Humans and Animals in the Norse North Atlantic

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SUMMARY

It is a well-established fact that all human societies have coexisted with and are dependent upon animals and it is increasingly recognized that the study of human-animal relationships provides vital insights into past human societies. Still this is yet to be widely embraced in archaeology. This thesis has examined human-animal interdependencies to explore the social identities and structure of society in the Norse North Atlantic. Benefitting from recent research advances in animal studies and the ever increasing volume of archaeological reports from Norse period archaeological excavations the North Atlantic this thesis was able to develop previous scholarship and define directions for future research.

The thesis explored the role of animals in human society in the North Atlantic to reveal the complex Norse societies that existed. It revealed through human interdependencies with animals that these societies were far from homogeneous and had their own distinct identities with the individual islands as well as across the North Atlantic. The thesis achieved this by examining several important discrete but interlinked themes. These themes were divided into four chapters that focused on the individual aspects. This included an examination of previous North Atlantic Viking Age scholarship, consideration of human construction and perception of landscape through archaeological excavations, investigation of the role of domestic animals in human social activities, and an exploration of the role of domesticated animals in beliefs. Although these are all connected the structure of the thesis was deliberately chosen to restrict repetition, although given the interconnected nature of human social identities, society and worldview this was not entirely possible.

This thesis addressed some of the most fundamental questions in Norse archaeology.

Notably, through examination of human-animal interdependencies, it provided a detailed insight into how Norse society understood and perceived the world, and consequently the structure of Norse society and social identities.

DECLARATION

This work has not been submitted in substance for any other degree or award at this or any other university or place of learning, nor is being submitted concurrently in candidature for any degree or other award.

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STATEMENT 1

This thesis is being submitted in partial fulfillment of the requirements for the degree of PhD.

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STATEMENT 2

This thesis is the result of my own independent work/investigation, except where otherwise stated.

Other sources are acknowledged by explicit references. The views expressed are my own.

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Notes

Icelandic surnames differ from most current Western family name systems by being patronymic or, occasionally, matronymic. As such, it is usual practice to refer to the person by their first name only. However, for ease of presentation and to avoid confusion, in the bibliography of this dissertation, Icelandic names are listed alphabetically by patronym. For example, Adolf Friðriksson is listed under 'Friðriksson, A.' rather than 'Adolf'.

In the bibliography accents, ligatures and diacritics are discounted. For example \emptyset is listed under O and \hat{A} is listed under A. Likewise P is listed at 'Th' and E as 'Ae'.

CHAPTER ONE

Introduction: Humans and Animals in the Norse North Atlantic

Animal Studies in Archaeology

t is a well-established fact that all human societies have coexisted with and are dependent upon animals. In the past few decades many disciplines have utilised animal-studies to understand human societies. Many anthropological studies (Abbink 2003; Crate 2008; Willerslev 2004) have highlighted intense human-animal interdependencies, demonstrating the fluid boundaries between human and animal (Mullin 1999, 202). An indication of the multifaceted nature of human-animals relationships can be observed in modern Western society. For example Sykes (2009, 22) has commented that the introduction of chickens into her garden has changed the way the family engage with the space, and thus highlighted the way in which animals shape the landscape. Game (2001) writes emotionally about her intimate relationship with her horse and explains that whilst riding the boundary between horse and rider becomes blurred and a new identity created. Throughout history horses have had a special role in human society. Riding in particular demonstrates this unique bond between human and horse. This intimate relationship is highlighted in Hrafnkels saga, Hrafnkel murders Einarr for riding his horse, Freyfaxi. This meaningful and complex relationship is also revealed through burial rituals. There is abundant evidence for horse burial in early medieval Europe with notably examples at Sutton Hoo mound three (Carver 2005) and Oseberg, Norway (Price 2010, 135). The horse may not represent the identity of the human individual but the social and cultural understanding of human-horse interdependencies. From just a few examples it can be demonstrated that the way animals are viewed by humans is diverse and complex, and animals can be seen as

commodities, family members, food and the embodiment of nature (Mullin 1999, 215). These contemporary observations give some indication to the diversity of human-animal relationships in past societies.

Despite zooarchaeology being the fastest growing subdiscipline in archaeology since the late 1960's (Crabtree 1990, 155), it was generally not effectively integrated into the other forms of evidence and overall interpretation. This often led to the data not being fully utilised and simplistic conclusions being drawn, mainly focused upon dietary reconstructions and sometimes economic considerations. Russell (2012, 7) notes that 'zooarchaeologists have inappropriately narrowed their interpretations by seeing animals in terms of protein and calories'. However, Russell (2012, xi) has acknowledged that social zooarchaeology in the past decade has rapidly developed as the importance and diverse role of animals in human society is fully appreciated. This is not to say that social zooarchaeology did not exist prior to this, although it is only in the past decade that the specific term has been applied to the study. Arguably Marciniak first used the term in his pioneering book 'Placing Animals in the Neolithia'. He highlighted that the concept had existed prior to his work, as shown through the work of Pam Crabtree, but that the ideas were not defined with specific terminology. Amongst others, Crabtree (1990, 156) had highlighted that in order to make valuable contributions to the study of past societies then scholars must use and question the faunal data to consider their role and significance in the past. However, earlier approaches, specifically based upon species representation, often made simplistic and unjustified assumptions whereby the species representation directly related to the significance or importance of the animal to the site's inhabitants (Marciniak 2005, 1). However, faunal remains are exceptionally useful in interpreting the activities and identities of human society. These remains

should be thought of as the outcome of a complex life history (Marciniak 2005, 2). It is therefore crucial to see zooarchaeology integrated into a wider research framework.

With archaeologists' growing appreciation for the role of animals in human society a number of studies based on various other forms of evidence have been produced (eg. Sykes 2014; O'Connor 2013; Russell 2012; Shapland 2010; Hill 2011). These works have transformed the way in which archaeologists and zooarchaeologists interpret animals in the archaeological record. These studies go beyond simple classifications of remains into species and numbers of bones present. The scholars, especially Sykes, advocate the integration of zooarchaeological assemblages into the wider archaeological record and associated material culture to investigate some of the most fundamental questions in archaeology, for example how past humans thought and how they acted (Sykes 2014, 1). These studies have demonstrated that human-animal interactions and relationships are far from static and were, in fact, complex and intricate. These human-animal relationships, if fully explored and appreciated, have the potential to provide a detailed insight into past societies and give a more nuanced understanding to the full complexities of society and social identity. They demonstrate how these recent advances in animal studies and zooarchaeology should be more fully integrated with other forms of evidence in order to more efficiently study animals in the past and what these relationships reveal about human society.

The Viking Age and the Norse North Atlantic

The thesis roughly encompasses the time period AD 850-1100, or roughly the mid-9th to early 12th century. This is an attempt to broadly encompass the large-scale settlement of the Faroe Islands to Greenland, a period of significant change and colonisation of

the North Atlantic. The settlement of Greenland did not occur until ϵ . 1000, so the thesis attempts to adequately cover this and also give consideration of the early settlement sites there prior to the later developments of what could be termed the 'High Middle Ages', and the later social, economic and political changes associated with that. The majority of the key, and well-excavated, archaeological sites in the North Atlantic fit into this timescale. However, the thesis will refrain from restricting itself only to those dates (850-1150), as is now largely recognised time is fluid and changes do not occur immediately overnight. Certainly this thesis is not dealing with a sharply defined, discrete period, and as such it needs to be recognised that there will be some fluidity especially towards the later years of this study.

It needs to be appreciated that this thesis is not solely focussed upon Iceland, therefore a broader and more fluid approach needs to be taken to the defined chronological range of this thesis. Hence the beginning of the age of settlement for Iceland is usually dated to a. AD 871, referring to the tephra layer which marks the beginning of large-scale human activity on the island. It is widely appreciated that there was probably human activity and settlement prior to this date in the North Atlantic. As yet the evidence for an earlier settlement remains limited. In some cases the evidence produced remains dubious, with a reliance on problematic typologies and questionable use of tephra data (eg: Ahronson 2015). However, some notable research has been undertaken in the Faroe Islands that provides a good argument, alongside reliable data, to demonstrate earlier settlement on the isles (Church et al. 2013). Further, archaeological research undertaken in Shetland provides evidence that would suggest a Viking, or Norse, settlement on the islands as early as the 8th century, which is earlier than the conventional beginning of the Viking period in Britain (Ballin Smith 2007).

currently it can be seen that there was large-scale settlement in Iceland and the Faroes from around AD 871. By starting at AD 850 the thesis recognises that permanent settlement was unlikely to occur at exactly that date, and recognises that there would have been earlier contact, but is conservative as it is not primarily concerned with entering the large debate concerning the dating of the first settlement.

The title of the thesis uses 'Norse', which is a problematic term, as all general terms and labels are. The terminology and arguments behind 'Norse' and 'Viking Age' are discussed in Chapter Two. However, the author will briefly summarise the choice of the term 'Norse' and the use of the term 'Viking Age'. As this is an archaeological thesis, although historical sources are important in the interpretations, it was felt that 'Norse' was a better descriptive term for the thesis as a whole, rather than Viking Age. It has become increasingly popular to use 'Viking' and 'Viking Age' in all books that sometimes only vaguely relate to the period. In particular, when discussing Iceland, English language books can sometimes confuse 'Viking Age' and 'saga'. Scholars may indeed examine the Viking Age through saga sources, but this is the Viking Age of the later medieval scribes. In his strong argument to dismiss the 'Viking Age' as a term, Christiansen (2002) states that Icelanders don't use 'Viking Age' to describe a similar period, instead call it the 'Saga Age'. This assertion could possibly be argued to be true for literature scholars, seeking a more poetic description for the period, but it is arguably considered extremely old fashioned amongst current historians and archaeologists who largely stopped using it fifty years prior to Christiansen's book publication. As Christiansen should be aware that this is not a very good example to support his assertions that the Viking Age should not be used. Further there are many Icelandic scholars who do use the terms 'Viking' and 'Viking Age' in their work. This is notably demonstrated by the publication of the proceedings of the Viking Congress

held in Iceland, in which many of the Icelandic scholars utilise these terms. Despite there being many distinct, overlapping, phases in Icelandic history it can still be argued that using the term Viking Age in Icelandic scholarship helps to situate it into the wider geographic framework, and to consider Iceland as an important part of the events that characterise it. It is so widely appreciated that any period labels are problematic, and this thesis does not seek to discredit the term 'Viking Age'. In fact the author believes as a broad and general term to describe a rough chronological period and geographic area it is useful. However, a distinction needs to be made regarding the later medieval sagas discussing the Viking Age, and the actual period of history that the Viking Age encompasses.

This thesis is primarily archaeological in character, but utilises later written sources to aid interpretations. As such it was felt more appropriate to entitle the thesis with the term 'Norse', also to avoid the populistic connotations associated with the term 'Viking Age'. In regard to chronology the thesis follows the broad time-frame broadly associated with the Viking Age. However, whereas the Viking Age could be argued to start as early as AD 700 (Jesch 2015, 8), this thesis is focussed on the time from the large-scale settlement of the North Atlantic and therefore doesn't necessarily encompass the Viking Age as a whole. The term Norse, although largely associated with the later part of this period, may be a more accurate and all-encompassing term to use. It is becoming more widely appreciated that the settlers would have originated from countries other than Norway, such as the British Isles and possibly further afield (Vésteinsson 2014; Byock *et al.* 2005, 203; Helgason et al. 2001; Helgason et al. 2000). However, it could be argued that the dominant culture was Norse, which at least appears to become the largely accepted and displayed culture by the end of the period this thesis is concerned with. It can be observed that medieval Icelandic law

distinguishes between Norsemen and everyone else (Karlsson 2010, 128), suggesting this was the predominate identity. Further it has been argued that the whole of the North Atlantic had a shared common Norse identity, based on a shared language and mythology (Guldager 2002, 94). Arguably this is an identity that becomes dominant over the period concerned in this thesis. Owing to the problems and associated difficulties with using any general label, it is not necessarily completely without issue when using it to describe the period ϵ . AD 850-1100. However, when attempting to describe the whole region during this chronological frame, it is arguably the most appropriate in terms of broadness and to encompass a very diverse region. With its use it recognises the large-scale Scandinavian diaspora that is occurring during and characterises this period, without the problem of using Viking Age to encompass the period in this thesis that begins ϵ . 100 years after what could be argued to be the start of Viking Age.

Animals in the Norse North Atlantic

In the North Atlantic there has been a large increase in the number of zooarchaeological reports from Norse sites, especially in Iceland. This significant volume of research is due to the hard work of many zooarchaeologists working in the region. Notably the North Atlantic Biocultural Organisation has played a significant role in not only undertaking analysis but also making the reports easily accessible to a wider audience by uploading them onto their website in an open access format. These zooarchaeological analyses are often based on material found in midden deposits close to the settlement farms. These successful studies have drastically improved our understanding of the animals present in this region during the Norse period. As a result scholars now know much more regarding ethnic identities, economy and animal

husbandry. From this research it has become even more apparent that this was a period of great change, where settlements, landscapes and islandscapes underwent dramatic social and political changes, including colonization and conquest. My research aims to build upon the work of these scholars and to take this further and move beyond economic and ethnic approaches to the use of fauna. This thesis will examine the active roles of animals in partnership with humans as their relations changed or were maintained across the North Atlantic islands. It will utilise the advances made by scholars of human-animal studies in archaeology and the copious research undertaken by zooarchaeologists in the region. It will explore the human-animal relationships on these North Atlantic islands and reveal the complexities of the societies that existed on them and reveal through human interdependencies with animals that these societies were far from homogeneous and had their own distinct identities with the individual islands as well as across the North Atlantic ocean [see fig. 1.1 for a map of the main North Atlantic area to be discussed in this thesis].



