking thing about heraldic colours, the *tinctures*, is that they evade the definitions of colour we use in modern language. There are the basic chromatic colours red (*gules*) and blue (*azur*); and the metal-colours silver (*argent*) and gold (*or*) which may, when suitable, be substituted by plain white and yellow. In addition, there are pattern-colours which are stylizations of animal furs: black-and-white *ermine* and blue-and-white *vair* (squirrel). The patterns of the furs derive from the black tails hanging from the white winter ermine furs, and from the different parts of a winter squirrel, the bluish back and the white stomach sewn symmetrically together (Fig. 4). Also the colour black is derived from and named after animal fur: the *sable* and its brown-blackish colour. Possibly, the red *gules* has a similar background referring to dyed red fur or the reddish throat of an animal, but the etymology is disputed. The mixed colours purple and green are also used, but mainly for special purposes like imperial powers. Finally, the term *proper* should be mentioned, designating the natural colour of an item – though these are formalized and do not necessarily indicate the *real* colour of the item (Hellström 1941:50-2; Dahlby 1964:19-22; Dennys 1975:46-8; Woodcock & Robinson 1990:51-3; von Volborth 1991:18, 21f).

A colour may also be expressed in heraldry as patterns or scratches, *hatching*, in cases where it is difficult to use the very colour, such as memory codes for the medieval heralds (also, often as abbreviations) or in later printed heraldic books (Fleetwood 1917:35f; Raneke 1982:92; cf. von Volborth 1991:18-21; Paravicini 1993:109, 116-37, 2005:185-7). These patterns are today standardized, e.g. red is represented by vertical lines, blue by horizontal lines, gold by dots and black by straight cross-scratching (Fig. 5). It is not known, though, how far back this system can be traced; its uniform standards certainly belong to more modern times than the one focussed upon here and derive from a scheme developed at the beginning of the seventeenth century (Petra Sancta 1634, 1638; c.f. Neubecker 1997:86). Certain patterns (*diapering*) are for decoration only and are not standardized or invested with meaning, though it has

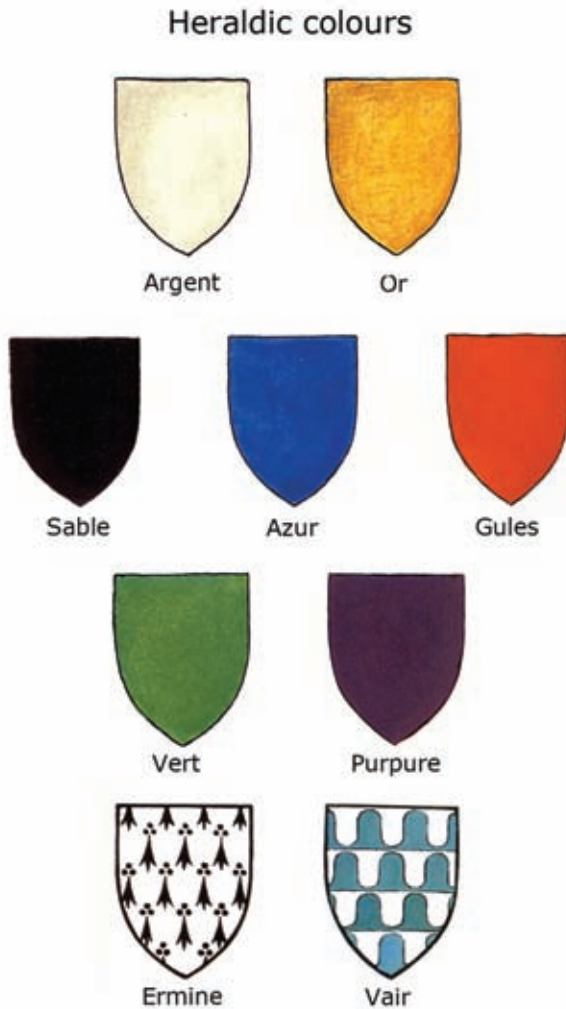


Figure 4: Tinctures, the heraldic colours: metals, colours and furs. After von Volborth 1991:18, 22, adapted by the author.

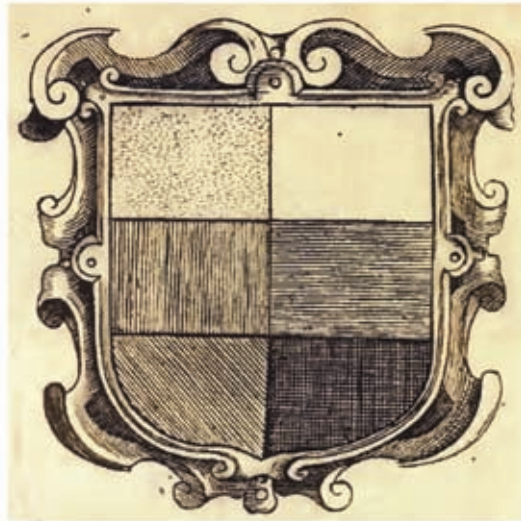
been suggested that they may have denoted colours on medieval seals. Patterns of cross-hatching on monochrome surfaces, distinguishing fields from each other, are known on Swedish seals from the beginning of the thirteenth century (Raneke 1982:92), but the intention may be to simply point out that the field had a colour other than that of the background or the adjoining field, rather than indicating the precise shade (Fleetwood 1917:24f).

Colour, metal, fur and pattern: medieval heraldic colour is multi-dimensional, a *texture* just as much as a *hue*. Hard and soft materials, even or smooth and three-dimensional surfaces, are combined. The luminous metal is different from the saturated colour of enamel or paint, and from the soft glow of a fur. To achieve the maximum effect, the different textures were applied to make the surface lively and variegated, clear and distinct; again following standard rules (e.g. metals cannot abut onto each other).

Furthermore, an intricate symbolism was added to the tinctures during the course of the Middle Ages, all becoming associated with different precious stones, celestial bodies, metals and animals. This symbolism is known to have existed in an elaborated form in the sixteenth century (cf. Woodcock & Robinson 1990:53f) and may have much earlier roots (cf. Dennys 1975:44f). The tinctures were invested with certain values or moral characteristics, and should be assigned carefully to a person (Dennys 1975:44-8; Friar 1987:344), though the symbolism was sometimes applied in an ambivalent and contradictory way (cf. Pastoureau 1986:40).

Thus, 'colour' is something malleable and ambiguous in medieval thinking. A metal is a hue is a planet. An animal is a fur is a pattern. A hue may be rendered nonchromatically; a natural colour may have nothing to do with reality, etc. Features from underground (metals) were connected with others from the surface of earth (animals, pigments) and the sky (celestial bodies). *Colour* here definitely includes *shape* and *sense*. It is fascinating to follow the logic of the heraldic world-system, which is also an important clue to conceptions of colour during the European Middle Ages.

Several authors have occupied themselves with the number of colours present in a language at a certain point (a recent example is Wolf 2009 on Old Norse-Icelandic), regarding that as an indicator of a linguistic, or even societal, level of development of thought. I argue that the research on medieval thought and perceptions regarding colour has



Argent



Or



Sable



Azur



Gules



Vert



Purpure

Figure 5: Hatchings representing colour. Above, the system as published by Petra Sancta in 1634. Below, after von Volborth 1991:18, adapted by the author.

to take into consideration a whole package of other 'colours', without the acknowledgement of which we would be working with incorrect assumptions and understandings, and the medieval mind in scholarship would forever be unjustly trapped in evolutionary simplicity.

Form and content - the cross-modality of heraldic colour

What is said above is in regard to the physical shape of a coat-of-arms. The arms in reality, though, consist of the *blazon*, the verbal description. This is where the core of the arms is. Indeed, arms may consist only of a blazon and never be painted at all (Woodcock 1990:51; Pastoreau 1997:12). The relationship between the blazon and the image of it is a fascinating field of study in itself and involves considerations on visualization principles and pedagogy, as well as issues of memory and transfer of knowledge (cf. Boudreau 1997).

The blazon is a verbalization of a concept worked out by the nobleman or commune with the herald to describe what they find to be a proper and significant icon or symbol for a person, family or group (e.g. a city). This is to work as a *pars pro toto* for the indicated person or group, through the use of attributes. It thus picks up elements from their perceived reality like social status and geographical setting, or from the family name, or from what they aspire to or find desirable to be (though perhaps not 'true'). This concept is processed through the conventions of heraldic language and eventually visualized by an artist. The visualization follows certain rules, as noted above, but the scope for individual interpretation of the details is wide-ranging. The representation is secondary to the blazon, and style and precise execution is even less conclusive. Thus the same family may have several generations of arms in different variations, following the style of the time, the imagination of the artist, and the taste of the commissioner. The physical shape is just one among several possible executions of the content of ideas held in the blazon.

As the concept is transformed to words and transferred to colours, surfaces and shapes, several aspects of the human body are activated. The cultural understanding, sensorial perception and creative abilities of the brain are used to envision the conception; the verbalization includes the organs of speech; the physical execution employs hands and eyes; and when the object is used, eyes/gaze, hands/touch, brain/understanding will evoke emotions and memory. The use of the coat-of-arms would often be accompanied by sound, as the herald would read the blazon

aloud to introduce the person behind it to the participants of a gathering or the public.

In this sense, heraldry is cross-modal: it demands the activity of several senses to produce, to experience and to understand it. It combines a universalist interpretation of colour metaphor with an individual application which demands familiarity with a cultural framework in order to be decoded. The few basic elements are used and reused in various combinations, truly creating a language of colours. Colour materiality is part of this – the various elements not only having a chromatic value but also a textural one. The flat and hard surface acquires depth, body and warmth through its glittering or shimmering; two-dimensional patterns evoke the three-dimensionality and softness of fur. Metals as well as animals may make sound, etc.... The range for associations is vast. Also, in this sense, heraldry is cross-modal, taking advantage of different senses to evoke associations on many different levels, according to purpose, or to the degree of cultural understanding of the beholder.

The red cross goes north-east

The outline of the historical context of the coins above intends to acquaint the reader with some important strands of thought relevant for the interpretation of the ‘red cross’ of the Gotlandic coins, and thus with parts of the cultural understanding which may have surrounded their use in the Middle Ages.