Figure Error! No text of specified style in document.1.1 A map of the North Atlantic (Byock 1988, map 1)

The presence of animals within past human societies is observable through a number of examples which indicate the ways in which animals shaped human identities and worldviews. The social and symbolic importance of animals in Viking Age society is demonstrated through their prominence in Old Norse mythology. They are often affiliated with particular gods, such as Óðinn's horse, Þór's goats, Freyr's boar, Freyja's cats and Heimdallr's ram. The continued association between animals and certain activities which form particular perceptions still permeate into modern western society. Place names derived from Old Norse are still in use today and give some indication of past activities at the location. Horse fighting was a common activity in the Viking Age North Atlantic and place names such as *Hestaþingshólar* (derived from *Hestaþing* meaning

'horse meeting') and *Hestavighamar* (derived from *Hestavig*, meaning 'horse fight'), both in Iceland, indicate a location where horse fighting took place. In addition, animals are the focus of many folklore stories and oral traditions, which may give some indication to the connotations and roles associated with particular animals which have persisted over time. An example of this is the 'U-shaped' gorge, Ásbyrgi, in northern Iceland where local folklore states that it was formed by Oðin's horse, Sleipnir, stepping on to the ground as he travelled between worlds (Sæmundsen 1949). This understanding of the ability of Sleipnir to travel between different spiritual planes is depicted on earlier, Viking Age, iconography such as the Tjängvide picture stone [see fig. 1.2] in Gotland (Staecker 2006, 365).



Figure 1.2 Tjängvide I image stone (Staecker 2006, fig. 3)

In addition to this, the presence and diverse roles of animals in human society is also observable through various other evidence in the material culture and archaeological data. Most obviously the presence of animals is displayed through their physical remains on archaeological sites. Often animals are recovered from midden deposits and these deposits are likely to reflect consumption patterns of the occupants, but they also give some indication to the way in which the residents related to the animals they consumed. Consumption patterns are also useful, indicating food preferences which possibly reflect religious, cultural and political ideologies. This evidence suggests that sometimes particular cuts of meat were favoured by certain groups of people and that some animals are notable in their absence suggesting that although these animals could be consumed they were being actively avoided. For example, the eating of horseflesh was condemned by the church (Simoons 1994, 187) yet horse bones have been found amongst food refuse on many sites in Ireland, including ecclesiastical sites such as Moyne and Illaunloughan and Iona in Scotland (McCormick 2007, 92-93). Evidence for horse consumption is not abundant suggesting that it was infrequent. There is limited evidence for butchery on horse bones at Early Saxon West Stow and Middle Saxon Wicken Bonhunt (Crabtree 1996, 71) and significantly eight of eleven Late Saxon sites which show evidence of horse butchery are located within the Danelaw (Poole 2008, 110). This could imply the presence of pre-Christian Scandinavian settlers impacting upon the diet in eastern England but the evidence is insufficient to draw a firm conclusion.

Aside from deposits associated with general consumption the physical remains of animals are also recovered from burials. Often animals are found associated with human burials and were often traditionally interpreted as food offerings or ritual

sacrifices. Animals appear included along with the human in the burial, separate from the human burial and sometimes with their own individual grave. There is abundant evidence for horse burial with notable examples at Sutton Hoo mound three (Carver 2005) and Oseberg, Norway (Price 2010, 135). There is evidence for dismembered animals from the burials at Gausel and Kaupang, at Kaupang the dismembered horse and dog have been reassembled so they are 'complete' (Price 2010, 129 & 143). This suggests complicated meanings behind the inclusion of these animals in the burial. Given that incomplete and complete animals have been discovered in wealthy burials it is likely that the deposition of a whole corpse was not necessarily a reflection of human elite status. The animal may not represent the identity of the human individual but rather the social and cultural understanding of human-animal interdependencies. That the presence of animals in graves may have multifaceted meanings not limited to an aspect of identity or practice, is comparable to the observation, based upon early Christian graves, that grave-goods do not necessarily indicate Paganism neither does an absence indicate Christianity (Burnell & James 1999, 87).

There are also examples of animal burials that do not appear to be associated with a human burial. These have sometimes been interpreted as acting as substitute graves for deceased humans when the physical remains were unavailable. This has been argued as a reason for the individual dog burials which can be observed over a wide chronological, at least from the upper Palaeolithic, and geographical range (Lindstrøm 2012, 153). For example, the late Mesolithic site of Skateholm I, Sweden, has evidence for individual dog burials. It was suggested that the dogs were acting as substitutes for human bodies lost at sea or that they represent shape-shifters or shamans (Strassburg 2000, 161). Alternatively this example could merely represent the high regard in which the animal was held. A number of the dog burials from this site were also found buried

with the same grave goods as humans (Fahlander 2008, 37). That the dog appears with grave goods challenges the notion that animals served only as grave goods in Viking and Norse burials. This example could reflect the importance of the dog within human society and is not dissimilar from burials for pets in modern western society. Therefore, the grave represents the relationship between dog and human rather than reflecting a ritual or practical reason. It is examples such as this, where the animal appears to have been treated as a human, that Lindstrøm (2012, 152) argues demonstrates identity being attributed to animals. By attributing an identity to something you are essentially creating a bond by relating to a personal identity. It is this personal identity ascribed to the nonhuman animal which would result in emotions such as grief if you were unable to continue this personal relationship (Lindstrøm 2012, 161). It is therefore highly reasonable to suggest that these individual dog burials do indeed represent the dogs' identity rather than acting as a substitute for a human. It also goes some way to demonstrate how and why particular animals are consumed and disposed of in household waste. Alternatively others may have had a more personal and emotional resting place, which may reflect why they are not always that visible on an archaeological sites. The difference in the way animals are treated by different human groups reflects diverging and evolving worldviews which reveal much about human society and identity.

This relationship with animals is also observed through daily activities and tasks, for which evidence can be seen in the archaeological remains. These demonstrate what animals were present on archaeological sites and, to some extent, the role they played in human life. Structures associated with animals give some indication of this. For example, the proximity of animals to humans would have influenced their perception and understanding of particular animals. The longhouse at the Bay of Skaill, Orkney,

incorporates a byre whereby animals and humans would have lived under the same roof (Griffiths 2011, 16). This proximity would influence human perception of and engagement with the space as noise and smells would drift across the living space. Another consideration is that living in close contact with animals is recognised as a way of spreading disease (Serpell 1996, 14) and notable examples in recent years are avian and swine flu (Van Reeth 2007). This is merely an indication of the ways in which animals would have impacted upon and been included in human society. Other structures seen in the archaeological evidence, such as shielings, also reveal how the movement of livestock may have influenced human life away from the immediate confines of the domestic sphere. References to shielings are made in literary sources such as the Laxdala saga, Egils saga, Grettis saga and Hrafknels saga. Shieling sites demonstrate how the seasonal movement of sheep would have dictated human lifestyles as these structures were utilised during summer months for milking of sheep (Matras et al. 2003, 206). The movement of livestock would have created tracks across the landscape which would have, in turn, influenced human perception and understand of the landscape. It is likely that these sites, away from the confines of society rules, would have also facilitated activities that would not have occurred with the domestic sphere. This is demonstrated through Hallfreðar Saga Vandræðaskálds and Hænsna-Þóris Saga where the shieling acts as a meeting place for lovers. Although physical remains of the animals rarely exist in these structures it is clear from them that animals were present and they give some indication to which animals were there and the role they played in daily activities and consequently human identity.

Through transhumance, the movement of livestock across the landscape, the animals were facilitating communication between different communities. Riding can also be seen to act in a similar fashion. Within the Icelandic sagas there are many

references to cross-country journeys on horseback, for example such as in *Njáls saga*. It is generally acknowledged that there was an extensive system of horse paths in Iceland. Archaeological evidence for accommodation booths at the assembly site of Pingvellir are testament to the fact that people had to travel significant distances to participate in routine political activity. In addition to practical considerations, horse riding can invoke a strong sense of identity and intense emotions. This is well illustrated in *Hrafnkels saga* for example, where Hrafnkell eventually murders Einarr for riding his horse (Pálsson 1971). Arguably, it is through riding that the boundary between human and horse is most permeable. When riding both the horse and the rider are responsible for the safety of each other. This action requires mutual trust and understanding from both of the participants. This dependency upon one another creates a strong bond between horse and rider. The sociologist Ann Game (2001) has written about her riding experience and believes through this interconnectedness the blurring of the boundary between human and animal is most apparent.

Particular activities are often associated with certain aspects of identity. Animals and their by-products are inextricably interlinked with these associations. Particular activities have long had gender associations. The modern terms 'spinster' and 'wife' get their appellations from 'spinning' and 'weaving' (Leyser 2004, 14) and the Anglo-Saxon word for wife, 'wif', can be interpreted as 'weaver' (Hall 1960, 401). Weaving and dairying have often been considered female activities during the Viking Age (Norrman 2005, 139; Bergsåker 1978, 87). According to the late Anglo-Saxon Rectitudines Singularum Personarum the only woman specified among the estate workers was the cheese-maker (Hagen 2010, 261) and butter churning as a female task is referenced in riddle number 54 from the Exeter Book (Crossley-Holland 1978). Weaving as a female activity was highly symbolic and in Norse mythology the goddess, Frigg, was symbolised by a

spindle (Østergård 2004, 45). The symbolism of sheep is more apparent through the weaving of its wool. In Anglo-Saxon tradition and Germanic culture warp-weighted looms are seen as instruments of fate and the women who controlled them were often associated with magic (Bek-Pedersen 2007, 2-7). Darraðarljóð is a skaldic poem in Njáls saga which details how a battle is woven upon a warp-weighted loom (Walton Rogers 1997, 1822). Weaving was a way in which women could express feelings and share stories (Norrman 2005, 140). It was also a key activity within households and textile production probably would have been a year-round task (Walton Rogers 2007, 108). Many Viking Age and Norse sites have evidence for weaving and spinning, such as the late Norse site at Freswick Links which has a range of spindle whorls and loom-weights and pin-beaters (Batey 1995, 130).

From these examples the importance of animals in the creation and perception of human identity has been demonstrated. Animals are essential to human existence and are integral in human society but their relationship with humans is complex. As demonstrated, it is key to integrate various forms of evidence when examining human-animal relationships. Due to the multifaceted nature of these interactions they are better examined when utilising multiple forms of evidence as this allows the full complexity of the relationships to be appreciated and understood. Through an examination of the relationships between humans and animals in Viking and Norse society the complexities of the significant transformations and changes that occurred during this period will be demonstrated. Therefore, by using animal-human relationships to examine Viking and Norse society certain questions can be addressed which will enable us to explore the social dynamics of this era.

The Structure of this Thesis

This thesis will undertake this study by examining several important discrete but interlinked themes. Although these are connected the structure has been chosen to restrict repetition although it is not entirely possible to avoid this entirely given the nature of human-animal studies and the interconnected nature of human social identities, society and worldview.

- Chapter Two will explore academic scholarship on Viking Age and Norse society and social identities. It aims to highlight how this aspect of study has developed, how previous scholars have approached it and what is meant by different terminology used in this area of study. This chapter will state what is currently known and how this can be expanded upon, advanced, confirmed or corrected by the research in this thesis by looking at the role of domestic animals in human society.
- Chapter Three will consider human construction and perception of landscape.

 It will consider the terrain, weather and climate and natural phenomena of the North Atlantic Islands. The chapter will detail the domestic animals present in faunal assemblages at the main archaeological sites considered in this thesis.

 This chapter will consider how domestic animals and differing environmental conditions across the North Atlantic reflect human interaction with and perception of the landscape.
- Chapter Four will take a more detailed examination of the role of domestic animals in human society. The previous chapter discussed how animals shape human perception of and interaction with the landscape, this chapter will look at the more intimate interactions and the animals that would have had a major role in human social activities and society. This will involve not only examining

the physical presence of animals but also consider the importance of their products. Domestic animals were key in human society, shaping and creating human social identities through their very physical presence, their products and their associated connotations. Associations with and perceptions of particular animals defined individual social identity but also the identity of society as a whole. The various activities associated with animal products and interactions with animals reveals much about a person's social identity. In this chapter it will be shown how social identities were created and defined through human interaction with animals and their products.

- The last of the thematic strands will conclude in **Chapter Five** where the role of domesticated animals in beliefs will be examined. Animals had a special and important role in Old Norse mythology and examining their use and role in belief will reveal much about Old Norse beliefs in the North Atlantic. This remains an area of which scholars still know very little and by exploring human-animal relationships in relation to belief a new insight will be gained into this complex aspect of human identity.
- Chapter Six will conclude the thesis. It will draw together the conclusions from the previous chapters and present what this thesis has shown, the importance conclusions drawn and the potential for future research in this area.

These chapters, through the exploration of human-animal relationships, will address some of the most fundamental questions in Norse archaeology. Notably these will provide a better and more detailed insight into how Norse society understood and perceived the world, how and why they behaved in particular ways and how and why social identities were created, transformed or maintained. These are not only important questions to consider in archaeology as a discipline but these are also of crucial

importance of the study of the Viking Age and, in particular, the Norse period in the North Atlantic.

The Aims of this Thesis

As demonstrated animal studies have the potential to reveal a significant and detailed insight into past societies to answer fundamental archaeological questions about the past. This, therefore, is of significant importance to the study of the Viking Age as it has been recognised that this was a period of great social change. Therefore understanding how social identities were created, maintained and transformed is of crucial importance to this period of study. By exploring human-animal relationships in the Norse North Atlantic one will gain a greater understanding of human social identities as well as society as a whole which will greatly impact upon our knowledge of this complex and turbulent era in the past.

Fortunately for scholars of the Viking and Norse periods there is an array of evidence available from various different sources. By utilising all the available evidence a more detailed understanding of the period can be gained as different disciplines can provide their unique insights which, if used effectively, can only be of benefit to the broader research of the period. However, there has been a tendency in the past to work individually on discrete aspects of study and whilst that can provide a good and detailed piece of research it would be of benefit to the research area to integrate as much as possible with various other pieces of research from different fields. There are a number of scholars who have utilised an interdisciplinary or multidisciplinary approach to their work in the field of Viking Studies, for example Jesch (2015), Harding (2010), and Barrett (2011). Also a number of research projects have developed, in particular in

recent years, whereby academics from different disciplines utilise their research specialisms in a bigger research project. One particular project that stands out in recent years is the *Vägar Till Midgård* (Roads to Midgard) project. This project focussed primarily on Old Norse religion and utilised a multidisciplinary approach from various academics at different institutions. Whilst this was useful in demonstrating the success of a large collaboration such as this at providing a new perspective to a complex issue it however focussed primarily on the Scandinavian Peninsula with many of the academics based at Swedish institutions. It would have been interesting to see how the project could have been influenced from the inclusion of a broader array of academics.