During the twelfth century, Europe experienced a religious revival which formed the ideological basis for the crusades. Bernhard of Clairvaux, a religious superstar of the time, was a major engine driving the movement of pilgrimages and crusades, and a supporter of knightly orders which protected the pilgrims and religious leaders (Lind *et al.* 2004:253f). One major incentive to ‘take the cross’ and participate in the crusades was the promise of receiving indulgences, particularly the plenary indulgence, or forgiveness from all sins (Lind *et al.* 2004:138f; Palmén 2005:102). This was apparently very important to the medieval mind, since for most participants it was the only compensation promised. Indulgences were promised both with regard to life on the ‘other side’, and as a release from penitence in the present – typically praying, fasting etc. (Lind *et al.* 2004:144-6, 179-81). It should therefore be remembered that the crusading movement was not mainly a matter of politics and conversion by the sword, but also from another point of view represented

hope of salvation and spiritual freedom for a large number of devoted Christians. Pilgrimage, making a journey to the Holy Land, was a large movement both metaphorically and in the physical sense.

In the European Middle Ages, religious symbolism was of great importance, and great philosophical effort was invested in the interpretation and development of texts and symbols. For example, the Cistercians (a religious strain emanating from the teachings of Bernhard of Clairvaux) were deeply involved with theorizing and interpreting symbolic representation. Symbols, it was concluded in the 1120s, were a visible form of invisible matter. Symbols refer to invisible realities, which may be disclosed and made real through *imagination*. Imagination was a mysterious but strong human power, capable of exceeding the limits of visible and invisible, of material and immaterial, and of revealing the spiritual content of the symbol. The purpose of the sign or symbol was thus to convey knowledge and make these invisible contents visible (Palmén 2005:99).

In a famous passage, Abbot Suger (1081-1151) of St. Denis describes how the sight of a precious reliquary studded with gems carries his mind from the material to the spiritual world. The gems and gold here act as the very means for imaginative creation and the pious man's spiritual journey; the power of the object derives from a religious symbolism of the time where light was the visible manifestation of the divine, and where the shininess of gold and gems were metaphors for light and for the realm of light. The spiritual transformation this resulted in was made possible only because Abbot Suger's philosophy sanctioned an apprehension of the supernatural in terms of sensuous symbols (Gombrich 1978:15f).

What is of interest here is the medieval conviction that concepts are inherent in the physical representation. The exact shape of the representation is not conclusive, still on the other hand it is important that a representation be made – metaphorical thinking is well developed and a metaphor or a *pars pro toto* may well substitute for the real thing – but some material form of it is a must. This forms the basis for all medieval beliefs in relics – the symbol or piece of the divine, referring to invisible realities and made real through imagination and what could be called the 'magic of touch' or 'magic of sight'.

I propose, that this 'touch magic' was also working through coins and their iconography, for they were some of the most frequently spread images and were normally handled in different situations more than

most other images; quite literally, they were very 'hands on'. In the case of the Gotlandic coins from the early twelfth century the concept conveyed through the crusader cross may have embodied and evoked the spiritual contents of the crusading ideology, possibly on several levels: the pious pilgrimage of the individual alongside the forceful politics of the sword. Further connotations may have been evoked, if it may be assumed (as suggested above) that the cross was perceived of as *red*, thus likely connected with the Brethren of the Sword or other knightly orders, and on a deeper level to the Passion, the death and suffering of Christ.

The colour red is a 'visual metaphor' that easily lends itself to symbolic use. There are certain physical features that are red, like blood or fire, that one readily associates with pain or violence, though it must be remembered that the value or meaning of red is in itself not fixed and grounded in biological facts, but is always culturally situated (Gombrich 1978:13). Red in this medieval context may have had general associations with elite, royalty, blood and feasting occasions, derived from its traditional use on precious Frankish and Scandinavian jewellery, but the use of the colour by the crusaders will likely have added new (or substituted old) dimensions.

As a result of the Baltic Sea crusades, all of Livonia (Estonia and Latvia) was devoted to St. Mary in the middle of the thirteenth century. It thus became possible to make a symbolic pilgrimage there rather than going all the way to Jerusalem (Rydbeck 1967). Through the medieval imagination, the sites of the Holy Land could be recreated there, the spiritual journey completed, and indulgence bestowed. Perhaps the 'red cross' of the Gotlandic coins was a reminder of this concept for the visitors to the island, acting as a means to make the disclosed visible, through fingers and eyes, to reveal the spiritual content of the symbol and draw its immanent realities to the surface.

The colour of money

Several studies have shown that there are ways of perceiving, understanding and classifying colours that are distinct from the modern approach, observing features other than hue or pigment as defining factors. These classifications originate in cultural factors, separated from the pure biological perception of the human organism (Jones

& MacGregor 2002:5f). To add to the examples mentioned earlier (degrees of wetness, light or brilliance), medieval heraldry provides an example of how texture, the very materiality of the tincture, is of utmost importance to the understanding of colour in that setting. This conclusion has important implications for any study regarding colour during the European Middle Ages, and perhaps it is also of some consequence regarding other times and materials. It might also be suggested that the exact chromatic shade may have been less important than we think. For example, until the thirteenth century blue and green were often regarded only as variations of black (Pastoureau 1986:36), and shades of red often became darker, almost brown or black, with the passing of the years. Still, the colour on a shield would 'be' what was stated in the blazon, not the actual shade.

In certain contexts, such as monochrome coins, it may be argued that specific elements of the image worked as colour codes, understandable to those who were familiar with the code, or with what the image was *supposed* to look like. Such elements are normally difficult to identify, and what appear today as decorative elements or patterns may really be signs for breath, sight, sound or reflection (cf. Houston & Taube 2002). Wells argues that decorated surfaces *always* refer to something else (Wells 2008:43). Using the example of medieval European heraldry, it may be argued that the cross-hatching on the Gotlandic coins was intended to evoke the idea of the colour red, and any further connotations that may have brought with it. It cannot be established with certainty that the pattern intended to represent colour, but the interpretation is suggested by several indications. The idea of coloured coins in itself certainly opens the door to new and innovative studies regarding coin images and coin agency.

Given the general scarcity of images around on a daily basis, pictures such as on the coins may have had a far deeper impact on the medieval viewer than today when we are flooded with images. Coins often spring from elite milieus but move in other contexts, becoming everyday objects and perhaps not even really being 'seen'. At least in part, a coin is seen through the fingertips, then as now, and we are used to 'feeling' what they look like. Arguably, part of their agency therefore emanates from our sensory perception of them, activating the same parts of the brain as would reading with the eyes (cf. Malafouris 2008:404). Thus they ultimately activate cultural understandings and connotations, among which colour may be one.

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Immortal Maidens: The Visual Significance of the Colour White in Girls' Graves on Viking-Age Gotland

Susanne Thedéen



*The first of all single colours is white ...
We shall set down white for the representative of light,
without which no colour can be seen*

Leonardo da Vinci D V

Introduction

In some Viking-Age (AD 800-1050) burials on Gotland, an island in the Baltic Sea, a large number of white shell-beads have been recovered together with glass-beads predominantly coloured yellow, green, red, blue and turquoise as well as beads of exotic materials such as carnelian and rock crystal. The beads were part of bead-sets from necklaces worn by females. Previous research assumed that the shell-beads were made of local limestone, but analyses have revealed that the beads were actually crafted from the exotic cowry shell (*cypraea pantherina*), originating in the Indian Ocean and the Red Sea (Trotzig 1988:289; fig. 1).

The shell-beads draw attention to a discussion of the significance of the colour of the beads. The shell-beads are white and also have a texture that makes them different from the other beads. Furthermore, in a previous study by the author it has been shown that burials with the largest quantities of white beads or shell-beads belong to females between the ages of five and around fifteen (Thedéen 2008:78ff).

Shell-beads sometimes occur in the burials of infant girls or adult women, but they amount to only a few examples in total. The purpose of this paper is to explore the significance of the colour white of cowry shell-beads in burials from the Viking Age on Gotland, considering aspects of gendered age identities as well as fertility and status.

Colouring the past

The study of senses within archaeology has been a field of research since the 1990s (e.g. Classen 1993; Houston & Taube 2000). Various senses have been discussed since then and the usage, symbolism and visual aspects of colour in prehistory have inspired several studies. An appreciation for and attitudes towards colour have changed over the years, but the fact that it has been a matter of importance since antiquity is documented in written sources (Gage 1999:11ff). A colour study of great influence stating a neo-evolutionary approach was argued by Brent Berlin and Paul Key (1969). They emphasized universal meanings of colours determined by aspects of neurophysiology. Their opinions have been questioned by linguists and anthropologists, but also above all from an archaeological point of view because their basic colour terms, the



Fig. 1. White shell-beads arranged as a bead-set in a Viking-Age context - Hellvi, Ire burial 218A (Photo: Susanne Thedéen).

Munsell Colour Chart, do not consider the specific contexts or historical aspects of colour. The chart has also been criticized for overlooking colour symbolism and social meanings of colours (Sivik 1997; Gage 1999:79; Chapman 2002:45ff; Jones & MacGregor 2002:3ff). Furthermore, it has been argued that colour must be understood as relational, culturally constructed and may be related to wider aspects of cosmology, social categorization and gender relations (Owoc 2002:128). Colour can act as an important means of constructing difference through dress, adornments and bodily paints or substances. Colours may also be significant for signalling certain age groups or may be important in life course rituals marking altered identities (Turner 1967; Geirnaert 1992:56ff; Boivin 2000:373ff; Owoc 2002:127ff; Hauptman Wahlgren 2002:185ff; Thedéen 2004:102f).

The cultural significance of colour in archaeological, historical as well as anthropological contexts has been emphasized by several scholars (e.g. Turner 1967; Gage 1999; Jones & MacGregor 2002). According to studies conducted by Victor Turner it is white, red and black in particular that have been attributed cultural meanings (Turner 1967). However, other studies have shown that a variety of colours or combinations of colours may be ascribed cultural significance (e.g. Owoc 2002). The colour white specifically may hold a range or variety of meanings. White may refer to the sum of all other colours or white may denote no colour at all, that is it is colourless. A common view is to conceive of white as light. White has also been ascribed the colour of the metal silver in heraldry and the Latin and Greek root of the name of silver *arg-* signifies white or shining (Gage 1999). In societies of the western world white has traditionally been associated with innocence, purity, cleanliness, coolness, newness and virginity (Darvill 2002:74). In Eastern traditions as well as in African societies white has been ascribed meanings linked to death and sorrow, perhaps alluding to the white bones of the dead. Several anthropological studies have also shown that white has been associated with the spiritual world.

Cowry shells in their contexts

Cowry shells originate in the Indian Ocean and the Red Sea and have enjoyed widespread use across time and space (Burgess 1970). The word cowry derives from *kauri* in ancient Hindi or Sanskrit, probably meaning shell. In Asian and African societies cowries have been used

as currency. In China this dates as early as c. 1500 BC, and in some African societies they were used right up until the twentieth century. In fact, the Chinese sign for money is in the shape of a cowry shell. Cowries are therefore also a general symbol for wealth and property in these societies (Hingston Quiggin 1949; Wang 1980).

In several contexts cowries have been worked into beads and been used as jewellery and a form of adornment. They have also been kept in an unprepared state, either as pendants or in bags, suggesting that they may sometimes have functioned as amulets. In a majority of societies the cowry has been associated with the female gender, symbolizing aspects of fertility and childbirth. This may be due to the form of the bottom of the cowry, which might be regarded as alluding to the vulva (Meaney 1981:123f; Lennartz 2004:198ff; cf. fig. 4). The fact that the cowry is collected from shallow waters also provides strong associations with water, which may be a significant element in relation to fertility and childbirth. In the Middle and New Kingdom in Egypt females wore cowries or imitations of cowries in girdles on the hips as amulets to secure fertility and to ensure safe childbirths (Meskell 2002:68). Amuletic features of cowries associated with fertility have also been suggested for Early Medieval Anglo-Saxon and Frankish contexts (Meaney 1981:123f). In Germanic and central European contexts cowries have instead been linked to perceptions of protection against the evil eye, but still acting as amulets (Lennartz 2004:206ff). The form of the cowry has also been associated with snake heads and was worn by women as amulets to protect against the evil eye in Russian, Baltic and Finnish contexts during historical times up to the nineteenth century. 'snake head' (Sw. *ormskalle*) as a name for cowries has been used in Sweden in historical times as well (*Nordisk familjebok*).

Turning to the Scandinavian contexts there are a number of different species of the cowry, the two most common in Scandinavia being the *cypraea pantherina* and the *cypraea moneta* (Jansson 1989:589ff; Johansson 2005:49ff). The *cypraea pantherina* was used to make shell-beads while the *cypraea moneta* was not worked but worn as pendants in necklaces. These cowries regularly have a hole with a bronze ring used for a string. There is evidence of cowries from the Vendel Period (AD 550-800) and the Viking Age, mainly from Gotland and Birka, the Viking-Age town in eastern Sweden, but also some examples from Öland, another island in the Baltic Sea, and from Ångermanland in the north of Scandinavia and from Scania in the southernmost part of

Scandinavia. There has also been a discussion considering whether the cowry beads were imported from the east (Jansson 1989) or if the shells were transported to Scandinavia and the beads were manufactured locally. No waste has been found from cowry bead production, which might support the idea that the beads were imported (Trotzig 1988:289). There is evidence in Russian and Baltic graves from the period AD 600-1000 indicating that the beads and cowries in Scandinavian contexts were imported from the east. White shell-beads are a common feature in burials on Gotland as early as the Vendel period. Cowries as pendants from the Migration (AD 400-550) and Vendel periods have also been observed (Nerman 1955:209f). Although only few in number, cowry pendants and beads continued to be used during the early Christian era as they are found in burials in some of the churchyards on Gotland (Carlsson 1999:61f; fig. 2). There is some evidence of cowries from settlements, too, but those remains will not be considered in this paper (Johansson 2005:51).

Keep a beady eye on the beads

In table 1 Viking-Age burials from Gotland with shell-beads are presented in relation to the estimated osteological age of the deceased. The table clearly illustrates that burials with large numbers of white shell-beads can be attributed to a certain age category of individuals,



Figure 2: Necklace with whole cowries from a Late Viking-Age churchyard, Fröjel (Modified after Carlsson 1999:62).

namely those between five and around fifteen years (Thedéen 2008; table 1). These individuals most likely denote a female gender representing girls judging from the similar burial outfit typically found in burials of adult females. Monochrome glass-beads of local production are also present in the burials. The glass-beads appear in the colours of yellow, green, red and blue or turquoise. One or two beads of carnelian or rock crystal

Table 1: Viking-Age burials with white shell-beads.

Parish	Estate	Inv no	Beads	Cowry-beads	Osteological age
Halla	Broe	SHM 19734:25:2	16	1	0-1 months
Grötlingbo	Barshalder	SHM 27739:3	8		2 child
Hellvi	Ire burial 375	SHM 20826	43		3 0-3 months + 3-4 years
Grötlingbo	Barshalder	SHM 27739:1b	114		10 child
Hellvi	Ire burial 218A	GF C 9322	217		111 7 year
När	Smis	GF C 9521:13-21	255		135 7-9 years
Hellvi	Ire burial 230A	SHM 23140	118		19 9-10 years
Hellvi	Ire burial 370	SHM 20826	257		118 10 year
Hellvi	Ire burial 182B	GF C 9322	220		59 10 year
Tofta	Gnisvärd		152		10 15-20 years
	Exc. Burial 2				
Hellvi	Ire burial 230B	GF C 9322	17		12 20-25 years
Färö	Vinor	SHM 22459:1	41		4 25-35 years
Othem	Slite	SHM 23896:2B	62		32 skeleton with foetus
Visby	Land S Kopparsvik	GF C 12675:140	22		1 female, age?
Visby	Land S Kopparsvik	GF C 12675:189	43		22 female, age?
Visby	Land S Kopparsvik	GF C 12675:277	17		1 female, age?
Eke	Gudings slott	SHM 33024:1/88	4		1 ?
Eke	Smis	SHM 13084	62		16 ?
Eksta	Bopparve	GFC 11510	97		27 ?
Eksta	Hägur Excavation	1973-77 Gr. 2:3	11		3 ?
Eksta	Hägur Excavation	1973-77 Gr.3	37		6 ?
Fleringe	Utoje Excavation	1984	110		10 ?
Halla	Broe	SHM 20263	98		41 ?
Hangvar	Ire	GF C 9671	20		1 ?
Levide	Pejnarve	SHM 26714:25	45		3 ?
Sanda	Runne	SHM 27300:11	12		1 ?
Tingstäde	Furbjärs	SHM 10046	6		1 ?
Tofta	Krokstäde	SHM 24101:3A	240		109 ?
Tofta	Krokstäde	SHM 24101:3A	15		1 ?
Visby	Land S Kopparsvik	GF C 12675:123	9		1 ?
Visby	Land S Kopparsvik	GF C 12675:140	22		1 ?
Visby	Land S Kopparsvik	GF C 12675:277	17		1 ?

may also be part of the bead-set. The table also shows that children below the age of five and females over fifteen years of age wore white cowry-beads in their bead-sets or necklaces, but the number of beads in general, and of shell-beads specifically, are not as numerous in these burials compared to those of the girls aged five to fifteen.

There is further evidence that cowry shells were probably associated with the female gender in general and children in particular. Whole cowry shells (*cypraea moneta*) have been found in three Viking-Age burials on Gotland. These whole cowries have probably been used as pendants and would have been displayed in the bead-sets. As in European contexts, it has been suggested that those kinds of pendants, as well as the beads generally, worked as amulets (Bye Johansen 2004:468; Thunmark-Nylén 2000:225). The first burial is one of those with a large number of shell-beads, burial 218A, from the Ire cemetery in north-eastern Gotland, where a cowry was found inside a box brooch. The box brooch was found close to the beads on the chest indicating the cowry may have been part of the bead-set, but had lost its original context (Thunmark-Nylén 2000:406; fig.1). The second burial is grave no. 4 from Hallvards in Silte, south-western Gotland (SHM 22087:4), where a cowry shell was found as a stray find. An adult and a child were recovered from the burial (Thunmark-Nylén 2000:622; fig. 3). The third burial from Slite in Othem, eastern Gotland (SHM 23896:2B, fig. 4), is perhaps the most interesting, as it appears to have contained a female who was pregnant at her death, as bones from a foetus were found in the pelvis area (Thunmark-Nylén 2000:579). She also wore a bead-set comprising 62 beads of which half were cowry shell beads.

A common feature of these burials with whole cowries is that they all represented burials of female adults and children. The burials of the adults were most likely females as evidenced by dress-related objects such as box brooches, animal-headed brooches, tool brooches with keys and knife as well as arm-jewellery. The children represented in the burials were a foetus, a child around age one and a seven-year-old girl judging from the female dress-related objects found in the burial. The burial of the seven-year-old girl thus uncovered both a cowry pendant and numerous cowry shell-beads. The child in the grave with the cowry classified as a stray find may have been a boy, as a penannular brooch was found close to the cranium of the skeleton. Also, four beads were recovered, a number found in both male and female graves.



Figure 3: Cowry shell probably used as a pendant - Silte, Hallvards (National Museum of Antiquities).

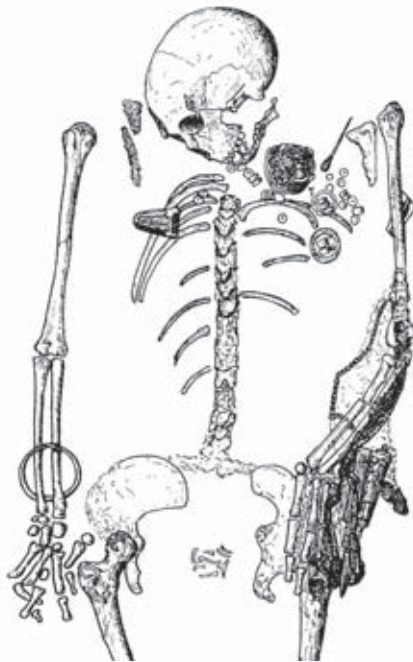


Figure 4: Burial of a pregnant woman with whole cowry and beads made of cowry shells - Othem, Slite (Modified after Thunmark-Nylén 2000:579).

Other evidence of cowries confirms the association with the female gender and children during the Viking Age. In all burial contexts with cowries in Scandinavia, except for one example of a male grave on Birka, the osteological evidence indicates that cowries were deposited in the burials of females or children (Johansson 2005:51). Even the male gender of the Birka burial may be questioned. A knife, two rings, one blue and one yellow bead and an unidentifiable part of an iron object were recovered from the burial. This gives no clear indication of the sex of the deceased (SHM 12159). The deceased may very well have been a female. An example of an adult and a child buried together in the churchyard at Fardhem in southern Gotland (SHM 27774) indicates that the tradition of females and children being linked with cowries continued into Christian times (Thunmark-Nylén 2000:174f).

The pattern of association with females and infants is also in line with the evidence from Medieval European contexts. There are other similar examples of pregnant women being buried with cowries (Meaney 1981:123ff, Lennartz 2004:198f). Furthermore, Annette Lennartz has shown that the deposition of cowries in burials may be linked to certain age categories. The cowries seem to have been deposited with adult women as well as infants and juveniles of a probable female gender, but rarely in the burials of males or mature and elderly people in European contexts (Lennartz 2004:198f). The conclusion also appears to be valid for Gotlandic burials with cowries. In addition to the burials with a large number of shell-beads presented in table 1, cowries are also deposited in the burials of infants under the age of five, juveniles and adult women, but not in the burials of mature and elderly women. However, in these burials the total number of beads and the number of shell-beads only amount to a few compared with the number of beads in the burials of the girls aged five to fifteen. One example is a burial with a female aged 20-25 buried with a necklace made of seventeen beads, twelve shell-beads and five glass-beads (Hellvi, Ire, GF C 9322:230B). Another example is an infant below the age of five who was buried wearing a necklace with eight beads consisting of two shell-beads and six glass-beads (Grötlingbo, Barhalder, SHM 27739:3). This pattern adds to the understanding of the cowries having been connected to certain gendered age identities.