In the North Atlantic there has been a notable interdisciplinary and international collaboration, the North Atlantic Biocultural Organization (NABO). There have been a number of significant projects undertaken, such as the Mosfell Archaeological Project in Iceland (Zori & Byock 2014) and the Heart of the Atlantic Project in the Faroe Islands (eg: Church et al. 2013; Arge et al. 2009). However, NABO has been able to bring together the research and results of a number of projects run by their partners in an accessible way and so this has allowed more researchers to gain access to data from North Atlantic sites. Furthermore, NABO covers the broader geographical spectrum allowing researchers to draw links and comparisons between the North Atlantic sites rather than looking at them in isolation. This is important as often studies of the Viking Age have a tendency to focus on discrete geographical regions, such as the Scandinavian mainland or the Northern Isles of Scotland, rather than looking at the wider geographical area. Arguably these discrete studies can be more detailed as these are more focused and it is always problematic to attempt to cover too much in one study. However, there needs to be an approach whereby areas are considered together as although this was not a strictly homogeneous area these places are still very connected

and part of the primary Viking World. Scholars are increasingly recognising that the Viking world was well connected despite oceans, seas and rivers separating it and rather than being seen as a barrier these provided the opportunity for communication, contact and trade.

Therefore this thesis has focussed on the geographical area of the North Atlantic, encompassing Greenland, Iceland and the Faroe Islands. This is to allow for a better understanding of the North Atlantic region than one that could be obtained from only focussing on one of these areas. Regrettably, although the original intention of this thesis was to also include Britain north of the rivers Dee and Humber, it quickly became apparently that this could not be adequately achieved in this study, limited by both time restrictions and word count. It was therefore decided to focus on Greenland, Iceland and the Faroe Islands whilst putting them in their wider geographical context if possible. This leaves the potential for further research post-doctoral study and provides a more detailed and adequate study than would have been the case if the research had to be compromised to fulfil the criteria for a broader geographical region of study. It was also decided that the nature of this thesis should primarily be archaeological. Despite advocating for interdisciplinary approaches to this research area I recognise that I am limited, again, with time and word count restraints. I also recognise that my academic strengths lie in archaeology, with a BA and MA in the discipline. However, during this thesis I have drastically advanced my understanding of different disciplines within Viking studies and have utilised them in my interpretations. In particular saga and historical sources have been particularly useful alongside archaeological data in forming the interpretations and conclusions presented in this thesis. This utilisation of various forms of evidence has allowed for a more nuanced understanding of the subject presented. Nevertheless I recognise that the thesis is primarily archaeological in

character, but I believe that this has resulted in a much more successful piece of research. However, the thesis should be accessible to scholars from other disciplines, given that I have utilised and recognised the potential for other forms of evidence, which will help further and advance research in the wider study of the Viking Age North Atlantic.

Furthermore it was decided that this thesis would focus on domestic animals rather than the whole of the animal kingdom, including wild mammals, and mythical beasts. This was decided not as a restriction on the research but because this study was interested in the close human-animal relationships. The animals with which humans coinhabited and interacted with on a regular basis are domestic. Although domestic animals could be perceived as boring or unimportant that is far from the case. Humans had a very different relationship with these animals than animals in their beliefs, mythical beasts, or animals in the wild. Domestic animals were, and still are, commonplace in everyday life and as such are easily overlooked but examination of their interactions with humans can reveal intricate details about human society. It is the relationships between humans and domestic animals that are focus of this thesis, but there is the potential for future research to explore the relationships humans had with other animals which will undoubtedly provide another insight into human society. However, given the lack of research in this area it is important to focus on this particular aspect of human-animal relationships which will provide a considerable insight into Norse social identities and society.

Human identities are a subject of much discussion in archaeology and in Viking studies. This thesis will start by outlining the scholarship in this area and asserting the ways in which social identities and past human societies are understood in this thesis. It will also make clear what is meant by certain terminology, such as 'Viking' and 'Norse'.

It will state why further research needs to be done in this area and why this thesis is suitable to undertake this study and how it will provide an original perspective and advance knowledge of Norse social identities in the North Atlantic.

CHAPTER TWO

Viking-age Society and Social Identities

his thesis is examining the role of domestic animals in human society to better understand Norse society and social identity. It will explore the full complexities of Viking-age society. However, in order to achieve this it is important to appreciate and acknowledge previous scholarship. Furthermore it is also important to clarify terminology, notably 'Norse' and Viking' but also relating to society and identity. This is essential for this thesis to develop and fully understand the complexities of society and social identity during this innovative period.

The period AD 750-1100 was a dynamic era which witnessed considerable transformation and change across Northern Europe. Diaspora, demographic growth, urban development and expanding international and regional trade networks are just some of the factors that have been argued to have stimulated the changing social dynamics of the time. This would have led, not only to social mobility, but the creation of new and a more diverse array of social identities within society. The popularisation of cultural patterns of the upper classes (Crouch 2005, 208) led to lesser lords emulating their social superiors (Meulemeester and O'Connor 2007, 325) which may have resulted in what has been perceived to be the growth of the 'middling elite' (Loveluck 2009, 164). Social identities were in a state of flux and as such the structure of society became increasingly stratified (Reynolds 1999, 57) as individuals sought to define their identity within society. Therefore, this period would not only have witnessed a transformation in the structure of society but also in the way in which social identities were formed and displayed.

Society and social identities are inextricably interlinked as both are formed and exist because of the other and 'come into being through interactions between individuals' (Renfrew & Bahn 2004, 223). Identity enables individuals to define themselves and determines how others perceive them belonging to a particular group (Díaz-Andreu & Lucy 2005, 1). A better understanding of the past can be gained by knowledge of social identities and society as these reveal how past people thought, acted and interacted. Transformations in social identities can reveal much about wide-ranging developments and changes impacting upon and influencing all aspects of past society. As this was a period of significant transformation, by exploring and examining the various aspects of social identity a better insight into the structure of society will be gained which will, in turn, provide an insight into the full complexities of the transformations during this period. In recent years the concepts of society and identity have undergone development and are now often utilised whilst interpreting the past. However, although identity has become a particularly popular term in archaeology definitions of the term are often vague or not available (Díaz-Andreu & Lucy 2005, 1). Therefore, both the terms 'identity' and 'society' will need to be carefully defined. The concepts of identity and society and their application of archaeological study will be further discussed to define their definition and enable a better application to the area of study.

The Viking Age has been the focus of many scholarly debates and has undergone significant transformation in recent years, although aspects of the period have been significantly overlooked when compared to the seemingly popularity of this period and topic. Viking identity has a strong image in popular culture which was probably, to some extent, influenced by early academic work. The Viking Age has also been subject to a certain amount of misuse to support modern political agendas and

ideology. Early scholarship was often heavily nationalistic and its application was often utilised in such a way as to define ethnic or national identities in Scandinavian countries (See: Price 2002, 32; Svanberg 2003). The early significance given by scholars to the inhabitants of Scandinavian countries as active agents of change in this time frame has led to a backlash where scholars have attempted to redefine the Vikings as a less dominant force in Europe (Hodges 2006). However, recent years have seen the application of new theoretical models to the study of this era, utilising methods from other disciplines such as anthropology to better understand Viking society (Price 2002; Tolley 2009). It is also recognised that certain aspects of social identity, such as gender (Jesch 1991; Lee 2009, 251), have been understudied. As such, there is still comparatively much still to be understood regarding social identities and society during this period.

Many previous studies have tended to focus upon particular aspects of social identity and have made statements which have been applied to all Viking and Norse societies at this time. Many of these studies have been quite isolated in their approach, focused upon discrete geographic regions or areas defined by modern country boundaries. However, it will be shown that there was a certain amount of regional variation and so a broader, transnational approach must be taken to fully appreciate the wide-ranging transformations in society occurring at this time. Social identities that have received significant amount of attention, either through the volume of scholarship or have been more recently highlighted as areas of importance, will be examined in order to appreciate how scholarship of the Viking and Norse North Atlantic has perceived and interpreted society and social identities.

The discrete, but interlinked, sections will be brought together in conclusion where it will highlighted that there is still a considerable amount of work to be

undertaken to fully appreciate the various complex social identities and to understand Viking and Norse society. It will be shown that interpretations drawn from a limited range or specific, isolated, form of evidence are not sufficient to fully interpret the multifaceted social identities which form Viking-age society. Multiple forms of evidence must be used together and not selectively and new developments in archaeological theory must be applied to the study. In so doing, it will reveal aspects of social identities that have not been appreciated or recognised before and this has the potential to shed new light Viking and Norse society. Through a better understanding of the social identities in Viking and Norse society a more complete insight will be available into this dynamic period of considerable change and transformation.

What is society and what do we mean by it?

Society is a concept that has attracted some attention regarding its definition and role in archaeological scholarship. Scholarship on society and archaeology has developed throughout the twentieth century. The full complexity of the interlinked aspects that comprise human societies is now widely acknowledged. Society determines how humans express themselves, how they conceptualize relationships and their very being in the world (Meskell & Preucel 2004, 3). The idea that human cognitive processes are fundamental in the formation of human societies has long been appreciated. As early as 1935 Gordon Child stated that human consciousness and society could not be understood as separate entities (Meskell & Preucel 2004, 4). The importance society to archaeology was argued by Graham Clark (1939) who viewed the production and use of artefacts as synonymous with the existence of a society and therefore 'society' was the central focus of archaeology. He argued that the emergence of a class-ranked society was a consequence and a cause of social evolution (Meskell & Preucel 2004, 5).

Despite these early practitioners there was a certain amount of avoidance of social archaeology, which Renfrew argued was due to a tendency to separate mind and matter (Meskell & Preucel 2004, 6). It was argued that archaeology was concerned with the social unit which existed through interactions between individuals during shared activities and so new cognitive categories developed with new social relationships (Renfrew & Bahn 2004, 223). This was further developed by postprocessual archaeologists who argued that material culture was not merely a reflection of social practice but part of it (Giddens 1979; Hodder 1982, 10). This concept was further extended by Shanks and Tilley (1987) who questioned the hierarchy of factors and critiqued whether 'economic' should be regarded as more privileged than others, such as 'political' or 'religious' (Meskell & Preucel 2004, 7). Due to the large-scale adoption of social anthropological methods in archaeology there has often been a connection made between wealth and elite identity. However, the use of social evolution models has led to the over-simplification of social identities and this is now being challenged by scholars (Loveluck 2009). It has also been noted that the majority of the previous work was undertaken from the adult male perspective which 'mimics the structures given importance in our own society and so excludes more than it includes' (Scott 1997, 5). Therefore, archaeologists must make a concerted effort to explore the possible ways in which social identities are created, relationships formed and interactions between individuals displayed, so as to better understand the ways in which society is constructed. It can be observed that social archaeology has attracted much attention and will evolve further as scholars continue to question and critic the way in which society is understood and what this meant for past societies and individuals.

It is now widely acknowledged that society and social identities are inextricably interlinked with society defining a person's social identity and social identity

determining the structure of society and therefore interactions and social relations (Scott 1997, 5). Within the society there are many individual social identities but also an allencompassing group identity through which the individuals identify. There is a shared collective perception of the group identity in which social identity is formed (Turner 1982, 15-21). These social interactions may be expressed through various diverse methods which can be observed in the archaeological record, such as spatial construction and the production, use and deposition of material culture (Greene 2002, 243). Therefore, the archaeological material must be considered alongside the interactions and actions that would have created it. It is through the recognition of the full complexity involved in the construction of society and social identities that an understanding of past societies can be formed. Social identities are key to the formation of society but are also constructed within a shared understanding of society.

Identifying Identity

Identity has become a fashionable topic and a 'buzzword' in various archaeological studies in the recent past. The way in which the word 'identity' is used has developed over time and has diverse connotations for different people. It has been previously, and sometimes still is, utilized by politicians to define national identity and determine ethnicity. Archaeological materials can become intricately interlinked within political discourses and objectives to serve as support to, sometimes extreme, ideologies. A prime example of this is the work of Gustaf Kossinna, which was adopted by the Nazi regime to identify alleged *Germanic* territories, based upon the belief that material culture was a direct reflection of ethnic affiliation (Insoll 2006, 7). There are many negative associations with early twentieth century scholarship concerning ethnic identity which probably reflects its early application. This may explain its unpopularity in scholarship

after the first half of the twentieth century and its slightly different focus in more recent academic work (Meskell 2002, 282). However, its use in recent scholarship is quite different and it is recognised as being a dangerous concept when considering origins, legitimacy, ownership and rights (Meskell 2002, 287). A more recent development is the use of the word 'diaspora'. It has become a particularly common term in research concerning emigration from Scandinavia in the 9th and 10th centuries. The increasing popularity of this term has led to its credibility as a suitably analytical tool being questioned (Abrams 2012). It is a concept highly interlinked with ethnic identity and based heavily on material culture, but its use cannot be underestimated or ignored.

Different aspects of identity have received more attention than others. Aside from cultural identity, class and status have long been the focus of study whereas gender and sexuality have only more recently been significantly considered. However, there are still considerable discrepancies in gender-related research and it is still often associated with feminist theory and research into female identity. Often identities have been interpreted directly from archaeological material with the assumption that material culture is a direct reflection of identity. This relationship is contentious and identity is far from being a singular entity. As already shown it constitutes many 'identities'.

Johnson (1999, 16) has highlighted the problems associated with defining cultural identity explaining that a person cannot be identified as English because they 'drink tea, speak English and queue in an orderly fashion without complaint'. He stresses the importance of the individual and the complex ways in which cultural identity is assimilated.

Identity, despite its popularity in contemporary archaeological research, is an exceptionally difficult concept to define and interpret. Identities are not always chosen by the individual and sometimes are ascribed at birth based upon factors such as gender,

physicality and family status. These factors influence the way identity appears in the archaeological record and therefore our understanding of the way the individual identified. It is a fact that identities are not static but are fluid, changing through experiences and are open to manipulation (Meskell 2001, 196). With this in mind, the way in which archaeologists attempt to interpret identity through a few select objects in the archaeological record, can be perceived to be an extremely simplistic way of interpreting this complex concept. The way in which identity is displayed in the archaeological record may not be a reflection of the individual's identity but rather the way in which the community identified the individual. This is particularly the case in statement actions such as burial. The traditional approach to cemetery studies perceives material culture actively communicating social relations (Wilson 1976, 3). Therefore, a rich burial demonstrates wealth and signifies high status. However, even in modern society we can observe how in death many express an 'ideal of equality, humility and non-materialism which is blatantly in contrast with the way we live our lives in practice' (Hodder 1979, 167). This highlights the subjective nature of interpreting identity which is further observed when attempting to understand the more abstract aspects composing social identities. Some aspects of identity, such as sexuality, cannot be observed or easily defined in the archaeological evidence. Noting that identity can be open to manipulation Meskell (2006, 29) has observed that given anonymity people may divulge a different gender and/or sexual preference than if they were to disclose it publically.