The visual significance of the colour white of cowry shell-beads

One important issue is whether it is possible to determine if the shell-beads were significant for their white colour in addition to the origin, form, texture and contexts where the shell-beads have been recovered. To date, in their work and discussions on the meanings of cowries, scholars have not commented upon the possible significance of colour. One of the burials with numerous beads from Vallstena, Uppgarde (SHM 32397:5/63), in eastern Gotland, did not contain shell-beads but instead had numerous white glass-beads, confirming the importance of their white colour. The burials from Hellvi, Ire, burial no. 182B (table 1) in north-eastern Gotland and Tofta, Gnisvård, burial no. 2 (table 1) in western Gotland also contained large numbers of white glass-beads, which were probably used to balance the shell-beads which were not as numerous in these burials compared with those in other burials with shell-beads. Accordingly, one may conclude that the colour white had a visual significance. This is demonstrated by examples of burials that lacked, or which had only a small number of shell-beads, but which used white glass-beads as a substitute.

The appearance of high status Viking-Age women was probably colourful judging from analyses of colours from fragments of textiles deriving from various parts of the female dress. Fragments from textiles indicate that various visible parts of the dress such as the skirt and the outer garment were probably coloured blue and red (Geijer 1938:180ff). Furthermore, adornments such as brooches, and not least beads in various colours, contributed to the overall colourful appearance. The colour of the beads shifted from the Vendel period to the Viking Age (Callmer 1977; Petré 1984). This most likely implies not only changes in fashion, but rather an altered meaning of colours in connection with wider aspects of society. It is of importance, however, to note that when the colour of other beads changed the white cowry shell-beads used during the Vendel period continued to be used during the Viking Age. This signals a probable continuity in the meaning envisioned for both the shell-beads and their colour white.

One aspect to consider is that the white cowry-beads were probably the only object of material culture displayed in this colour. Other visible adornments or textiles comprising the dress had other colours. The chemise was probably also white, but would not have been visible to any great extent, as the skirt and the outer garment concealed the

chemise. The whiteness of the beads would have been visually striking and in distinct contrast to the other colours of the dress in general and of the other beads in particular. Furthermore, there are examples of the beads having been arranged in certain combinations or sequences on the strings. This may indicate that the bead-sets created and displayed patterns or symbols on the chest; patterns of significance that acted as markers for certain identities. A bead-set was recovered in situ from a burial in the Kopparsvik cemetery. The white shell-beads had been displayed in a pattern of three and three with a coloured bead in between (Thunmark-Nylén 2000:856). This provides evidence of the colour white reflecting a certain visual significance possibly linked to a certain identity. It also indicates that the meaning of the colour white was created in relation to the colour of the other beads in the bead-sets. Another significant aspect is the fact that cowry shells may come in various colours in their natural state, but turn white as they are manufactured and transformed from shell to bead. This may have implied an alteration of meaning where the beads were thought of as achieving new qualities and connotations.

It has been suggested that the cowry beads had a meaning that underlined feminine individuality while also expressing exotic ideals (Trotzig 1988:293). However, it was assumed that the burials with shell-beads represented adult females, and there has been a lack of awareness for the osteological evidence suggesting the beads were in fact worn by rather young girls. The majority of evidence points to girls in a specific age category between five and fifteen, thus representing females, but for the most part not sexually mature or fertile ones, implying that wearing cowry beads or cowry pendants probably signalled a certain gendered identity which was linked to sexual immaturity or unavailability. The material also accompanied a pregnant woman and another woman buried with a child, individuals who might also have been considered untouchable or requiring protection in some way. In a previous study I have argued that the white shell-beads and glass-beads were perhaps added to the necklace of the girls in a life course ritual to mark the entry of a new life stage. The choice of beads may imply that the white colour of the beads had a symbolic meaning; a meaning that was associated with virginity and purity and reserved for girls aged between five -fifteen years. When the girls entered the next stage in life as a sexually mature woman the white beads were given to another, or perhaps shifted in some other way in a life course ritual as they had lost their visual meaning

and symbolism (Thedéen 2008). This argument is in line with Salin who stresses the fertility aspect of cowries (Salin 1949-59 in Meaney 1981:245). Lennartz argues, however, that an interpretation of fertility is problematic as cowries are also common in the burials of infants, and infants are not obviously linked to fertility (Lennartz 2004:197). But Salin suggests that young girls wore cowries to ensure a successful and proper sexual development; the cowries do not refer to present fertility, but to success in future fertility (Salin 1949-59 in Meaney 1981:245). This seems to be an explanation that could also be valid for pregnant women wishing to ensure a safe childbirth.

The visual significance of the colour white in written sources

Aside from the use of white shell-beads, there are few other examples of the material significance of the colour white during the Viking Age. This may be due to colour pigments not being retrieved from objects or other material culture, or it may be caused by the fact that the colour white was important in organic materials or as a bodily feature which has not been preserved. In contrast, it may be significant that the colour white appears in several contexts in Norse written sources. This form of evidence is not without obstacles, however, not least because, with the exception of eleventh-century rune-stones, the relevant texts were written during the medieval period, 200-300 years after the Viking Age. Furthermore, they were composed by Christian authors for a Christian audience. This context may have particular implications regarding the meaning of the colour white, which is highly symbolic in Christian thought.

In the runic inscriptions from the eleventh century it is sometimes mentioned that someone died in white robes (Sw. *vita vadir*) (Peterson 2006). This is to be understood as a death that occurred shortly after baptism, while the individual was still wearing the white robes one wore for ten days following baptism. The colour white also appears in connection with the gods Heimdal and Balder who are mentioned as the 'white' or 'shining' gods (*Snorri's Edda* (Sw. *Snorres Edda*)). White seems to be a colour imbued with meaning in both pre-Christian and Christian contexts and there is little reason to believe the cowries had certain religious connotations as they continued to be used in necklaces found in burials in the early churchyards dated to the late Viking Age.

The cowries are still connected to the female gender as in an example from the churchyard in Fröjel. An adult woman aged 30-45 had been buried with a necklace consisting of sixteen beads of which as many as ten were whole cowries (Carlsson 1999:61f; fig. 2).

On the whole, it is possible to associate the colour white with maidens in Norse literature (*The Poetic Edda* [Sw. *den Poetiska Eddan*]). The 'maiden' is a concept used to denote young unmarried females. The concept does not appear to be used in reference to old unmarried women. Maidens seem to be described as pure white, and where different body parts are mentioned, predominantly the arms and the neck, they are described as white-coloured (Göransson 1999:164ff). One example of this is *The Lay of Völund* (Sw. *Völundarkvida*) where two maidens called Ladgunn Svanvit and Hervor Allvitr are mentioned. Hervor is described as the shimmering white maiden and the young white in the poem (*The Poetic Edda*). Another example is *The Ballad of Allvis* (Sw. *Allvismal*), where Allvis is cited as a soft-white (Sw. *mjällvit*) maiden. In addition, the 'maiden' is an acknowledged concept during the Viking Age as it occurs in a contemporary runic inscription (U 29) (Peterson 2006). Taking these examples into account, it may reasonably be suggested that the white of the shell-beads alludes to purity, virginity and innocence, and we might then conceive of the girls in the five to fifteen age-group as 'maidens'. An identification as maiden is indicated by the manner in which the girls had the external appearance of socially adult females through dress, but biologically were not yet sexually mature or available, although potentially fertile as suggested by their age.

Another example is *the Song of Rig* (Sw. *Rigstula*), where there are strong colour associations including for the colour white (*The Poetic Edda*). *The Song of Rig* is a narrative detailing the rise of the social structure of society. The god Rig travels from one family to another and finally to a third. These families form the genesis of the three social levels: earls, farmers and thralls. It is the classic colour triad black, red and white that appears in *The Song of Rig*. The lower stratum of society or the thralls are connected to the black colour in various ways. The middle stratum, that is the farmers, are linked to the colour red. The colour white has strong associations with the kin of the earl or the upper echelon of society. The visual meaning is clear through expressions such as white-skinned, mother has a neck whiter than the whitest snow, cookies white from wheat, white cloth on a table...

In the examples it is not the colour of the dress or adornments that have been ascribed meanings, but rather bodily appearances and other physical attributes.

A further aspect of *The Song of Rig* is that all unmarried females are called maidens, indicating that the concept was not used only to denote young, high-ranking females, but was used as an age category in general. The high status maiden is cited as being fair haired (Sw. *ljuslätt*) which the newborn baby boy is also said to have had, but with the implication of pale or faded hair (Sw. *blekt hår*) used. In line with the circumstances found in *The Song of Rig*, the colour white of the shell-beads may be linked to status, an expression for girls from the upper stratum of society. Together with beads of carnelian and rock crystal, the cowry shell beads originated in remote places. These beads, and especially the cowries, cannot be viewed as objects for everyone. Rather, they represented signs of contacts and wealth (Jansson 1989:631). The girls buried with the cowries belonged to a kinship group that was wealthy and powerful and the family showed its position through the exotic white shell-beads.

A last example of the colour white in the written sources takes us back to Gotland and is cited in the creation myth of Gotland. It is the mother of genesis in the *Guta Myth* who is called *White-star* (Sw. *Vitstjärna*). The name *White-star* alludes to aspects of nature and chaos and is the type of name often attributed to giantesses. She is the wife of Havde and the mother of the three sons of Gotland, each of whom inhabited one-third of the island. Before the sons were born she had a dream in which three snakes appeared on her chest. Her husband interpreted the dream: she will give birth to three sons and they will be the first inhabitants of Gotland (*Guta Myth* [Sw. *Gutasagan*]).

The snakes in the dream are interesting as snakes are common symbols of fertility (Johansen 1997:73f). This may be interpreted as the three sons who would represent lineages of fertility which would be influential, enduring and prosperous in Gotland for many generations. *White-star* is also the mother of all lineages on Gotland and it may have been important to stress and remark on a certain kin's relationship with old lineages. This was probably significant in connection to funeral rituals when relations were renegotiated both within a kinship group and between powerful families. Dying young could be viewed as a great loss to society and young girls who had survived the early vulnerable years

of life possibly maintained an inherent power, potential and vividness as they stood on the threshold to womanhood. They represented the ability of the family to endure and last into the future. In this sense some girls from certain lineages were conceived of as potential mothers of genesis for her kin. Girls may in this way be significant from the perspective of the fertility of the kin (Mizoguchi 2000:149). When a child dies a link in the chain of a lineage is broken. In addition to significance in life the white shell-beads may have been displayed on the chests of girls during the funeral ritual. The shell-beads worked as symbols of the potential fertility of the kin with associations with White-star, the mother of genesis. The girls were possibly conceived of as white maidens, unavailable as women but available as future wives and mothers of a lineage. The girls may have worn a certain dress in death wearing white shell-beads which signalled and ensured a rebirth and new life in the realm of the dead (Salin 1949-59 in Meaney 1981:245).

Concluding remarks

Some common features may be attributed to cowry beads and cowry pendants such as an association with the female gender, aspects of fertility and wealth as well as indications of their having properties as amulets. This paper has drawn on some of these aspects while adding to the discussion some thoughts on the significance of the colour white of shell-beads and taking the local context of Viking-Age Gotland into consideration. It has been revealed that white cowry beads in Viking-Age burials on Gotland have a strong association with the female gender and to children. Furthermore, it has been argued that the white colour of shell-beads displayed patterns of visual significance and symbolic associations in the appearances of females and children. It has been suggested that the visual significance of the colour white is linked to an identity of the buried girls as maidens. But the colour may also indicate that the maidens originated from influential families and lineages of importance and wealth. In this sense the colour white is used both to express a certain gendered age identity as well as representing a particular social status. Furthermore, it has been proposed that the cowry beads displayed on the chests of the girls signal aspects of the future fertility of the kin or rebirth of the girls in the realm of the dead.

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Sense and Sensibility: Masking Practices in Late Iron Age Boat-Graves

Ing-Marie Back Danielsson



Introduction

Swedish boat-graves, especially those from Valsgärde and Vendel, have been the subject of many investigations and extensive research since their discoveries in the late nineteenth and early twentieth centuries (e.g. Stolpe & Arne 1912; Arwidsson 1942, 1954, 1977; Lindqvist 1950; Herschend 1997, 2003; Seiler 2001, Schönback 2002; Norr (ed.) 2008). The helmets retrieved from these burials are the focus of this paper, and these have been analysed with particular consideration for their role in sensory engagement – both for the person wearing the helmet and for those experiencing it from the outside.

The paper starts off with a short presentation of the boat-graves and the helmets therein, after which follows an equally short introduction of masking practices and the significance of masking practices during the Late Iron Age in Scandinavia. A more detailed discussion of the helmets of the boat-graves and their connection with sensual activities, the main theme of the paper, follows. Finally, a broader interpretation of the boat-graves themselves is offered and, lastly, conclusions are presented.

The boat-graves

Late Iron Age boat-graves are known most notably from Vendel, Valsgärde, Ulltuna, and Tuna of Alsike in Sweden. When excavated, the boat burials of Vendel produced such wealthy finds that an archaeological time period has been named after the location – the Vendel period – by which is meant the period from about AD 550 to AD 800. Contrary to the most common method of disposing dead bodies in the area at this period of time, the boat-graves contained inhumations, and comparatively large quantities of organic materials have survived. At Valsgärde the first boat burial took place at the beginning of the seventh century, and it was followed by fourteen subsequent boat-graves, seemingly one boat burial per generation. Five of these date to the Vendel period, and these are far more elaborate regarding the number and character of the grave goods than the boat-graves of the Viking Age (AD 800–1050). Since weaponry in the form of spears, swords, shields and helmets have been recovered here the Valsgärde (and Vendel) boat-graves have been interpreted as representing only the male gender. Boat-graves are also known from other countries, such as the Oseberg and Gokstad boat-graves from Norway, dating to the Viking Age. Another world-famous boat-grave, which is particularly interesting in this context, is the boat-grave of Sutton Hoo from East Anglia, which has close parallels with the Valsgärde burials.

The way in which the boat-graves have been equipped, as well as how the paraphernalia and bodies (animal and human) were positioned within and outside the boats, show next to no variation, thus implying highly standardized and ritualized rules for the stage-settings over decades, even centuries (Stolpe & Arne 1912:8, Arwidsson 1980:50). Although it seems as if only one boat-grave burial has been conducted per generation, this ritual regularity may paradoxically mean that the death of a person in one generation did not necessarily mark the end and the beginning of a new era. Rather, by sticking to old paths and a set formula for laying out the dead, a continuation of practices relating to certain families or clans was guaranteed to continue.

The equipment of the boats mainly consists of helmets, swords, shields, spears, buckles, saddles, drinking cups/glasses, cauldrons/kettles of iron, cauldron chains, pokers, scissors, axes, combs, dice and gaming pieces, drinking horns, currency bars, armour pieces, spits, pliers, hangers, frost nails, halters, animal leashes, hooks and textiles, for

instance in the form of blankets (Arwidsson 1980:52–53). From this listing it is clear that the weapons are just one category of object from the boat-graves, which implies that the notion of a male gender must be dressed with further connotations – other than those connected to war and battles.

Since few body parts have been recovered, it is assumed that a human body was placed in the middle of the boat, where remnants of a bed and a tent-like structure have often been retrieved. This space has been described by Herschend as a room “...for the everyday privacy of the aristocratic man”(Herschend 2001:70). Herschend (2001) has further linked the boat-graves with halls, as well as to journeying and symbols of this, describing how an aristocratic man becomes mature and civilized. The common absence of human bodies in the boat-graves has made analyses of sex and biological age impossible. However, skeletal material from animals is prominent at times.

The helmets

Whereas some equipment may be found in sets or in greater numbers, such as spears, buckles, swords, animals, drinking gear, and tools, only one helmet per burial has been recovered in the boat-graves containing head-gear. In Vendel, five out seven Vendel period boat-graves have been endowed with a helmet (boat graves nos. X, XIV, XI, XII, and I). The two without (nos. VII and III) were plundered in ancient times (Lundström 1980). Valsgärde, on the other hand, provided evidence of four out of five Vendel period boat-graves containing one helmet each (Arwidsson 1980:52). Helmets were retrieved in boat-graves nos. 5, 6, 7, 8, while no. 13 contained none.

Vendel period helmets consist of a hood of iron and a facial mask, at times with a protruding nose (Arrhenius 1994:209). The eyebrows may further be marked and have a zoomorphic appearance (fig. 1). The helmets are also usually equipped with a crest or a ridge in animal form, which is further believed to have been partly detachable, fig. 3 (Arrhenius 1994:211).

The helmets from Vendel and Valsgärde – as well as Sutton Hoo – have ornamented plaques in bronze on the sides of the iron hood. Humans or human-like beings wearing masks can be seen on the helmet-plaques (figs 1, 4). These masks are similar to the helmets of which they are part, worn in real life (and death in this context).

The helmets are said to have their predecessors not from the then contemporary Reihengräber culture with its conically shaped helmets of copper, but instead from helmets of late Classical origin (from the fourth century and earlier) inspired by those from the house of the Roman Emperor and its closest staff (Almgren 1980). Some parts of the helmets, such as nose protectors in the shape of a bird which perched loosely on the nose (Lindqvist 1950:7), fig. 1, suggest that the helmets were not intended for hard battle, since a single blow, or perhaps even putting the helmet on and off a human head, would make the nose flap fall off or rest in a crooked position. Others seem to be too small to allow proper bolstering.

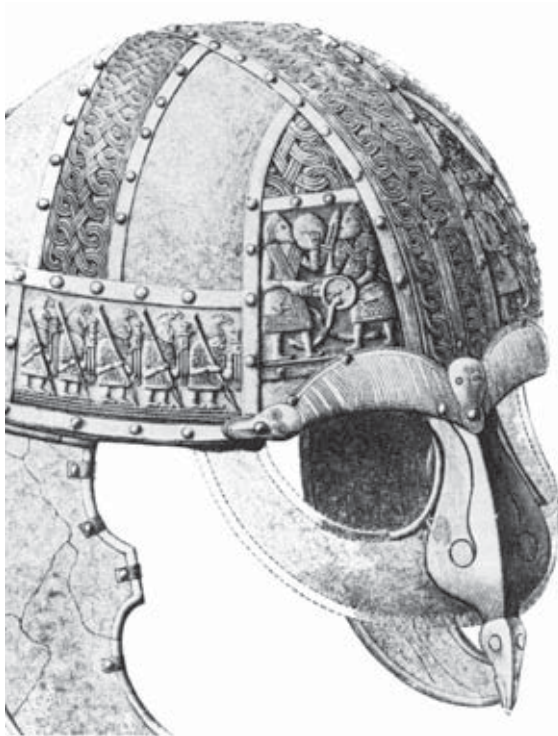


Figure 1: The helmet from Vendel XIV. When worn, the animal/bird covering the human nose can be interpreted as receiving enough air 'to come alive' through the constant inhalation and exhalation of air of the mask wearer. See also the plaque of the helmet from Valsgärde 8 in fig. 4, where the figures' ridges have seemingly come alive (Almgren 1980:162).

A short theory of masking practices

The helmets of the boat-graves with facial masks benefit from being discussed in the context of masking practices in general. Anthropological studies have demonstrated that masks are almost exclusively found in connection with transitional situations, although they may at the same time also express aspects of power relations. Furthermore, masks may play an important role in gaining control over forces of both natural and human origin to help individuals, families or clans (King 1994). Within transitional circumstances the performer may use the mask as protection against possible evil forces, and the mask may also serve as a container or conduit for spiritual force and power (Pernet 1992:57; Emigh 1996:3, 14). Thus, a mask can be perceived of as invoking specific forces and their control, but likewise, perhaps in a modern way of putting it, the mask can bring out the other from within (cf. Kristeva 1991), that is, your own many unstable and paradoxical traits. A performer may invite such forces or powers through acting, but the power may also come from the very material of the mask itself, or the treatment it has undergone, or indeed from the figure or event that is expressed through the mask (Pernet 1992:128, cf. Mack 1995:62–63).

A mask such as a helmet defines not only the helmet wearer, but also those who do not wear facial gear (Proschan 1983:25). These contrasting effects are crucial – they invite and demonstrate paradox. Likewise, a facial mask/helmet defines what is perceived as a normal or ordinary face, and the abbreviation, exaggeration or intensification of facial characteristics in the mask makes it “...another face, opposed to the human one” (Oguibenine 1975:5).