As we can never observe a past human in their world, one is left to construct the way individuals thought and acted through one's own normalities based on modern society and anthropological case studies. This has led to a varied and illustrative understanding of the past but can sometimes be restrictive and defined by our notions

of the roles undertaken by individuals. Issues of ethnicity, cultural identity, nationalism and politics can significantly influence our interpretations of past societies. Notably there has been a male bias towards the study of archaeology and Johnson (1999, 120) highlights this through the use of an illustration from a 1953 children's book depicting women as the 'home makers' and males as the hunters. This idea of prehistoric female and male identity was undeniably a result of 1950s social norms. The male bias in archaeology has been challenged by the emergence of gender archaeology since the 1980's linked to the increase of gender studies in other subjects (Johnson 1999, 118). Although it can be perceived as demonstrating a balanced view of gender identities in the past this, once again, reflects modern views of gender roles and is very unlikely to define the way past societies identified. However, one cannot deny the use of identity in attempting to understand change in the archaeological record.

In our attempt to interpret past societies, identity has become a fundamental aspect of any research in archaeology. Identity is particularly relevant to understanding change in a society if used as a broad representation of the community represented in the archaeological record. It can show a development or transformation of ideas connecting with the way in which individuals present themselves and how society saw them and changes could be a result of an external factor. Barrett and Richards (2004) use evidence for marine resource intensification when interpreting the identity of the population in eleventh to fourteenth century Orkney. This led them to conclude that the change in marine intensification, and therefore, consumption was due to a change in identity by the population on Orkney as Scandinavians had a cultural preference for a fish-based diet. Arguably it reflected Scandinavian impact, either through migration or intense contact, on the native population which changed the perception of maritime economy and resources. As noted previously there has been much interest surrounding,

and research concerning, migration in the archaeological record. It is clear, however, that it is extremely difficult to understand the individual through generalisations based on aspects of perceived change. Some aspects of social identity will not be visible through the archaeological evidence and other aspects will be influenced by the archaeologist's perception of 'the norm' based on their own society. Therefore the use of identity and ideology in archaeological research is only useful when used in conjunction with other archaeological evidence and other theoretical perspectives.

This research will be primarily concerned with the multiple 'identities' that compose social identity. These include, but are not limited to, status, rank, sex, gender, age, religious and cultural identity. This research is primarily concerned with understanding how and why social identities were transformed and constructed during the Viking Age by integrating other forms of evidence to complement the archaeology (the focus of this research), and consider discussions and arguments utilised by disciplines such as history, geography, biology and anthropology.

The development of Viking-Age Studies

The Viking-age has become a notorious period in western history, largely facilitated by its prominence in popular culture throughout history. 'Vikings' are often the focus of epic cinematic creations from the classic Kirk Douglas film 'The Vikings' to the later, but in the same vein, film 'The 13th Warrior'. A more light-hearted portrayal can be observed in the 2010 film, 'How to Train your Dragon', but even this retains the basic modern notion of what 'Viking' represents. The iconic symbol of the Viking Age is of the rampaging, pillaging, raping, sea-faring, bearded warrior wearing a horned helmet. 'Viking' is perceived to be a pure expression of masculinity. Male-gender associated

activities have utilised this word and its modern connotations, one can observe the Minnesota Vikings American Football team, Viking lawnmowers, Viking Tyres and Viking Automotive wholesaler. This definition of Viking can be observed in the popular TV-series 'True Blood' in which a Viking living in modern America is portrayed as the epitome of masculinity. What it means to be 'Viking' has been fully embraced by modern popular culture. Moreover, it has been noted that expressions of perceived Viking heritage have become more widespread throughout Europe (Hannam & Halewood 2006) and include the, now iconic, Up-Helly-Aa festival in Shetland. It is apparent that there is a strong perception in modern society concerning the definition of the Viking and therefore the Viking Age.



Figure 2.1 The Viking Festival to celebrate Icelandic National Day on 17th June in Hafnarfjörður (photo: L. Hogg).

There has been some debate concerning the concept of a 'Viking Age'. It has been argued that the perception of the Viking Age in popular culture led to a backlash where scholars attempted to redefine the Vikings as a less dominant force in Europe during this period (Griffiths 2010, 16). Notably Svanberg (2003) was very critical of the

idea of a common 'Viking' culture and Hodges (2006) argued that the influence of Vikings as agents of change in Europe had been overestimated. Alternatively, Downham (2012, 8) argues that the use of the term 'the Viking Age' is valid because the successes of early Viking ventures resulted in a great number of Scandinavians raising the resources needed to go on overseas expeditions and so these Vikings would have been key figures in Europe. It must be appreciated that the Viking Age is a modern construct which has been defined by particular events deemed as significant by modern scholars. These events were perceived as important purely due to the fact that there is a written record (Price 2002, 31).

There is some debate amongst scholars concerning the dating of the Viking Age. Often these debates are very Anglo-centric, linked to events happening in England. AD 793 is the date often used as the start of the period and is taken from the Anglo-Saxon Chronicle, recording a Viking raid on the monastery at Lindisfarne. Often the 9th century is used as the indication of the start of the Viking Age (Downham 2012, 1) although some scholars have argued for the Viking Age to start as early as the mid-8th century (Ambrosiani 1998, 410; Myhre 1993, 199). The end of the Viking Age is another source of contention. Traditionally it has been associated with the defeat of the Norwegian army at Stamford Bridge in 1066. Others have suggested an earlier date of 1050 (Morris 1985, 210), whilst some argue that is continues as late as the 12th or 13th centuries. This is even the case for England where the 1066 had long been the accepted date for the closure of the Viking Age, but given the continued interaction with Denmark it could be argued to continue for much longer (Brink 2008a, 5).

Very generally the Viking Age could fit in the date range AD 750-1100. However, as Jesch (2015, 8-9) notes there are a number of events that could contest that. She argues that the starting date could be pushed back as far as the 8th century as

Ribe, a key Viking Age trading site, was established in AD700 and archaeological evidence shows considerable evidence for Scandinavians trading with the British Isles and further afield. The end date is also a source for considerable debate. Jesch (2015, 9) notes that it could be argued to be around AD 1000, when Iceland converts to Christianity but she also notes that this change did not occur overnight; and using this date is problematic as there would have been considerable regional variation in religious practices. This highlights the problems associated with the very Anglo-centric dating and definition of the Viking Age, and whether it is appropriate label to apply to a chronological range and geographical area with such diversity. This is an issue that Christiansen (2002) discusses, suggesting that because typology of artefacts, dates and events vary considerably across what may be considered the Viking World, the term 'Viking Age' should be abandoned. He notes (2002, 8) that there are several unifying transformations, but that none of them fit the conventional dates used to describe the Viking Age. However, this is an issue with all periods of history that are characterised by distinct developments and thus labelled. Time is fluid, change doesn't happen immediately overnight. Despite the associated problems with the term 'Viking Age' it can still be used as a broad description, so long the relevant issues associated with this term are recognised and appreciated then it is not necessary to eradicate the term from scholarship of this period entirely.

Rather than being constrained by particular events, the Viking Age could be seen as a time when people of Scandinavian descent became particularly active within Europe and further afield. This is an idea that has been championed by scholars with a non-Scandinavian background who argue that given the colonial nature of the period there should be flexibility in the definition relating to different areas and circumstances

(Price 2002, 3). This highlights the uncertainty regarding the chronological and ideological concepts of this period (Price 2002, 32).

As debate continues concerning the definition of the Viking Age there is also ambiguity surrounding the use of the word 'Viking'. It is generally accepted, as noted by Frands Herschend (2006, 55), that historically the word 'Viking' has been used in two different ways. The earlier (up to the 14th century) use of 'Viking' was employed to describe a male sea-warrior/pirate of Scandinavian descent. Its later application (from the 17th century) became heavily loaded with ideological associations and was often utilised in such a way as to define ethnic or national identities in Scandinavian countries. The etymology of 'Viking' is vague but it is likely to be connected to the word 'vík' meaning an 'inlet' or a 'bay' (Brink 2008b, 6). In Old Norse the masculine noun vikingr translates as 'sea warrior' and the feminine noun viking can be understood as 'military expedition over sea' (Brink 2008b, 6). Byock (2001, 12) suggests that early Icelanders would have used the word Viking but not to describe a specific, in this case Scandinavian, ethnic group. The later usage of the term 'Viking' has led to a backlash with modern scholars heavily debating its application. Christiansen (2002, 1) went as far as to make the analogy between using 'Viking' to define a group of Scandinavians and the application of the label 'cowboy' to describe modern Americans. The work of Svanberg (2003) focusing on 'decolonising the Viking Age' highlighted the previously heavily nationalist scholarship of the study of the Viking Age and criticised the idea that a common culture could be attributed to the people of the Viking Age. However, as Price (2008a, 259) pointed out, despite various localised variations there was a common language, similar cultural traits and practices. It has therefore been suggested that the term 'Viking' is still a useful broad term (Downham 2012, 8). The strong feelings and emotions involved in the use of this term has resulted in considerable variation in the

way in its application. This ranges from use of the term to describe only Scandinavian warriors, to its use as a racial label or as a cultural label to describe the spread of Scandinavian influence during this period. It is feasible to agree with Downham and use the label 'Viking Age' as an umbrella term to describe this period.

Early academic scholarship on the Viking-age was heavily culture-historical based, utilising material culture to locate cultures mentioned in documentary sources, and approaches were often directed by nationalistic perspectives. A significant proportion of the early scholarship focused upon the specific regions which now form the modern Scandinavian countries (Price 2002, 31). This was a period when the modern Scandinavian states were developing as authorities became more centralised. In the 19th century there was a romantic view of the Viking Age which complemented the patriotic character of Scandinavian at the time. The scholarship during this period reflects these ideals and can be seen in the work of Erik Gustaf Geijer, Nicolai Frederik Severin Grundtvig, Jacob Keyser and Peter Andreas Munch who attempted to claim the Icelandic sagas for the Norwegians. The various Scandinavian countries were quick to put a claim on the Viking Age as it complemented the political and national ideology of the 19th and early 20th centuries. Therefore the scholarship at the time was intricately interlinked with contemporary politics. In the pursuit of defining a national identity and history, archaeology was heavily utilised. Svanberg (2003, 52) has noted that 'the Jelling complex, Birka and the Norwegian ship-burials were a crucial factor in the relation between the Viking-age and nationalistic ideology'. A cultural-historical approach was taken and the archaeological evidence was often used to support written documentation (Friðriksson & Lucas 2009, 1). Nazi propaganda often exploited Viking Age scholarship during their occupation of Norway. This was largely born out of the idea that archaeology could be used to identify cultural groups of people and the interpretation of Viking-age representing the formation of the modern Scandinavian states and the spread of this national identity through colonisation and conquest. One can observe the use of the 'Viking' identity in Nazi politics, for example SS meetings were held at historical places central to Viking Age history and the SS unit *Ahmenerbe*, responsible for the cultural politics of the Third Reich, included prominent Viking specialists such as Herbert Jankuhn (Svanberg 2003, 61). Given the abusive use of the Viking Age it can be noted that this romanticised view of the Viking Age did not feature in scholarship after the war.

The continued intense interest in the Viking Age resulted in it becoming established during the twentieth century as one of the great historic civilisations. This is most apparent in the 'The Viking Achievement: The society and culture of early medieval Scandinavia' by Foote and Wilson. This work reinforced the idea of one common culture for Scandinavia with slight variations reflecting Denmark, Sweden and Norway. It utilised archaeological evidence in such a way as to support the documentary sources and as a result was heavily culture-historical based in its interpretation. Their approach has been highlighted by Svanberg (2003, 68) as representing the continuing use of colonial ideology in Viking Age scholarship. It also represented the idea, common in twentieth century historiography, that the formation of states with monarchs at the centre could be associated with the suppression of other regions by colonial expansion. Following this, the work of Sawyer and Roesdahl became influential in Viking-studies. Sawyer challenged previously held notions and attempted to consider the role of Vikings from a European perspective; however he still regarded archaeology purely as supporting evidence to history. Roesdahl, similar to previous research, discusses Denmark, Norway and Sweden as the modern states unifying during this era, although she believes that these nations were undefined during the Viking Age. Svanberg (2003,

95) argues that this demonstrates a progression from 'explicit nationalism to implicit nationalism' therefore, the basic interpretative framework remained the same, or similar, continually until the end of the twentieth century.

The previous colonial discourse has impacted on the way in which we understand the Viking Age. As such, the exploits traditionally associated with Vikings are seen as 'Scandinavian' as in the modern-day nationalities of Sweden, Norway and Denmark. However, genetic evidence demonstrates that Iceland was settled by equal numbers of people from Scandinavian and Celtic ancestry, with the paternal ancestry being prominently Scandinavian and the maternal ancestry being notably Celtic (Goodacre et al. 2005). High-levels of integration can be observed in places such as the Northern Isles and in north-western England. It is now acknowledged that settlement in the mid-ninth century was not by colonists from Scandinavia, but the colonists were more likely to be 'Anglo-Scandinavian', 'Hiberno-Scandinavian', Hiberno-Norse' or even 'Cambro-Norse' (Griffiths 2010, 22). These examples challenge notions of the Viking Age as the result of purely Scandinavian colonial exploits. As such, understanding of the diverse identities from across a wide geographic area that were active in the transformations occurring during this time has dramatically increased. A complicated case can be observed in Greenland as previous work on Norse sites was undertaken predominately by Danish archaeologists. Whether research into Norse Greenland should be a Danish, rather than Greenlandic or international, matter is highly subjective as it is an emotive and political issue that raises the question 'who does the past belong to?' (Guldager 2002, 79). The movement of people that characterised the Viking Age demonstrates the international nature of this period and supports the criticisms challenging the previous colonial notions.