It is only when Late Iron Age perceptions of an ordinary face are understood that the modifications and manipulations of the same signs may be recognized. Such alterations often resonate with ambiguity, contradiction and representation (e.g. Tonkin 1979, Urban and Hendricks 1983, Emigh 1996). Pollock has contended that masks work and gain their special effect by doing exactly this, “by operating upon the particular ways in which identity, or personhood, is expressed in any culture” (Pollock 1995:584). He reaches this conclusion by analysing masking from a semiotic perspective. This is not the Saussurian semiotics, where there is an arbitrariness between, in this case, masks as signifiers and the signified meaning (Pollock 1995:592). Rather, the opposite is the case – there is no arbitrary relation between the mask and its meaning, and

“[t]he form taken by masks is motivated...by their particular semiotics of identity” (Pollock 1995:590).

The distinctiveness of the face in the case of helmets, or its particular semiotics of identity, is expressed through the common exaggeration of the nose (for instance in the shape of a bird, fig. 1) and the accentuation of the eyes (through the eye sockets, figs. 1 and 3). However, the accentuation of the nose and eyes are not restricted to the helmets, but can be found on a few other Late Iron objects with figures such as gold foil figures, mountings, a yoke finial, runestones, and on pendants (Back Danielsson 2007:123–134). These features ultimately signalled the time and occasion for imminent transformations, the purposes of which were most probably to perform certain ceremonies relating to marriage, death, war, prophesy making (the Norse *sejdr*), and/or birth (Back Danielsson 2007:135, 205, cf. Skre 1996).

There are ample masking studies, however theorized and advanced, that emphasize over and over again that masks work as disguises (e.g. Urban and Hendricks 1983, Pernet 1992, Pollock 1995, Bailey 2005). This persistence could possibly be connected to the belief that a true and stable identity can be found beneath the worn paraphernalia. But when identity is treated as something fluid and constantly created and creating through performances (e.g. Butler 1990, 1993), it is obvious that it is insufficient to regard masks solely as disguises. Rather they are in fact components, parts that if successfully integrated by the performer will engender and reveal a new persona. Tonkin (1979:240) has likewise emphasized that what is created through the mask is a new being, creating emotional responses within the wearer and the co-performers or audience. Thus, importantly, masks or helmets work as a revelatory device.

Deleuze and Guattari (1988:168–169) make a distinction between the face and the head. The head belongs with the body, corporeality and animality, whereas faces are not connected to the body but rather with a system of plane and holes – obvious with the helmets from boat-graves where we encounter a metal plane and holes controlling, limiting and/or emphasising senses and expressions.

It is the orifices of the face that enable the ingestion of material, speech and song, tasting, kissing, fellatio, smelling, seeing, hearing, etc., which is why the face is deeply significant and may be described as the ultimate sensing box. As such it may be said to refer to the inhuman features of the human (Deleuze & Guattari 1988:171), or as being part

of neither a human nor an animal organism. It belongs “to conditions of apartness” (Shanks 2001:76). Therefore facial masks controlling, distorting or even hindering this ultimate sensing box are very powerful mechanisms. Of course, what is accounted for here on helmets/masks, is equally valid for the masks/helmets that are worn by the miniature figures that are an integral part of the helmet plaques.

On the significance of masks during the late iron age

Masks and masking practices were a prominent trait of (Late) Iron Age Scandinavia (Back Danielsson 2007). Actual masks, apart from boat-grave helmets, have been found from the period in question, and facial masks are frequently represented on, or fastened to, a variety of objects. Masking practices can also be traced through the (Late) Iron Age words *grimr* and *kuml*.

In Old Swedish, Danish, Icelandic and Norwegian the word for mask was *gríma* (Hellquist 1980). In Old Anglo-Saxon the word *grim* also meant facial mask. Importantly, Grimnir is also a name for the shape-changing god Odin (Heggstad, Hødnebo and Simensen 1975), meaning ‘the masked’ (Ström 1967: 110). Grim occurs both as prefix and suffix of personal names of the time, denoting people performing *sejdr* (Strömbäck 1935:35, Breisch 1994:125). *Sejdr* is a form of prophesy-making that has been compared to trance and ecstasy shamans in Siberia and was achieved when performing healing sessions, fortune telling, etc.

The rise in popularity of the god Odin after the Migration period (AD 400–550) in Scandinavia and in other Germanic areas is very much connected to the growth of a new social elite. This elite manifested its power through control over land, but was ideologically connected to a warrior religion/belief (Hedeager 1997:118–119). Political power resided in an authority that was gained through a cosmology that was well known, and a crucial element here would have been access to the world of ancestors and gods, gained through the powerful Aesir god Odin. Odin was the master of transformations; he could easily use a grand variety of cloaking devices. He could also turn himself into in an animal gestalt to gain knowledge on all sorts of matters, and contact ancestors. Through the symbolism of animal art styles, the status of the warrior elites and their connection to divinity was made visible, tangible and mediated (Hedeager 1997: 83).

Helmets from Vendel and Valsgärde, Uppland, Sweden

A prominent trait of the helmets, the plaques, and other paraphernalia deposited in the boat graves is animal ornamentation, in particular expressions of human-animal engagements, amalgamations and transformations. In fact, the symbolism of the helmet as linked to human-animal transformation is a key element of animal-art in the period. This theme is therefore crystallised into the structure of the boat-grave helmets (Back Danielsson & Williams forthcoming). The intertwining bodies of the animals in the eye-brows, the crest/ridge, the nose, and the plaques of the helmets may have been employed as protective devices, but the human-animal relationship may also suggest a further theme linking protection with soul-journeying as well as far-seeing to acquire wisdom and knowledge.

The ornamented plaques of the helmets were made of bronze. This would have contributed to a shining helmet, which with its luminous plaques with miniature figures in battle or in procession (fig. 1) would have made an impression, stunning spectators. The luminous qualities of the helmet could equally have suggested a numinous presence (cf. Back Danielsson 2007:180–188). The helmets further signify a perpetuation – of the decomposing buried, of the divine amalgamation of human and animals, and through the plaques of possible celestial battles to be

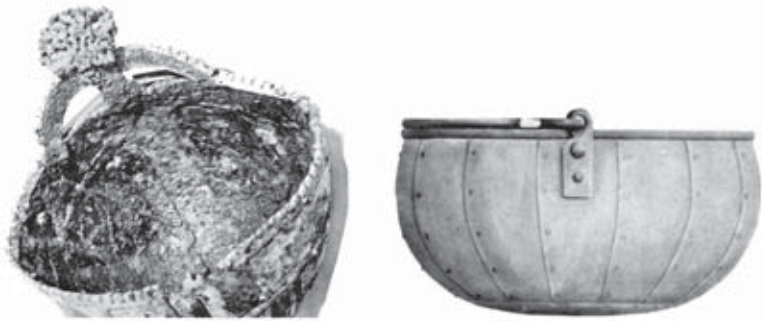


Fig. 2. Left: Interior of helmet from Valsgärde 8. Right: Cauldron/kettle from Valsgärde 8. The helmet and the cauldron have been made by forging together pieces of iron. The helmet and the kettle are linked together through their form of construction and manufacture. This association is also metaphorical, where the kettles gave real food, and the helmets with plaques gave celestial food for thought (Arwidsson 1954).

won. The iron helmets with their luminous and numinous plaques of bronze thus capture an essential paradox: how ritual transformations are frozen in time, and are therefore eternal.

I have already remarked on the hybrid character of the helmets in terms of inspiration from geographical areas and different time periods, and highlighted their amalgamation of humans and animals. The ways in which they have been manufactured also carry other allusions, in particular to kettles and indeed, in their turn, to currency bars. These objects have also been retrieved from the boat-graves. Both kettles and helmets may be made by forging pieces of iron, like currency bars, together (fig. 2). This link may also be described as metaphorical where the kettles gave real food, and the helmets with plaques gave celestial food for thought.

Sensations for humans and animals

A helmet with a facial mask affects, distorts or even deprives you of your senses. In the case of Valsgärde 8, the only sense untouched by the helmet/mask is sight (fig. 3). However, it could also be interpreted as if this one sense is heightened, in focus or through being omnipresent. When worn in real life, the helmet with a facial mask would have altered the way the wearer moved his/her head, as well as affecting the person's speech – the tone and character of the voice. It also would have altered one's breathing, as inhalation and exhalation of air flowed less freely. If and when worn in battle the eye sockets could have been intimidating to opponents. This gaze could further confer political and sacred authority by the wearer of the helmet (cf. Williams 2010).

The helmets of the boat-graves are often recovered from the middle of the boat, although not located in the same place where the head of the (supposed sleeping or) dead should have been found. Instead, it seems as if the helmets were placed in prominent, visible positions in front of a tent-like structure made of carpets of birch bark, which acted as a roof of the burial chamber (Arwidsson 1980:56). This means that the helmet was to be seen, perhaps perceived by spectators as a greeting or intimidating presence by someone – an embodiment of an ancestor, divinity, or aristocratic warlord? The helmet here works as an exoskeleton, present although a human body – an interior – would not be present. The eye sockets of the exoskeleton are thus of importance – they seemingly stare at you from any direction but especially from

the front, whether they are occupied by human eyes or empty. Also, the shining qualities of the helmets, reiterated earlier, are of importance in this context. In sum, the paradoxical traits of the helmet were surely pivotal and paramount, and explain what seems to be the prominent placing of the helmets in the boat-graves.

Herschend (2003:47–9) has suggested for Valsgärde 8 that the construction was kept open until the human body had disintegrated, whereupon the burial was covered. This suggests that the boat-grave was an open stage for spectators to see (and sense!), for a long period of time. There were, as noted above, a number of dead animals deposited inside and outside the boat in addition to the human corpse. An encounter with the open boat-graves, whether as an invited spectator or a participant, or by passing the Valsgärde boat-grave burial ground by boat or by foot, must have been a multi-sensuous experience, odoriferous and colourful in character.

The helmet plaques – miniature figures as performing objects

Upon the plaques of the helmets human-like beings in miniature are seen wearing masks, resembling the masks of the helmet of which they were part. The plaque figures are not embodied as immobile, but rather



Figure 3: Parts of the equipment of Valsgärde 8. The one sense least affected by the helmet and mask is sight (Arwidsson 1954).

as performing acts that may be described as events, stories or rituals. I would like to use the concept 'performing objects' to describe how these miniatures may have worked. Performing objects are "material images of humans, animals, or spirits that are created, displayed or manipulated in narrative or dramatic performance" (Proschan 1983:4). Boat-grave burials are such narratives and enduring dramatic performances. However, the term 'object' is rather misleading since an object can become an actor or subject during performances; and an actor, a person, can even be transformed into an object (Benjamin 1979; Veltruský 1964). Through their engagement the boundary between living and immobile dead matter is obliterated (Jakobson 1975:8).