It generally appreciated that archaeological research in Iceland emerged from a scholarly interest in the Icelandic sagas (Friðriksson & Lucas 2009, 1). There is also a heavy focus on Viking-age research in Iceland which is probably a reflection of the unique situation in Iceland, whereby medieval documentary sources record the origins of the country (Lucas & Snæsdóttir 2006, 5). The interdisciplinary nature of Viking studies has led to a differing range of opinions on using literary sources and also how they have been interpreted (Schjødt 2007, 2). The use of written texts in archaeological research has been positively embraced by some (eg: Byock et al. 2005, 195) whilst other scholars (eg: Hjaltalín 2009) are more critical of their use. Much is placed upon the study and use of saga sources in any scholarly endeavour relating to Viking-age research. It has been noted that there is a long history of archaeologists utilising written sources, for example, when investigating the mounds at Gamla Uppsala, Sune Lindqvist and Birger Nerman used them extensively (Price 2002, 32). The sagas are often used as primary sources and are still utilised, alongside other philological evidence such as placenames, as a means of dating or identifying the archaeological evidence (Friðriksson & Lucas 2009, 2; Price 2002, 35). In particular archaeological evidence was utilised to illustrate aspects of culture and society which were known from the literary evidence. This may been due to the lack of archaeological evidence but this is being challenged as knowledge is expanded upon as large-scale excavations, such as Kaupang and Ribe, have been undertaken and published. Additionally there has been an increase in the reporting of metal-detecting finds and new scientific techniques have been applied to explore the movement of people through genetic evidence and to reconstruct the environment. There has been constant debate surrounding the accuracy of the sagas for interpretations of the Viking-age, but after decades of scepticism their use in Viking archaeology is, once again, becoming more fashionable (Griffiths 2010, 21). A noteworthy recent example is the Mosfell Archaeological Project (Zori & Byock 2014)

where the researchers have utilised a variety sources in their project, particularly archaeology and saga studies.

The longevity of utilising written sources to interpret Viking society is demonstrated by the work of Hedeager (2011), who has taken an interdisciplinary approach to understanding Viking society and considered myth alongside material culture. She argues that Old Norse texts are valid in the interpretation of society and are especially relevant exploring long-term transformations and to the study of the Viking Age as ideologies and worldviews slowly changed. Both Tolley (2009) and Price (2002) went beyond the use of written sources and material culture and applied theoretical frameworks from other academic disciplines such as anthropology. Until this work cognitive archaeology had not been applied to the study of the Viking-age which further demonstrates the slow uptake of evolving theoretical frameworks to this research area. The study of religion has long been the focus of research into the Viking Age, but it was often considered as an aspect of the history of religion rather than archaeology and was dominated by the use of literary sources. This is partially because the study of religion did not fit the application of processual approaches in archaeological studies. However, this has changed, probably as a result of successful collaboration between sociologists, anthropologists, linguists, historians and archaeologists (Jennbert 2011, 19). Throughout the last few decades the study of religion in archaeology has become increasingly popular and created much debate concerning interpretation of the evidence and what it can inform us about society.

Due to the rapid growth in Viking age archaeology over the past three decades there is now a wealth of archaeological evidence which is further being added to continuously. The ways in which this material is examined, discussed and interpreted still has some way to go to catch up with theoretical developments in archaeology and

other disciplines. As already noted, there has been a delayed application of mainstream cognitive archaeology to Viking studies (Price 2002, 39). In previous Viking Age archaeological research little thought was given to the ways in which people thought, however postproccessual approaches to cognitive archaeology have started to be applied. There are obvious difficulties in attempting to understand thought processes with some archaeologists arguing that it is impossible to do so, however others such as Johnson (1999, 87) argue that it is necessary. One must be aware that we interpret archaeology based upon our own ideas of time and social norms which may be significantly different from those of other societies. Therefore, by challenging our own notions of thought we can reveal new insights into the social interactions and social structures of Viking-age societies. As previously discussed, an aspect of archaeological interpretation which has particularly benefited from applications of these theoretical frameworks is religious and ritual archaeology. It is argued that religious actions are performed within an ideologically structured society and cultural identity and therefore these rites are not always religious in character, subsequently meanings are embedded in material culture (Jennbert 2011, 19). With advances in this area, led by scholars such as Price, it has demonstrated the need to fully engage with new theoretical frameworks and appreciate the multifaceted ways in which humans identified and constructed worldviews through their thought processes.

Many aspects of Viking-age society still remain vastly understudied and the application of new theoretical approaches has been delayed in comparison with other study areas. Despite the noteworthy book by Judith Jesch, 'Women in the Viking Age', there is still little known about Viking-age women as only recently studies have started to considered gender. The study of the household is only just starting to be applied to Viking scholarship, therefore there is still much to know concerning social structures

within the household as well as between different households. Recently Viking-age archaeology has been dominated by scientific research with much of the work being undertaken in Iceland and focusing on the environmental reconstructions of the landscape. Animal-related research has been restricted to the reconstruction of animal husbandry practices and food preferences. However, it is becoming increasingly apparent that the study of human-animal relationships can provide a unique insight into the structure and transformation of past societies. This approach is starting to be embraced in archaeology as animal-studies are recognised as a way of understanding worldviews, social identities and perceptions of landscape (Poole 2011; Sykes 2009). Humans and animals live together within the same landscape and animals and their products could be brought into human society and play active roles within social relationships (Oma & Hedeager 2010, 155). It has also been suggested that animal-related artefacts can create connections between the human and animal worlds and construct new identities (Conneller 2004).

Previous research has also tended to focus on discrete geographic areas however it is vital, when attempting to understand reasons and stimulants for change, to appreciate the transformations occurring elsewhere. This is especially important when considering factors such as trade and exchange, activities often associated with the Vikings. Also, this is a particularly key aspect for study of the Viking Age as this was a period consisting of high levels of diaspora across Europe. It is argued that throughout this period society became more highly stratified and consequently indictors of social status were more important (Reynolds 1999, 57). Research into Viking-age identities has often been primarily concerned with ethnic affiliation, but identities are formed of multiple strands and the complexities of Viking-age society need to be fully addressed (Meskell 2006). This was a period of significant change which would have experienced

substantial the transformation of society with notable levels of social mobility (Loveluck 2009, 170). It is therefore clear that there is still more work to be undertaken to fully appreciate the complexities within society during this period and to appreciate the wideranging transformations occurring within it.

Viking-age Social Identities

As previously mentioned, identity has become a 'hot topic' in archaeology but it is a contentious concept. Earlier interpretations of Viking-age society suggested that it was based upon egalitarian doctrine where all members had an equal say but the king made the final decisions. However, it has since been argued that society was composed of a complex social hierarchy in which power and status was based upon landholdings and kingship groups influenced identity and actions (Roesdahl 1982, 23). It now recognised that Viking-age society was a complex amalgamation of social identities creating a complex social stratification within society which not only varied across the homelands of mainland Scandinavia but throughout the Viking settlements located in the North Atlantic. Therefore attempting to ascertain individual and group identities becomes exceptionally complicated as these aspects are not individual entities but are inextricably interlinked impinging upon every aspect of social identity and society. Identity is a multifaceted concept making it difficult, or arguably impossible, to isolate and define specific social identities. However, the main aspects of social identities often discussed and commented upon in relation to the Viking-age are ethnicity, rank and status, gender, age and religious affinity.

Ethnic Identity

The concept of ethnicity is highly contentious and the way it has been interpreted in the archaeological record has been heavily debated. It has often attracted negative associations due to its application in the early twentieth century (Meskell 2002, 282). Jones (1997, 100) suggested that it was difficult, if not impossible, to isolate ethnic identity as an individual aspect of identity and that there was rarely a direct correlation between ethnicity and cultural practices. Ethnic identity is especially hard to identify as it is a complex concept with fluid definitions which could be attributed to an individual or community voluntarily or involuntarily. The idea of identifying ethnic identities gained interest from the nineteenth century and was particularly utilised in the twentieth century especially to define national boundaries (Meskell 2002, 282). Early interpretations of Viking-age society were often made within nationalistic frameworks. However, it is important to remember that ethnicity is not nationality, even if such a concept existed in the Viking Age. Recently scholars have challenged perceptions of national and ethnic identity in the Viking Age and examined whether people in the Viking Age saw themselves as nations or as peoples (Christiansen 2002, 113; Downham 2012, 8). It is now understood that ethnic identity is multifaceted and not limited to solely national or racial identity. As such simplistic conclusions cannot be made based upon little evidence or generalised examples (Lucy 2000, 177). When identifying a collective ethnic identity various aspects could be considered such as a collective name, a common sense of descent, a shared history, a distinctive shared culture, an association with specific territory and a sense of solidarity (Karlsson 2010, 126). However, this may mean that ethnic identity is particularly difficult to identify in Viking Age and Norse archaeology due to the high level of integration that is argued to have occurred.

During this period the Vikings were able to adapt to various circumstances they encountered, whilst maintaining a 'Scandinavian' identity which allowed them to utilise international communication and trade networks (Downham 2012, 8). This would allow for variation in the archaeological record as the ways in which Viking identity was displayed would vary considerably dependent upon the situational circumstances. For example, different levels of integration are argued to have occurred in the various regions that experienced Viking contact and settlement. These interpretations are often based upon evidence associated with Scandinavian culture, in particular material culture, such as oval brooches, and linguistic evidence including the use of Scandinavian placenames. These perceptions have led scholars to reinterpret the nature of Scandinavian contact and settlement. To explain the perceived lack of evidence for native culture two schools of thought have emerged to explain the nature of Norse colonization in northern Scotland. One theory suggests a large-scale migration which resulted in Norse culture dominating the native (e.g.: Crawford 1981; Smith 2001; Wainwright 1962) and the other school of thought suggests a much smaller migration of Scandinavians who integrated peacefully with native inhabitants of northern Scotland (e.g.: Bäcklund 2001; Ritchie 1974; 1977). This demonstrates how evidence which has been perceived to show ethnic and cultural identity can lead to two very different interpretations of interactions between and identity of different ethnic identities.

During the settlement of the North Atlantic the Vikings retained aspects of their Scandinavian identity (Downham 2012, 5). Despite the movement westwards the colonisers maintained contact with their homelands which would have enforced the idea of a connectedness based upon a shared language, history and traditions (Jesch 2008, 221-2). The idea that there was a Norse identity, opposed to a national identity based distinct geographic units, has been argued to exist supported by medieval

Icelandic law which distinguishes between Norsemen and everyone else (Karlsson 2010, 128). There were many factors that contributed to this shared Norse identity including a shared language and material culture, such as style of construction. It has been argued that the whole of the North Atlantic had a shared common identity based upon these factors (Guldager 2002, 94). Within this sphere the language would have been similar, if not identical, and there would have been a shared mythology (Gräslund 2010, 133). This identity was created in Viking-age Scandinavia, argued to be demonstrated predominantly through material culture, and spread outside of Scandinavia through the large-scale diaspora during this time (Sindbæk 2008, 176). As such, this indicates that Norse identity would have been dominant across the North Atlantic and based upon an ethnic identity created in Scandinavia which was dispersed to other geographic regions through population movement.

Whether the shared identity of the North Atlantic population reflects a Scandinavian ethnic identity is questionable. It is known that the population of early Iceland was a mixture of peoples originating from Scandinavia, Scotland and Ireland which appeared to display a predominately Norse culture but also representing Celtic and Gaelic identities (Byock *et al.* 2005, 203). Similarities with other European societies have been identified. For example, based upon archaeological evidence and literary sources, it has been suggested that the character of Viking-age society was comparable to the rest of Europe (Skre 2010, 6). Despite early arguments suggesting that Scandinavian settlers in Ireland remained separate and distinct from the native culture it is now widely appreciated that the two cultures had much in common as communities across northern Britain and the Isles (Valante 2008, 91). However, as settlers expanded across the North Atlantic they would have encountered populations with different physical attributes to their own. What has been perceived as an 'ethnic boundary'

between the Norse and the Sami would have been infringed by Norse fishermen establishing fishing-stations and an increasing trade in furs (Keller 2010). Settlers at L'Anse Aux Meadows would have encountered Native Americans, and in Greenland the European settlers are likely to have had contact with Paleo-Eskimos and Inuits (Gulløv 2008). These encounters are likely to have created some distinction between the settlers of European origin and the Arctic indigenous and Native American peoples. Thus this would have created an identity where the settlers distinguished themselves from the peoples they encountered. Despite the mixed origin of the settlers, most scholars agree that the most suitable term that can be applied to the North Atlantic settlers during the Viking-age is 'Norse' in the sense that they have a shared language, traditions and customs, but not necessarily because they are Norwegians.

It is important to consider, when attempting to interpret the ethnic identity of North Atlantic Viking-age colonisers, the extent to which they viewed their connections with Scandinavia as connections with a homeland (Gräslund 2010, 132). It has been suggested that bone assemblages indicate that in Iceland, during the initial phase of settlement, settlers were attempting to duplicate the mainland Scandinavian farming model (Vésteinsson et al. 2002, 109). However, similar farming practices do not therefore reveal a farmer whose ethnic identity is Scandinavian. From a purely practical perspective it may have been that the Scandinavian farming model was effective in the North Atlantic islands. The landscape of western Norway has many similarities to the landscape of Iceland and southwest Greenland (Gräslund 2009, 135). An indication that Icelanders may have identified as Norse is revealed as they were referred to as Norsemen when in non-Nordic countries (Karlsson 2010, 128). This could be in reference to their ancestry or that they share similar traits with Norwegians or all Scandinavians. However, given the mixed descent of the population it could also be

argued that Icelanders would have identified as Icelanders opposed to the geographic origin of their ancestors. In fact, as already mentioned ethnic identity is multifaceted and cannot be based upon single factors such as country of origin, even if this nationalistic concept even existed at this time. Despite not having a separate language or religion they did share a common name, a history and an association with a specific territory (Karlsson 2010, 128). It was these aspects that would have allowed Icelanders to identify as Icelanders even if they descended from Scandinavians, Gaels and Celts.