Importantly, the performing objects must be understood as playing part in stories or events, where the (re)presentation of a character, for instance Odin, may not be the most important aspect of the figure (Back Danielsson 2007, 107). The mediated events are instead essential. Such events or stories may explain a cosmos or a world system as well as the historic and mystic diversity of the community. They are generally used to describe the founding actions of the world, of humanity, of the clan or of a particular institution (Back Danielsson 2007:107; Mack 1994; Pernet 1992).

In semiotic terms performing objects act as symbols, as signs of signs and more seldom as signs of objects, with the crucial consequence that they are often abbreviated (Bogatyrev 1976:33). Performing objects and miniaturization make such manipulations possible and necessary, and these may be described in terms of simplification and/or exaggeration (Johansen 1997:57), or in terms of abstraction and compression (Bailey 2005:32).

What abbreviations and/or abstractions have the figures of the plaques undergone? Here I focus on one of the plaques from the helmet deposited in the boat-grave of Valsgärde 8.

On this plaque (fig. 4), the ridge of the helmet worn by the rider, consisting of an animal being, perhaps a snake or a bird, appears to be alive, and has risen to some extent from the helmet, and now partakes in the action with an active gaze. In my interpretation, this means that the mask-wearer has successfully invited powerful forces, whether exogenous or non-exogenous, and is able to control them; a new persona is thus created. This is discernable through the whole story of the plaque: the gazing animal, the mask-wearer mounted on a galloping or trotting horse in full armour and the god of war Odin (?) found on

his/her right side. Furthermore, the plaque figures, perhaps indicating a numinous presence, were beings with agency in these transformational processes. Perhaps the plaques of the helmets, displaying the correct or desired outcome of the mask wearing, were used as precautions or divine guidance for the successful transformations into a warrior and/or a divine entity. From my earlier description of the helmets it may be suggested that the helmets were not intended for hard and actual battles. The battles could have been more symbolic, for instance part of stories retelling how certain powers were asserted, controlled and contained. As previously remarked they could have described the founding actions of a particular institution or clan, and in extension were a way of upholding and perpetuating social control.

The design of the helmet clearly affected the wearer's senses. However, it can also be suggested that when worn the senses and abilities of the wearer could be heightened by the senses and abilities of the animals that were integrated into the helmet, and its plaques. The plaques show birds, for instance, and birds of prey have excellent sight.

Weapons, also represented on the plaques, were designed with clear references to animals, and consequently equipped with essential senses. A spear had eyes and the blade was evidently the beak of a bird (fig. 5). Needless to say, spears must fly and by good eye sight they arrive at their proper destinations, where the beak may penetrate, or indeed engulf, the target. Thus here we have an example of how the senses of creatures other than humans are recognized and paramount, and it also demonstrates how these senses were perceived as integral parts of objects – turning them into living subjects with agency!

Continuing with Valsgårde 8 (fig. 4), the ridge of the helmet, or animal gestalt, was surely regarded as an essential part of the appearance/performance, since it is disproportionately large on the plaque. Equally, the possibility cannot be overlooked that the animal gestalt of the helmet crest might have been given life when the helmet was worn, and literally life/air was supplied through exhaling air through the nose (see fig. 1). One necessary ingredient (out of four) for the creation of life according to the anthropogenic myth in Voluspá (verse 18) was the adding of breath (Steinsland 1983) (note that the ancient and current Swedish word for breath: *andedräkt*, which literally means 'the attire of the spirit'). It is also important to note that the actual metal bird – the nose protection of the real helmet – sat loosely in its place, giving the impression of a free-flying bird.

The miniature figures of the helmet plaques contribute to the intelligibility of the world, since knowing the whole before the parts of the whole is gratifying for the intelligence (Rosenblum 2001:21). Miniature figures are further ways of exploring and creating ourselves through a different site of signification (Tillis 2000:175). Through this site of signification an array of issues and emotions may be more effectively illuminated in comparison to using performing, living human beings (Skipitare 2000:125).

Much more than martial and mortuary materials

The helmets of the boat-graves, as well as other paraphernalia in the burials such as swords or shields, are connected to war. Weapons were martial implements, but they were also powerful symbols implicated in the constitution and commemoration of masculine social identities and ethnicity in early Anglo-Saxon England as well as Late Iron Age Scandinavia (e.g. Härke 1990, 1997, 2000). In the mortuary realm they become increasingly restricted in the display of the identities of an emergent aristocratic class during the late sixth and early seventh centuries (Härke 1990, cf. Herschend 1997, 2001). Weapons were constitutive



Figure 4: One of the plaques from the helmet of Valsgärde 8. Here the animal gestalt of the helmet (the crest), worn by the rider, is seemingly alive. Its significance is underlined by the fact that it is represented in an exaggerated mode. Drawing: Per-Olof Bohlin (Arwidsson 1980:58).

of a martial aristocratic personhood that extended beyond those that used them to encapsulate new families who were experimenting with symbols of power drawn from multiple sources, some of whom may have had aspirations towards royal status. They were artefacts of power, agency and social memory, evoking and commemorating a distinctive style and character of person in a period of rapid socio-political and ideological conflict and change (Back Danielsson & Williams forthcoming, Williams 2010).

However, it must be emphasized that the boat not only contained weapons but also a number of other artefacts of ceremonial character and others that were connected with feasting. Thus the boat-graves also allude to household activities, smithing activities through diverse tools, and food production – implying a domination of many socio-cultural spheres. The boat itself, as well as the sacrificed horses with frost nails, and a number of animals from different biospheres, also speak of the ability to travel in all sorts of areas, seasons and dimensions. It must also



Figure 5: Left: Helmet plaque from Vendel XIV. Right: Spear from Ren, Bollnäs, Sweden. The plaque materializes combatants seemingly with animated gear – the spears are equipped with animal senses to make their mission possible: sharp-eyed sight and an engulfing or penetrating beak. Compare with actual spear found in Hälsingland, Sweden (Arbman 1980:27 [left image], Montelius 1901: 5 [right image]).

be observed that the Valsgärde material, both weaponry and household equipment, were partly, and sometimes completely, unserviceable at the time of deposition in the boat-graves (Arwidsson 1980:50). Some objects were visibly worn and had been repaired in ancient times. Also, other objects bear references to ancient times, such as the helmets.

All together the objects deposited in the boat-graves are artefacts with long life-histories, and they must certainly be connected to specific stories that were important, perhaps not (only) for the buried individual, but for specific families or clans. Arwidsson's observation (1980:51) that the boat-graves do not contain any personal equipment such as finger-rings, arm-rings or any other paraphernalia belonging to a costume (though see Herschend 2001 for another view of this phenomenon) supports this idea. Furthermore, the helmet as a mask cannot be considered personal (see masking theory above). Equally, the helmets, swords, stabbing knives etc., were almost never worn by the deceased. Thus the boat-graves, through the head-empty but prominently placed helmets, may instead be described as an expression of domination of several social and cultural spheres in Late Iron Age Uppland: the access to ancestors, the control of transformations, the ability to travel (or rather the great mobility of the nobility), the ability to make and host feasting arrangements, etc. In all these spheres an activation as well as a skilled control of a variety of senses are required. These senses not only included those of human beings, but equally of refined objects such as spears with animal senses.

It is also worth pointing out that a large number of (old or ancient) objects in the boat-graves are made of iron, and also, as mentioned earlier, that currency bars have been retrieved in boat-graves. In combination with the position of boat-graves next to the 'highways' for iron production areas up north (Ambrosiani 1980), this could imply a dominance over iron trade, or at least highlight the importance of stories relating to how iron was wrought and bought (cf. Kopytoff [1986] on the social life of things and Shanks [1998] on the life of an artefact).

Conclusions

It is evident that the helmet not only represented physical protection but was also perceived as transforming the wearer and could afford him/her supernatural qualities and abilities. In this sense, the helmet was a symbol of wealth and status and provided protection in battle,

but also gave the wearer a transformed, perhaps even divine, persona. The helmet worked as an exoskeleton of the dead, and yet, with its luminous and numinous properties and omnipresent gaze through the eye sockets, embodied in eternity a transformed relative, ancestor or new-born divine being. This could explain the helmet's prominent and often visible position in the boat-grave.

In addition, the whole assemblage of equipment in the boat-graves may be seen as an activation of sensory engagements that are linked to memory. The senses helped create, establish and valorise memories of past relations and desired futures. These relations were both material and immaterial and included relations to things, people/clans, animals, journeys, divinities and consequently stories of pasts. The sensory engagements further forged together aspects of masculinity, animality, death, lifestyle and body.

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The Inescapable Body

Stephen Houston



Imagine a movement from past to present that traces in rough order the papers in this volume:

- ... most ancient peoples craved and enjoyed tasty meals and drink, just as we do today, but in distinctive ways (Fahlander)
- ... Maya sculptors of the Yucatan peninsula and environs crafted images of royal faces and then undid them by acts of mutilation (Normark)
- ... a helmet embellished with images served to augment facial expression and personal identity among elites in the Vendel period (Back-Danielsson)
- ... white beads passed into the graves of women in the Viking age as tokens of their identity (Thedeén)
- ... pain as sensation and suffering as emotive response afflicted ancient Europeans, whose very bones reflected such agonies (Kjellström)
- ... a world of color and its attendant meaning went into the making and scrutiny of medieval coins (Myrberg)
- ... a beloved child or spouse or parent lay dead, in simulated sleep or celebration of spiritual innocence (Nyberg).

On November 26, 2009, the discussant listened to papers that described these phenomena. He had the pleasure of practicing his rusty Swedish and eating food that can be difficult to obtain in the United States.

Yet , despite the fun of meeting new friends, he thought longingly of a missed meal: Thanksgiving. In North America, this feast is meant to fill the stomach. But, much more than that, it affirms loving bonds with family and friends. Now, at the end of this long process, and long-overdue in his moral obligation to hosts, he has adjusted his glasses to read the papers. He notes their polished English and ponders, with regret, the linguistic deficiencies in his own country. He thinks about content, processes it all according to his own training and idiosyncratic predisposition. He types a response by interacting biomechanically with a QWERTY keyboard.