Iceland was the starting point for further exploration and diaspora across the North Atlantic. As such it has been argued that the ethnic identity of the populations in Greenland and L'Anse Aux Meadows show considerable similarities with the Icelandic population. Amongst other similarities the most obvious is that both the colonies in Greenland and Iceland shared a common language (Vésteinsson et al. 2002, 100). A shared language, or at an least exceptionally similar language, would have been used by settlers across the North Atlantic allowing them to more easily communicate across a geographic area from Scandinavia to Newfoundland. Even in the 21st century the Scandinavian languages, Danish, Norwegian and Swedish, although different, are similar to the extent that speakers can understand one another. It has been suggested that throughout the duration of the settlement in Greenland the society remained as a typical Viking-age society which contrasts with other Nordic countries who were evolving to resemble a similar structure to societies in continental Europe (Guldager 2002, 93). This highlights the independent nature of Greenlandic society indicating that although the society had similarities with Scandinavian and Icelandic communities, it also had its own identity. Similar to Greenland, the ill-fated settlement at L'Anse Aux Meadows displayed remarkable similarities with Iceland, notably the buildings are distinctly Icelandic in style

(Wallace Ferguson 2001, 139). Despite this it has been argued that the settlers would have described themselves as Greenlanders rather than Icelanders (Karlsson 2010, 129).

Key considerations to be appreciated are the mixed descent of the population in the North Atlantic settlements, the distinctive dominant culture comparable with Scandinavia, particularly Norway, and, importantly, the slight regional variations. It is therefore reasonable to suggest that there were multiple ethnic identities in the settlements across the North Atlantic. The populations would have been able to identify on a smaller geographical scale, such as Icelanders or Greenlanders, and as the origin of their ancestors, such as Norwegian, and also as Norse which is a term that encompassed considerable variability but could be applied to the population who shared the Norse language, religion and mythology. Whether or not these potential ethnic identities were all-important is debatable, however these would have been aspects of an individual's overall social identity. This highlights the complexities involved in the interpretation of ethnic identity and demonstrates the multifaceted nature of this concept supporting the idea that many factors must be considered when making such interpretations.

Status and Rank

The Viking Age was a period of huge change, in which the once unified Carolingian Empire divided and centralised states or kingdoms emerged in Scandinavia (Brink 2008a, 23; Lewis *et al.* 2001, 11; Steane 2001, 15). It has been suggested that Viking-age society was a type of legal society (Brink 2008a, 28) and social status was determined by family status, especially when concerning the unfree and free although whether this was the case for nobility is debatable (Christiansen 2002, 60). However, there is an observable increase in the number of free tenants during the Viking Age. The number

free tenants with little material wealth could be contributed to the release of slaves followed by settlement expansion. Arguably the elites from Scandinavia aided this social change as the resources needed for long-distance travel would have been significant (Downham 2012, 5). This led to a different stratification between Icelandic society and Scandinavian society. Social status in Icelandic society was different from the Scandinavian homelands and the British Isles as there were no kings or regional leaders and Iceland lacked the urban centres which fostered bourgeois elites (Byock 2001, 64; Leonard 2010, 148). It could be argued that the social stratification in Iceland was a reflection of the circumstances of its settlement as settlers were able to claim land and establish relationships based upon kinship rather than kingship (Byock 2001, 8). However, similar to the rest of Scandinavia, the law was a fundamental aspect of Icelandic society. It was a legal requirement to attach oneself to a legal household and that determined what legal duties the individual was expected to undertake, where they would be summoned and which assembly group they belonged to (Leonard 2010, 152).

Interpretations of status in the archaeological record have often been based on a direct correlation between expensive or luxury artefacts and high status. Low quality objects or less material evidence has been perceived as reflecting low status. This concept has particularly been used when interpreting status from burial evidence.

Wilson (1976, 3) believed that an interpretation of status could be made from a rich burial, therefore perceiving wealth to be a direct reflection of high status. This highlights how a traditional approach to cemetery evidence has dominated this study with material culture seen to actively communicate social interactions (Geake 1992, 89). There is a notable amount of richly furnished burials observable in the archaeological record during this period. Significantly a number of boat burials, containing a large amount of material wealth and ostentatious military equipment have been identified

across Scandinavia (Roesdahl 1980, 151). A well-known example is the extraordinarily rich female grave from Gausel near Stavanger. This is the richest female grave from the Viking Age after the Oseberg ship burial, and the female skeleton was discovered finely dressed in an elaborate cist-grave and dates between 850-60 (Price 2010, 142, 60). The wealth displayed in this burial has led to the female individual buried within it being labelled 'queen'. In contrast to the materially rich burials at Gausel and Oseberg, the cremated remains located on the Åland islands contained tiny animal paws made from clay (Price 2010, 142). It is these distinctions based upon material, or lack of material, wealth that have led to burials being classed as high- or low-status dependent upon material culture directly reflecting social status. The idea that material culture is an important factor in the creation of identity is generally accepted and can inform archaeologists about past identities (Gräslund 2010, 133). However, perceiving material culture as a direct reflection of identity risks over-simplifying the complexity involved in the creation of Viking-age identities and society.

Hodges (1989) believed that there was a transition from exchange of high-value luxury goods to low-value staples. This is argued to have occurred in the tenth and eleventh centuries and was seen as a defining aspect of the Viking-Age (Barrett *et al.* 2004, 618). The prosperous trade in luxury items has been suggested as the reason for the colonisation of Greenland (Keller 2010, 1). It is generally acknowledged that population pressure was not the reason for settlement in Greenland from Iceland (Vésteinsson *et al.* 2002, 108). The evidence demonstrates that Greenland contributed to the European demand for luxury items by supplying walrus ivory, probably from the Disko Bay, and furs, although these are less obvious in the archaeological record (Keller 2010, 2). The settlement L'Anse Aux Meadows is also argued to have served the same economic function as in Greenland, with the colonisation purely motivated by

economic concerns to supply exotic commodities for export to Europe (Keller 2010, 4). Keller perceives these North Atlantic colonies existing solely to supply European market with luxury commodities for the elite members of society.

Hodges' theory, that early exchange centres were royal foundations used by aristocrats to control access to luxury goods, has been disputed. It has been suggested that economic complexity could be attributed to the reign of Charlemagne (Barrett et al. 2004, 619) and evidence from the continent suggests that Carolingian Kings were primarily interested in collecting taxes rather than restricting access to prestige commodities (Verhulst 2002, 130). The archaeological evidence from Ribe suggests that commercial activity was intense between AD 700 and 850 (Feveile 2006, 88). At Hamwic, glass vessels similar to the ones found at the high-status site Flixborough, were in the possession of artisans which challenges the idea that elites had exclusive access to material wealth (Loveluck 2009, 143). This indicates international trade before the late ninth century suggesting that early trade was not limited to gift exchange. It also highlights the difficulties encountered when attempting to make interpretations of status and rank from archaeological evidence especial as portable wealth is not a direct reflection of high status. Simplistic interpretations of wealth reflecting high-status have been particularly prevalent in studies of this period due to the application of evolutionary models (Loveluck 2009, 140). It is now widely appreciated that wealth and status are not synonymous.

This period has been seen as an era of conspicuous consumption and display where elites attempted to separate themselves from the rest of the population (Condron, Perry and Whyman 2002, 28). Attitudes towards food and food sources can indicate the social status of the individual or group concerned. It is often noted that a good indicator of high status is the economic means to keep livestock purely for meat,

whilst leaving potential secondary products unexploited (Ashby 2002, 43). In Greenland a pastoral farming system, replicated from a Scandinavian model, focussing primarily on cattle was maintained whilst rich fish sources disregarded. This is likely due to the perception that a pastoral bovine economy signified high-status, an ideal that the settlers wished to convey (Mainland & Halstead 2005, 103). Going beyond purely economic considerations, food was used as a symbolic display of status and feasts became ritual events (Ashby 2002, 39). Wine was seen as a marker of high-status and had to be imported into Scandinavia, it was often drunk as a symbol of wealth, power and religious leadership (Wallace Ferguson 2001, 142).

Sykes (2010, 182) has noted that, in late Anglo-Saxon England, the ownership and display of a large knife indicated that the owner possessed both the resources and power to divide and redistribute cuts of meat. It would appear that the distribution of meat was a symbolic display associated with both power and wealth. Consequently the items associated with this act could also be utilised as a display of status. The display associated with this particular form of elite expression is further illuminated by the preference for aesthetics over practicality or taste. Despite many references to the toughness of their meat, peacocks were frequently used as the centrepieces at feasts (Ashby 2002, 41). In every society there have been food avoidances and during this period there was a clash of ideology surrounding the consumption of horse flesh. The Christian Church condemned the consumption of horse flesh, perceiving it as a pagan trait. However, it can be observed how attitudes towards the consumption of horse were not restricted to only religious identity. A twelfth-century account by Catholic clergyman Giraldus Cambrensis, recounts the coronation of a king in Ulster where his royal authority is confirmed through bestial intercourse, professing to become the beast, and the sacrifice and consumption of the horse (Simoons 1994, 185). Although food

preferences and activities can be most illuminating it should not be automatically assumed that all high-status individuals would choose to display their power through food.

Often, social distinctions of status and rank are perceived to be static, yet evidence suggests that prosperous merchants could cross social divides (Reynolds 1999, 60). Arguably, social mobility would have been greater during the Viking Age compared with other periods as Viking raids allowed men to gain or expand their material wealth (Skre 2010, 12). This shows how identifying social status becomes increasingly more complex as the structure of society was in a constant state of flux. This resulted in elites turning to other ways to define rank and social standing. Textiles became more than merely necessities and were used as a means of distinguishing social standing and wealth (Svensson 2008, 178-9). Alongside textiles furs, obtained from the Sami or from Greenland, were utilised by elite members of society (Keller 2010).

Additionally, it has been suggested that land was the main resource of importance to the elite (Skre 2010, 12). However, it could be suggested that, rather than the physical possession of land, it was the manipulation and control of landscape and space that was of more importance. During the first settlement of Greenland, Eirík constructed his farm in the most prominent position in the landscape (Guldager 2002, 74). This is an obvious example of his dominance and control over the newly established colony. By manipulating the landscapes, elites physically removed themselves from the production process and become consumers rather than producers. This in turn would have created a more diverse society as production became increasingly more specialised. Evidence from urban centres demonstrates the increasing craft specialisation at these sites shown, not only through archaeological evidence but also place-names such as Coppergate, York, which derives from the Old Norse words

for 'cup-maker' and 'street' (Holman 2007, 58). This would have produced a more diverse society and created new identities. It has been suggested that the technicalities of metallurgy and metalwork included a symbolic and ritual element, which gave practitioners a special status (Hedeager 2008, 15). This highlights the considerable transformations during the Viking-age and the diversity of social identities which further demonstrates the difficulties associated with interpreting these.

While there are clear similarities in the economy and society of later medieval Iceland and Greenland, there are again also significant differences. Icelandic animal bone assemblages become increasingly dominated by fish bones from the 14th century onwards, reflecting the increasing demand for dried fish in Europe. However, the Greenlandic bone assemblages show less fish, and more bones from seals and caribou. Another notable difference is that no Greenlandic bishop was ever a native Greenlander, while native-borne Icelanders frequently held episcopal offices in Iceland from the 11th century onwards. Further, the Icelandic aristocracy forged strong links with English and continental merchants in the 15th century at the same time as the Greenlandic colony became more and more isolated (Vésteinsson *et al.* 2002, 101).

Religion

The study of religion has long been a focus for Viking-age research but it is only in the last few decades that archaeological studies have significantly contributed, rather than solely used to complement evidence obtained from literary sources, to this area. This is argued to have been due to an increase in collaboration between archaeology different disciplines, such as philology and religious history (Schlødt 2007, 13). As a consequence there have been significant advances in our understanding of religion during the Viking

Age. Not least that it has demonstrated that religion impinges on all aspects of life, not just ritual, and that it is a complex amalgamation of interlinking ideologies, worldviews and belief systems, to name a few. However, many of the early attempts have focused solely upon categorising the archaeological evidence as either revealing 'Paganism' or 'Christianity'. To this end, much attention has been directed at burial rites. Burial monuments can be observed across Scandinavia and areas associated with Viking settlement and colonisation. It is therefore not surprising that these have attracted attention thus increasing interest in this particular ritual aspect of religious identity (Price 2010, 123). Certain burial rites such as cremation or inhumation with grave-goods have been perceived to reveal Pagan belief. However, simplistic interpretations based upon certain rites displaying either Paganism of Christianity have more recently been criticised. Williams (2001, 193) has accused academics of being 'sceptical' when it comes to reconstructing Pagan beliefs. This reflects the challenges encountered when attempting to comprehend the way past people thought and acted. Williams (2005, 19) suggests that animal cremations and burials did not symbolise the identity of the individual but that mediated the transformation of the dead person between social, cosmological and ontological states. This demonstrates the development of the study of Viking-age religious archaeology and highlights the difficulties in attempting to interpret religious identity from the archaeological record.

Pre-Christian religion in Scandinavia during the first millennium AD has been argued to share many key aspects with pre-Christian religion across northern Europe (Parker Pearson 2006, 86). It has been suggested that the belief system was notably different from that post-conversion as can be seen through people's relations and attitudes towards animals (Jennbert 2006, 137). In the early Christian period 'dog' was used as a derogatory term which has been argued to be a reflection of the importance

given to the role of the dog in Old Norse religion (Gräslund 2004, 171). Dogs were one of the most common animals, along horses, appearing in graves during the time. The Oseberg ship burial, Norway, contained decapitated horses, headless dogs and a beheaded ox and at Gokstad there were twelve horses, six dogs and a peacock (Price 2010, 135-6). One of the boat burials dating from the 9th century at Old Uppsala, Sweden, contained an expensively-dressed woman along with a hen and a dog (Gräslund 2004, 167). There were also dog and horse burials (Jennbert 2006, 135) which indicate a ritual deposition of the animal, a symbolic replacement for an absence of a human body or even just a burial for the animal. The presence of animals in graves has been suggested to demonstrate a theatrical affair, where every act of this deposition had a ritual purpose. Different species would have been treated differently and added to the burial assemblage at various stages (Price 2010, 135). These actions highlight perceptions of particular species of animals indicating a shared belief system which has been attributed to Old Norse Paganism.