In all of the above, bodies play and have played a role, as they must always do in human existence. In fact, bodies can be described as ‘topical inescapabilities.’ They are so central that archaeology and anthropology must always account for them, yet so central as potentially to be taken for granted. Sometime in the 1990s, archaeologist began to consider the relevance of human bodies to archaeology, not only as physical anthropologists might, or as interpreted by outlying approaches like Edward Hall’s proxemics or Erving Goffman’s face-work. The new stimulus coalesced from varying, heterogeneous input: Michel Foucault and his automaton views of authoritarian will and the coerced human form; a burgeoning anthropological literature that looked to emotions, clothing, food and drink, and, above all, the theme of identity and the formation of ‘self’; re-readings of German and French phenomenology; and reflections about the differences and meanings of human gender, occasioned by social movements and self-explorations of the time that very much ripple into the present. Interpretative doorways opened — not all of them leading to the same place, or consistent as to their source — along with novel opportunities for the stimulating importation of ideas from other disciplines. Archaeologists took full advantage of them. Useful articles and books ran along the customary arc of manifesto (Meskell 1996) — “We must focus on topics that have been ignored” — to monographic application (e.g., Meskell and Joyce 2003; Houston et al. 2006; Houston et al. 2009) — “We must evaluate specific evidence against these new ideas” — to the installation of new orthodoxies (e.g., Geller 2009) — “We must adhere to correct thought.” Or: “by some miracle, our research has brought us to perfect consonance with our political views and self perceptions. Indeed, this is both expected and needed given the subjective nature of human thought. ...and because our views are eternally right.” At this juncture, the trend

has passed from the avant-garde to the mainstream to the status of a banality. From a careerist point of view, its (approximately) ten-year arc may accord with the time it takes for a young career to be established. In that time, too, younger students learn to speak and think in its language. Then, in bored reaction or under impulse to create their own identities, they begin to discern, craft, and follow the next alluring arc.

At the Stockholm meeting, if I remember correctly, Fredrik Fahlander mused, in Swedish, “look, just because a topic has passed from trendy regard does not mean that it has been exhausted intellectually or that it cannot be extended or developed further.” In the United States, much archaeology has shifted, often with reason, to a concern for archaeological practice and public reception. In part, this comes from ethical qualms about the conduct and results of archaeology in an indigenous setting, and, at least outside of Europe, from anxieties about the roots of archaeology itself in the colonial experience (Liebmann and Rizvi 2008). The present arc conforms to a more general concern in anthropology--our parent discipline in the United States--with ameliorative, development-oriented approaches that now dominate many academic departments. (To exist in institutions controlled by sociocultural anthropologists inclines archaeologists to scuttle after their research agenda: models from the living usually trump models from the dead.) Archaeology should be interesting and instructive, but must also *make a difference*. Of course, there is also, as in all regional research, continuing excavation, processing, and publication, often along trajectories established decades before. These ‘flows’ of work have their own, discipline-bound inertia. They may touch only tangentially on metropolitan theory.

Still, the inescapability of the human body means that the topic as an integrative focus of study must form an enduring part of archaeological interpretation, if only to be revisited by subsequent generations, and in view of reworked or newly elicited data. The fact of the matter is that the initial monographic expositions (see above) may not build on the most careful or scholarly review of evidence. This is the potential cost of being trendy or modish. The very nub of the process is to work quickly. That way, there can be an agile embrace of the next wave and perhaps the chance of helping to define it.

But what are the contours of that sustained work and thought, and how can they be refreshed? The essays collected here show that there are still vast quantities of evidence with which to reshape and remodel theory. Our main history of archaeological thought, by Bruce Trigger (2008),

appears to make that claim that theory exists independent of data or discovery; or, to put this more precisely, that theory can be discussed in isolation from the substance of what we find. Surely, however, the notion that data collection is saturated with theory implies its corollary, that theory exists in tandem with the data it is supposed to illuminate. Can this be why a prominent theorist, Ian Hodder, has turned in the past decades to one of the most minutely empirical (and expensive) of all archaeological projects (Hodder 2006), using ever finer tweezers to recover 'truth' from these early deposits? (His simultaneous embrace of empiricism and subjectivism remains an unresolved irony.) It may be, too, that further injections of energy need to come from comparative studies, as seen throughout this collection of papers. Whether those studies should re-fashion terminology, as in John Normark's contribution, draw further on anthropology or local history, as in the papers by Fredrik Fahlander and Nanouschka Myrberg, or integrate the most basic of physiological commonalties, as in Anna Kjellström's essay, are all promising leads. But they are not exclusive ones.

My view: whatever works, whatever leads to insight and inspiration, these are the desired properties of a deepened archaeological approach to the body. Since we are all human, as were those who buried the dead, clothed the living, and considered sensation in faraway times, there must be some basis for empathy or, as John Lewis Gaddis has put it, '*a packaging of vicarious experience*' by which other perceptions are represented and distilled into the productions that we call scholarly writing and imagery (italics in the original, Gaddis 2002:33). But let there be no mistake: the predicaments of subjectivity are always present, yet there is also, or should be, a 'loop of reiteration' in which evidence interacts in muscular play with the ways of conceptualizing it (Gaddis 2002:46).

The Stockholm meeting was also, for the discussant, a chance to do some furtive intellectual ethnography. Increasingly, and as indicated in the references of most essays, English-language sources serve as a theoretical starting-point; local languages, such as Swedish, tend to be used instead for empirical studies of monographic length. (A century from now, we may well be writing in Chinese.) This pattern suggests that the community of young Swedish scholars that I met in Stockholm regards its interlocutors in discussions of theory as Anglophone and its community as larger than a regional one of, say, Vendel- or Viking-period Scandinavia. Johan Normark's paper revealed a different

orientation—of French philosophy—but also, to judge from the citations, a group of texts accessed through English-language translations, if from sources that are, as yet, relatively untouched by other archaeologists.

The questions for me were, to what extent would a US-based scholar write a similar essay and to what extent is archeology itself globalized and pan-regional in its intellectual goals? Is the creation of globalized archeological theory a necessary development? My own work on the human body, with Mayanist colleagues, has directed itself to asking whether a theory or approach is the right instrument with which to elucidate a particular body of data. For me, the target is always the Maya, whatever other, non-Mayanist scholars might make of the research. I doubt that distinct communities, rooted in local training, interlocution, and the particulars of evidence, will ever be supplanted by the virtual communities of a shared language or a set of collectively perused publications. It would be a bad thing if they were. The myriad sources of novel, instructive ideas would be flattened out, with little possibility of creative renovation or extension. My impression is that some of the essays in this volume make use of documentary sources to explore meaning (Danielsson, Myrberg, Normark, Thedéen); others are rooted firmly in a tradition of prehistoric, materials-oriented research or broader, comparative studies (Fahlander, Kjellström). Again, whatever works: the objective of a pragmatic archaeologist is to find ideas and views that enlarge the range of possibilities, that cause a widened or shifted perspective. This is how we move beyond the mere recycling and repetition of earlier thought.

The individual papers were of high quality. They made me think. Nonetheless, as an outsider I might not have written them the same way. Fahlander's paper asked many excellent questions, including ones all of us should ask about the where, how, when, and who of daily meals. Johan Normark's paper continues his exploration of non-anthropological theory, finding its inspiration in what I take to be the universalizing claims by French philosophy. (For all its weaknesses, anthropology at least sees comparison as an abiding and vexed problem of interpretation. Most philosophy would seem to begin with the dubious assumption of comprehensive applicability. Is it truly plausible that philosophy should exist outside history, that its verities be decultured, its proponents devoid of preconception?) I suspect that some of the aversion to taking an anthropological approach may stem from the distinct history of Swedish archaeology, which, to my understanding, tends as a prehistoric inquiry

to detach itself from local ethnography and all of its nationalistic, ethnic claims as embodied in places like Skansen and Nordiska Museet. Is there some lingering malodor to these ethnic propositions, a distaste or sense of caution that an outsider might not fully understand? Does a much-changed society, from the hardscrabble, agrarian roots of my ancestors in Skåne to the tempered socialisms of the past century, make an implicit argument for discontinuities? Later Swedish belief and practice—to be sure, much transformed over time—would seem to have strong, logical ties to earlier ones studied by some contributors to this volume. As for Normark's essay, probably, most likely, the terms and framework he employs will not enter the general archaeological instrumentarium. But one has to praise his search for alternative sources of inspiration. It is provocative and gutsy in a good sense.

Danielsson's paper addressed the masks and helmets of Late Iron Age Scandinavia, again to my great instruction. I did wonder whether an emphasis on transformation—do historic sources ever explicitly described such helms as 'masks'?—might detour from what are likely to be, fundamentally, their martial referents. For her part, Thedéen undertakes a classic example of semantic correlation: white shells, especially cowries, mark many interments of women, perhaps as tokens of notional purity, elite status or sacred stature. My only concern is more mundane and empirical, whether the sexing of the bodies in her table is unambiguous. If not, the table could be thrown readily into statistical doubt. The essay by Kjellström left no doubt that earlier Scandinavians were in misery. As such, it represents a pioneering attempt to bridge the domains of pathology and its personal experience as suffering. It is less clear, however, how to build on that understanding in a general way, as the pain qua suffering is really an issue of semantic, even theological interpretation (Houston 2009). This semantic freight will be difficult to deduce from shattered or necrotic bone.

Myrberg's essay was an especially gratifying relation of texts, iconography, thought, and material evidence, of a sort familiar to those who work in Mesoamerica. The layered evidence of encoding of color, by means of cross-hatching, and what that color might have meant or elicited at the time are persuasively argued. I have done similar studies, partly in evaluation of anthropological models of color (by Brent Berlin, Paul Kay, and others), with the proviso that colors are inherently relational to others colors—Michel Pastoureau's studies of certain colors or design in Medieval art seem both brilliant and profoundly wrong-headed

(cf. Pastoureau 2001, and Houston et al. 2009, for discussion). As Myrberg points out, 'color' is not even to be understood in all times and places by the terminology favored by cognitive anthropologists. Is shiny or wet a 'color'? They are in some parts of the world, at least as an evaluation of surface. The final essay in my chronological order, by Nyberg, was exemplary too, as an attempt to penetrate what the clothing and disposition of the honored and beloved dead might mean. In Stockholm, however, I did ask whether this needed couching more fully in Lutheran theology of the day.

My fingers no longer tap the keyboard, this biomechanical exercise is at an end, my body has done its duty. The chance to comment on these lively papers, to meet the authors behind them, and to engage with other traditions of scholarship leave memories of fond respect. I close with an exhortation to do yet more, to continue on paths set by the pages of this volume, and, as archaeologists, to engage in the long term with the inescapable human body.

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Making sense of Things **Archaeologies of sensory perception**

Edited by
Fredrik Fahlander & Anna Kjellström

How can human sensuous experiences through sight, sound, taste, smell and touch be studied in past worlds? In which ways may such a bodily perspective affect our interpretations?

In this volume, the authors explore a wide range of topics, such as the materialisation and symbolism of colour, the sensuous dimensions of commensality, and cultural constructions concerning pain and odour. The articles comprise examples from various regions and time periods from Scandinavian Iron Age burial rites and classical Maya monumental art to issues of death and burial in eighteenth-century Sweden.