Despite an arguably shared belief there are regional variations of the burial rite across Scandinavia. In Iceland there is a wide geographic variation in the distribution of pagan graves this could be for a number of reasons such as population density, environmental factors, and regional differences in burial form such as water burials. However, it is more likely that it reflects the prevalence of grave-goods as often these are perceived to reveal pre-Christian beliefs but it is now widely appreciated that the presence of grave-goods is not an indicator of Paganism (Vésteinsson 2011, 48). This is also the case for presence of animals in cremations and inhumations as continental evidence shows examples of horse burials associated with rich Christian furnishing (Burnell & James 1999, 90). This demonstrates the difficulties in interpreting Pagan beliefs from Viking-age burials and also reinforces the idea that in order to identify

these beliefs then other forms of evidence need to be considered. The use of graves and their contents to interpret Viking-age religious identity has been a common occurrence in the past with the belief that this form of evidence is a direct reflection of society (Pedersen 1997a, 171). It is now appreciated that religion was strongly integrated into all aspects of life (Hultgård 2008, 212). Graves are meaningful displays of ritual actions but the information they can provide is restrictive (Sindbæk 2008, 174). Williams (2001, 206; 2010, 79) suggests that by observing modern anthropological case studies one can attempt understand the pre-Christian burial rite. It is clear that other forms of evidence must be considered alongside burial evidence and previous interpretations of Paganism must be critically examined to understand whether they were based upon assumptions of what Pagan material culture was and represented.

Much has been made of the perceived Pagan period in the Viking Age North Atlantic, so much so that Christianity in the later part of this period is, by comparison, underappreciated. This imbalance could be due to the romantic notions associated with Old Norse religion inspired by tales in the sagas and intrigue and unknown surrounding pre-Christian religion. Burials have always received the most attention and the richly furnished non-Christian burials were, understandably, likely to attract interest. However, there has been a sizeable amount of interest surrounding the conversion to Christianity in Scandinavian (Staecker 2003, 463). Other archaeological is available which supports the change in religious practice and belief during the Viking Age. There is an increase in the transportation of large-volume dried foodstuffs, notably fish (Keller 2010, 14), which would have been in high demand with those following the Christian diet restrictions which prohibited meat during lent and on Fridays. The wealth of documentary sources concerning Christianity during this period also provide an invaluable insight, especially regarding events concerning the conversion to Christianity.

The twelfth-century document, Historia Norwegiae, states that Greenland was Christianised from Iceland but this contradicts Eiriks saga randa which describes the conversion to Christianity in Greenland undertaken by Leifr under the orders from the Norwegian King Óláfr Tryggvason (Arneborg 2001, 128). It is known that the Nordic colonies in Greenland were established in AD 985, fifteen years before Christianity was officially adopted in Iceland (Arneborg 2001, 122). However, as already mentioned there was a coexistence between Paganism and Christianity and it is highly probable that Christianity belief existed prior to the official date. Despite being Christian, Hákon the Good was buried in a mound and celebrated in pagan poetry (Lindow 2001, 7). It is likely that the settlers in Greenland would have had prior knowledge of Christianity and may have even been Christians, but did not practise it in the standardised way of the Western Church.

There are notable differences between the practices of non-Christian and Christian communities. For example, in Christian society everyone must have an inhumation burial whereas this was not the case in pagan Early Medieval Scandinavia (Skre 2010, 10). In Iceland there is an observable difference between the location of Pagan and Christian burials which were, as a rule, located inside the home-field boundary (Friðriksson & Vésteinsson 2011, 54). However, the potential differences between Pagan and Christian burial rites are not always so easily defined. Across northern Europe the use of Christian artefacts can be observed in traditional, sometimes considered Pagan, grave-forms, such as at the mid-7th century sites of Swallowcliffe Down and Benty Grange (Burnell & James 1999, 90). In the 9th century jugs of the Frisian or Tating-ware decorated with a cross were found in eleven Swedish, three Norwegian and one Danish, mostly cremation but also inhumation burials (Staecker 2003, 466). There are gold crosses and a baptismal spoon at Prittlewell (Hirst

et al. 2004, 28) and two possible silver baptismal spoons at Sutton Hoo (Carver 2005, 186). This could suggest that there was some fluidity in regards to contemporary understandings of Christianity and Paganism. However, this discrepancy in burial rituals can also be observed to continue with the use of items associated with Paganism in traditionally classified Christian burials. Material from Viking boats have been reused in Christian burials although there uncertainty concerning their presence. At Sebbersund, Denmark, the boards were found underneath the bodies which has been suggested to show a functional purpose whereas at Hrisbrú the stratigraphy suggests these were placed above the body which is argued to demonstrate a symbolic purpose in reference to the Pagan tradition of boat burials (Wärmländer et al. 2010, 2286). The presence of items conflicting with the grave-form of the burial is arguably nothing to do with the beliefs of the society. Although Christian burials are associated with the lack of grave-goods it can be observed that in modern society people bury their loved ones during a Christian ceremony with heirlooms. Therefore these should not be taken as displaying a direct representation of underlying Pagan or Christian beliefs.

The official recognition of the Christian church may reflect the high-status members of society seeking religious legitimisation for their power and control (Skre 2001, 1). This could be because conversion to Christianity across Scandinavia is perceived as a top-down process with those in charge initiating the change (Clunies Ross 2010, 10). However, the conversion process is argued to be quite different in Iceland than in mainland Scandinavia, possibly reflecting the different structure of the society. Vésteinnson (2014, 85-88) has argued that the conversion to Christianity in Iceland created a shared, single identity that the inhabitants did not have before. He suggests that the residents may have been more willing to accept the new religion due to a desire to create and define a shared communal identity, for a more unified and stable

society. Based upon Ari Þorgilsson's 'Book of the Icelanders' the official acceptance of Christianity was made at the Althing in the year AD 999 or 1000 (Clunies Ross 2010, 10). The general acceptance of Christianity by the whole population is highlighted by the archaeological evidence from Greenland which indicates that chieftain farms were not necessarily associated with churches or used religious orders as a means of legitimising their authority (Guldager 2002, 92).

In both Greenland and Iceland, although the official dates taken from documentary sources suggest a change from Paganism to Christianity, this was more likely a gradual process which had little impact upon the social identities of the individuals concerned. The religious identity of Icelanders and Greenlanders varies from that in mainland Scandinavia and can be seen not just in the conversion process but also in religious practices and customs. Despite cremation being a widespread practice in Scandinavia there is a notable lack of evidence from Iceland. It has been claimed that a cremation cemetery has been discovered at Hulduhóll, in Mosfell (Byock et al. 2005, 216; Wärmländer et al. 2010, 2285). However, this claim has been strongly criticised and argued to be 'unsubstantiated' (Vésteinsson 2011, 48) and it is not acknowledged by other scholars (Gräslund 2010, 133). Given that there were already differences in religious practice it is not implausible that the process of conversion in Greenland and Iceland would have therefore been different to that in Scandinavia. However, in all cases there would not have been a distinct transition from Pagan to Christian beliefs and for a significant time religious belief and identity would be a complex amalgamation of the two which has not been fully appreciated by modern scholarship. This demonstrates how applying an all-encompassing label such as 'Pagan' is really insufficient to describe the belief-systems prior to conversion to Christianity.

Despite the growth in popularity of the study of Old Norse mythology, it has been argued that the majority of the work has followed quite traditional patterns (Schlødt 2007, 14). Our understanding of Viking-age religion still requires attention to fully appreciate identities during this period. Pre-Christian religion in Scandinavia and the North Atlantic has been described through various terms such as, Nordic heathenism, pagan religion, paganism, old Scandinavian cult, Old Norse Religion and fertility cult, all have slightly different meanings and constrained by preconceived connotations (Jennbert 2011, 20). The study of Viking-age religion has tended to rely on modern perceptions of what constitutes religion and how this is displayed and understood (Parker Pearson 2006, 86). As already demonstrated religion was a complex amalgam of many thoughts and beliefs and although there are official dates for the conversion to Christianity it has been show that this was not necessarily a distinct transformation and Christian and pre-Christian religion may not be so easily defined and separated. Often when contemplating the religion prior to the official dates for conversion Scandinavian mythology is discussed. However, myth in the modern sense implies something that is not true (Lindow 2001, 1). Thus, this has automatically categorised earlier religion as a belief system that has no foundation in truth and this influences our understanding of society as a perception is portrayed that the society as unintelligent. Our modern perceptions of religion have impinged upon our interpretation of Viking-age burial practices. It has been argued that the remains of a skeleton orientated in a north-south direction in close proximity to the old farm mound in Pverá supports the idea that Pverá was established prior to the conversion to Christianity in Iceland (Lárusdóttir 2006, 50). However, this is based purely on the assumption that Christian burials were all orientated in an east-west direction. A northsouth orientation of Christian graves can be observed at the monasteries of Whithorn (Hill et al. 1997, 103) and Hartlepool (Daniels & Loveluck 2007, 78) in England.

Modern attitudes towards burial and death contrast drastically with the actions observed at Whithorn where new graves were cut through older burials (Hill *et al.* 1997). It is difficult to comprehend the ideological reasons behind these actions yet the archaeological record shows that this was widespread chronologically and geographically. It is seen in the later medieval period at Skriðuklaustur, an Icelandic Augustinian monastery (Kristjánsdóttir 2011). Therefore, it can be seen that modern perceptions of Christianity and Paganism have impinged upon interpretations of religion during the Viking Age indicating that Viking-age religion should be reassessed.

Often interpretations have been based upon modern perceptions of what religion constitutes and the assumption that modern Paganism and Christianity reflect Viking-age belief systems. It is important to appreciate the full complexity of religious thought and therefore apply an interdisciplinary approach when attempting to interpret it. As pointed out by Jennbert (2011, 17) 'archaeology follows our ideas of time'. As such, the way in which past societies perceived the world and time could vary drastically from our own. Modern anthropological studies have shown that there is no word for 'religion' in the Sámi language, as in the western world (Pentikäinen 1997). Therefore our notions of religion and what religion constitutes could be vastly different from that of Viking-age society. It is argued that the undertaking of rituals is done in collaboration with cosmology and cosmology purveys all aspects of life going beyond that of religion actions (Jennbert 2011, 23). It impinges on the way in which people thought and acted, influencing perception of self, society and worldviews. It would have created identities through relationships between, and perceptions of, the natural and supernatural world which could range from cult leaders dictating rituals to shamans crossing the cosmological divide. Price (2008b, 244) has argued that the way in which pre-Christian societies perceived the world was special and that that 'religion' is far too simple a word

to use when discussing pre-Christian beliefs. It encompassed every aspect of life, although particularly focused on the supernatural. Given the complexities involved with attempting to interpret the identity of Viking-age pre-Christian and even Christian society it may be more sensible to talk instead of the archaeology of the mind. This therefore goes beyond ritual acts and allows one to embrace the full complexity involved in these belief systems which altered all aspects of life and death. In doing so this moves beyond simplistic modern-western labels such as 'Christian' and 'Pagan' and prevents the constraints of the concept of 'religion'.

Gender

Gender is a complex concept, but if utilised it can provide interesting insights into the way in which identity has been constructed within different situations (Stig Sørensen 2009, 253). Although not always appreciated in past interpretations, gender and biological sex are two different identities. Lucy (1997) has drawn attention to the fact that often interpretations are focused upon identifying male/female rather than going beyond this to explore the roles these individuals would have played in society. The dominant interpretation in the humanities and social sciences is that gender is a social construction responding to socially perceived differences between people's bodies, often usually based upon biological sex, but consideration may be given to other subgroups and categories (Stig Sørensen 2009, 254). The full complexity involved in the construction of gender identity needs to be appreciated if attempting to interpret it from the archaeological record. This is especially the case when examining burial evidence as blurred gender roles in life may not have been reflected in death when the *idealised* social structure was articulated (Stoodley 1999, 139). The gender prescribed at death would be based upon the identity of the individual as seen by society, opposed to the way in

which the individual viewed their gender identity. Even in life, people may choose to hide their gender or sexual orientation. Although hard to define and interpret this is a key aspect of individual identity as well as providing demonstrating the multifaceted nature of identities within society.

Viking-age research has often been dominated by visual imagery of Viking, male, warriors raping and pillaging their way across the landscape. This has led to a dominance of masculine identities within Viking-age research. Although there have been attempts to rectify this there is still, in comparison, relatively little known about the roles of women in the Viking Age. Women were of crucial importance during this period of settlement and colonisation. For the new colonies across the North Atlantic to be successful the continuation of a population was of paramount importance and therefore both females and males would have been required to be present to fulfil this obligation (Jochens 2001, 78). Jochens (2001, 84) has suggested that one of the reasons for the abandonment of the settlement at L'Anse Aux Meadows was the sexual tension which arose due to sufficient lack of available partners. This view is rather negative towards women suggesting that they only served one primary function in the colonisation and settlement of new lands. Interpretations of the role of Viking-age women have often had a rather negative view of female influence and active participation. Viking-age research has argued that a woman's world was restricted to the immediate landscape surrounding her home whereas male-associated activities occurred outside the home (Clover 1993, 2-3). This has particularly been argued to be the case in Iceland, where rural farms were dispersed across the landscape. Vésteinsson (2006a, 87) has suggested that everyone, but in particular women, would have had little opportunity to travel beyond their own farm and socialise and might have only spent their lives in the company of no more than five to fifteen people. If women were restricted to this

small world then it may have meant that men were required to take on multiple roles in the outside world, leading them to have more diverse and complex identities (Downham 2012, 7).

Despite the argument that women would have been restricted to their immediate world, especially in rural Iceland, this could be challenged. There is one significant example, a woman named Guðríðr was born in Iceland, accompanied her parents to Greenland, travelled with her husband to Vínland and after his death she took a pilgrimage to Rome. These exploits have led to her being labelled the most travelled woman of the early 11th century (Jochens 2001, 86). Admittedly, this is one example which could be the exception but in a period recognised for high levels of diaspora it is also likely that this movement would not have been restricted to the male population. It has been suggested that female independence was a social fact in the Viking Age (Christiansen 2002, 17). One of the initial settlers in Iceland was female, Unnr in djúpúðga, and she was argued to have been extremely powerful, influential and independent and established a dynasty in Iceland (Clover 1993, 3). Taking into consideration that fact that for significant periods of time certain members of the population could be away from home, this would probably have been mainly men partaking in trade and raiding exploits. As such, women would have had to manage the family land and wealth as well as other family duties. The legal responsibilities held by freeborn Icelandic women are often interpreted as being comparable to those of men although Byock (2001, 196) has suggested that Icelandic women played no substantial role in the open political life and did not enjoy full legal equality with men (Byock 2001, 196). Whether or not similar roles should be seen as comparable and equating to equality is questionable but whether this necessarily suggests that women were not equal is also debatable. Certainly in the settlement and colonisation of new lands

representation of both biological sexes would not have been solely due to the need to procreate.

An aspect that is inextricably interconnected with biological sex and gender identity is age, and the ageing of an individual can be perceived to be a defining aspect of that person's identity (Stig Sørensen 2009, 254). The age at which a person gained or was attributed a gender identity has been debated by scholars. Welinder (1998) believes that gender identities were bestowed at birth which is an idea supported by Thunmark-Nylén (2006, 442) who suggests that children probably wore the same dress as adults. Evidence from child graves at Birka indicate that children were buried with gendered items as well as objects associated specifically with children, such as rattles (Gräslund 1972). The appearance of child-associated items as well as gender specific items associated with older individuals in graves during this period suggests that children were not necessarily subscribed to the same gender identities as their elders. There is the potential for a person's gender identity to alter during the course of their lifecycle, for example in Old Norse literature Egill Skallagrimsson was the epitome of male authority but loses his masculinity as he grows old and disabled (Ystgaard 2007, 63). Throughout an individual's lifecycle their identity, as perceived by society and the individual, is likely to develop and change as the person reaches specific ages and stages in their life. This is argued to be the case by Thedéen (2008, 90) who suggests that differences in the number and type of beads in graves located in Gotland different gender and age identities.

Little is known concerning the ages of Viking settlers in the North Atlantic but it is likely that given that both females and males were present on these settlements then children would have been present too. It is known that there were only a few females present at the Vínland settlement and only one child, Snorri, is mentioned and was born

during the expedition (Wallace Ferguson 2001, 136). However, it is appreciated that there was definitely mass movement of entire families during this period (Jochens 2001, 78). This movement would have helped to maintain previous structures within the family and identities already attributed to specific persons. It also further highlights the strong kinship links that had developed during this period and the desire to retain family connections. Jochens (2001, 79) suggests that familial bonds created by raiders and traders of Scandinavian origin through casual encounters and rape of local Anglo-Saxon and Celtic women may have induced some Vikings to return to the same places year after year. However, this is an unlikely scenario but it does demonstrate the importance of family and blood ties as told through Old Norse literature. Arguably marital status, rather than sex, defined property rights which further supports the argument for power associated with familial and martial bonds (Clover 1993, 4; Magnúsdóttir 2008, 40). It is apparent that families, including children, were important in Viking-age society which is particularly highlighted by the fact that the continuation of new settlements was dependent upon a sufficient population. There is still more to understand concerning the role of children within Viking-age society but it can be observed that kinship ties were important and so families would have been significant in society.

In Viking-age Icelandic society, every individual was related to the maternal and paternal kin (Skre 2001, 4). This would have meant that family ties and bonds were extensive. The example provided by Iceland demonstrates the importance of both females and males in the creation of new colonies. It has been argued that partnerships between the sexes were key to securing family property at home and increasing wealth by travelling and that this could explain why male descents sometimes took metronyms rather than patronyms (Christiansen 2002, 20). Therefore, marriages played an important role in the creation of these partnerships and extending family kinship

(Magnúsdóttir 2008, 40). The strong influence and role of women can also be observed through other roles such as warriors, poets and seeresses (Christiansen 2002, 21). Seiðr is argued to have been dominated by women (Tolley 2009, 166) and there is evidence from female graves to support the theory that seiðr was practised by women (Price 2004, 119). Through their role in seiðr women are argued to have been especially influential and powerful which is supported from abundant evidence from the written record that indicates seiðr practitioners were treated with great honour (Gardela 2008, 48). However, it has been noted that the perception of shamanism can be influenced depending upon the gender of the shaman and when undertaken by women it can be regarded as domestic rather than heroic (Tolley 2009, 145). However, this should not necessarily mean that it had any less importance. There are also passing references in literary sources which refer to female warriors, a role which has traditionally been associated with masculine identity (McLaughlin 1990, 194). Warrior status may have been aspired to by many men but in death it was granted to only a few and it has been suggested that weapons in graves may not necessarily reflect an actual experience of fighting (Hadley 2008, 275). The presence of weapons in graves need not indicate warrior identity but could also suggest social status and ancestral identity (Williams 2005, 264-7). There are few examples of female burials with accompanying military-associated grave-goods. It has been suggested that these may not necessarily reveal female warriors but could indicate rank or these items may represent a dead husband overseas (Christiansen 2002, 21). It should also be considered that these items usually associated with specific gender roles may reflect the gender of the individual as opposed to the biological sex. This highlights the plausible possibility that Viking-age society was not necessarily divided determined by two definitions based upon biological sex but could have allowed for multiple gender identities. As demonstrated in Iceland, and potentially other overseas

colonies, women and men's roles were likely to have been variable based upon situational circumstances.

It has been argued that in Old Norse literature there is a one-gender system with the superior aspect being comparable to the modern concept of masculinity (Clover 1993, 17). In the sagas women could obtain more masculine traits through their actions and, as a consequence, became more influential and powerful (Ystgaard 2007, 63). Questioning a person's masculinity or sexuality was extremely insulting and these insults are observable in saga evidence. For example, Njál was perceived as unmanly due to his inability to grow a beard (Ystgaard 2007, 63). In Njáls saga there are also many passages that specifically aim to cast a slur on Njál's manhood by making reference to bestiality (Jakobsson 2007, 1). There are many examples where reference to sexuality is an insult. King Harald is said to have 'fought lustily' because 'the mare' (his wife/mistress) was with him at the battle (Magnusson & Pálsson 1966, 118) and in Njáls saga, Skarphedin insults Thorkel by claiming he had sexual contact with a mare (Cook 2001, 204). Laws make reference to this type of insult, highlighting that these insults were not limited to reference in sagas. A section of the Gulathing code deals with 'fullréttisord' and states that compensation must be paid if a man compares another man with a female animal (Turville-Petre 1983, 16). Despite indications that seiðr practitioners were treated with honour and respect, in Old Norse literature, male practitioners of seiðr were perceived as 'unmanly' and comparable to homosexuals. This could be due to the practice being a metaphor for domestic activities and female roles (Gardela 2008, 50). However, Óðinn was both a male god and the master of seiðr. Price (2004, 114) has suggested that, based upon anthropological studies of Sámi shamans, a blurring of gender boundaries occurred when practising seiðr. This demonstrates the difficulties in identifying and interpreting Viking-age gender identities in specific activities and within society as a

whole. Identifying sexual orientation in the archaeology is extremely difficult, if not impossible. The idea that ambiguous graves, where the material culture and biological sex may not be consistent with our ideas of gender, could indicate a different gender identity has been criticized (Jensen 2008, 26). Gender and sexual orientation are very personal aspects of a person's identity and therefore are unlikely to have been displayed through such a public and ritual act where the individual's identity is not necessarily displayed. Interpreting gender identity from archaeological evidence alone is essentially flawed and evidence from other sources must be consider if there is to be any aspiration of interpreting Viking-age gender identities.

Viking-age Social Identities

It can be observed that Viking and Norse society has been interpreted in many ways with the full complexity of social identities gradually being recognised and appreciated. Early research was often undertaken within nationalistic frameworks, facilitated by the perception that modern Scandinavian states formed during this era. The use of saga evidence has also been particularly controversial, as seen in the early scholarship of Jacob Keyser and Peter Andreas Munch who claimed the Icelandic sagas for the Norwegians. This led to researchers, such as Svanberg (2003), to become critical of 'Viking culture' believing modern interpretations to be too heavily influenced by nationalistic ideologies. However, in modern scholarship terminology such as 'Viking' and 'Norse' is generally applied without preconceived notions of state identity and rather to describe communities that display considerable similarities including aspects such as language, religion and material culture. Often, earlier research into Viking-age society was largely dictated by the written record which recorded certain events and occurrences. The relationship between material culture and documentary evidence is the

source of some contention. As medieval archaeology, as a discipline, has developed the use of archaeological evidence to support the documentary evidence has been criticised. In Viking-age research archaeological evidence was used merely to support interpretations drawn from the sagas and other documentary evidence. This was especially prolific in early Viking-age archaeological research which was often dictated by interpretations of saga evidence. However, advances in the study of medieval archaeology have challenged this relationship between the material culture and the documentary evidence. As this has developed it has impacted upon Viking-age archaeology which is now being appreciated as a valid source of evidence and not merely utilised in an ad-hoc way to support the documentary sources.

The negative perception of the use of the term 'Viking' is further observed in debate surrounding the concept of a 'Viking Age'. The Viking Age is a modern construct which has been defined by particular events deemed as significant by modern scholars. Despite the reservations of Hodges (2006), who believed that the influence of Vikings as agents of change in Europe had been overestimated, scholars such as Downham (2012) still believe that the 'Viking Age' as a term is still valid. The everincreasing volume of archaeological evidence is supporting the validity of interpretations drawn from archaeological evidence and suggests that there was significant change in European society during the Viking Age. Furthermore, the rapid accumulation of archaeological material in recent years is enabling scholars to make comparisons across a wide geographic region. This allows them to move beyond small-scale regional studies which are often determined by modern country borders. Opposed to small-scale regional research, a transnational assessment allows one to appreciate the widespread changes within society. This has demonstrated that there was considerable variation in Viking-age society not only across the North Atlantic but also across

Scandinavia, an area that has often been considered to be homogeneous. In the North Atlantic communities in Iceland and Greenland display many similarities and appear to have more in common with each other than they do with communities in Scandinavia. This could be the results of a mixed population from different regions including the British Isles and Scandinavia.

Furthermore, as a result of the increasing amount of archaeological evidence being discovered, theoretical approaches to the archaeology of the Viking Age are rapidly developing. This is impacting upon the way in which scholars view Viking Age studies as they begin to engage with the multifaceted dimensions of social identity and structure of society. Academics, such as Price (2002), have utilised approaches from other disciplines and considered how the Viking and Norse thought. By applying these new theoretical approaches to the study of Viking and Norse societies there has been a significant shift in how the terms 'Viking' and 'Norse' are considered. These terms are seen less as ethnic or national identifiers and instead are used as a means of broadly defining a group of people who shared similar traits observable in aspects such as language, religion, mythology and material culture. Through the advances in archaeological theory and the application of approaches from different disciplines previous notions of Viking-age societies are being challenged. Not only is it now recognised that there was considerable variation between societies that have often been classed as 'Viking' or 'Norse', especially when comparing North Atlantic communities to Scandinavia, but the full complexity of society is beginning to be comprehended. In Iceland and Greenland the social structure was dependent upon kinship whereas in Scandinavia power and authority was becoming more centralised and therefore based upon kingship. Within this, Viking-age society was a complex amalgamation of social identities creating a complex social stratification within society. All the societies display

indicators that suggest that the society was hierarchical, but the way in which this hierarchy was structured and how it formed varied. Despite identity in archaeology being a 'hot topic' it is clear that it can help provide valuable insights into past societies.

Viking-age and Norse social identities and society are complex amalgamations of various interlinking aspects and as such there is still a significant amount of research that needs to be undertaken when attempting to understand them. Interpretations drawn from a limited range or specific form of evidence are not sufficient to fully understand the multifaceted social identities which form Viking-age and Norse society. Material culture is not a direct reflection of society and equally saga evidence does not reveal an accurate representation of all society. Archaeological evidence must not be used merely used to complement ideas drawn from saga evidence. These forms of evidence should be used together but not selectively. New developments in archaeological theory must be applied to the study of Viking-age archaeology to challenge older theories which were often heavily based on interpretations drawn from saga evidence. The study of animal-human relationships has been recognised as providing an insight into the complex and diverse ways in which humans identified. The agency of animals in human social relationships has been significantly overlooked, despite much work being undertaken on zooarchaeological assemblages and the importance of animals in human society noted through Norse mythological studies and mentions in sagas. As such, an examination of the interdependencies between humans and animals will reveal aspects of social identities that have not been appreciated or recognised before and this has the potential to shed new light Viking-age society and therefore the extent and significance of the perceived changes occurring across Northern Europe during this period.

CHAPTER THREE

Animals in the Norse North Atlantic

omestic animals were vital in the establishment of permanent settlements and colonisation of land in the Norse North Atlantic. It is acknowledged that the early Viking settlers brought with them animals from their homelands to their new settlements. The settlers would have had to transport animals from their homelands as they were colonising a land with no previous inhabitation. In order to survive they would have transported the main domesticates, such as cattle, sheep, pig, horse. However, the animals present would have differed across the period of this study and in the different geographic areas, reflecting differences and changes in society.

Understanding of early agricultural practices is a topic that is under constant evaluation. For example, there has been much debate concerning whether early settlers in Greenland and Iceland were able to grow cereals (Keller 2010, 3). To understand and examine this fully it is crucial to consider the environment and landscape, and appreciate how this may have differed across the region.

The rapid developments in this area demonstrate the knowledge that is still to be obtained. It is essential to consider the region as a whole, to observe differences and similarities across the region. It is key to examine which animals were present on the various sites, but also the wider issues of environment, as this was a region that has a seemingly similar landscape but is in fact quite diverse. By examining the evidence for domesticated animals and exploring how these would have shaped human social relationships a new, more nuanced, insight will be gained into the structure of society in these northern lands.

The North Atlantic Region

The North Atlantic region comprises a diverse landscape [see fig. 3.1] which also displays considerable similarities across the region. It has been suggested by a number of academics that areas chosen for settlement by Norse immigrants resembled their homelands (Fellows-Jensen 1984, 149; Graham-Campbell & Batey 1998, 4; Ritchie 1993, 11). In his doctoral thesis Bjarni F. Einarsson (1994, 37) suggests that Norwegian settlers may have been drawn to the site of Granastaðir due to the similarities of terrain to their homelands, in particular Nordland and Troms, in Norway. He notes that, although today there is a notable difference between Norway and Iceland, when the settlers arrived there would have been reasonable similarities between Troms and Northern Iceland including the topography, climate and environment and visual similarity. However, what at first may have appeared to resemble their homelands may have in fact concealed significant differences and it has been suggested that this may have been the cause of the failure of some of the early settlements (Halstad McGuire 2009, 31).

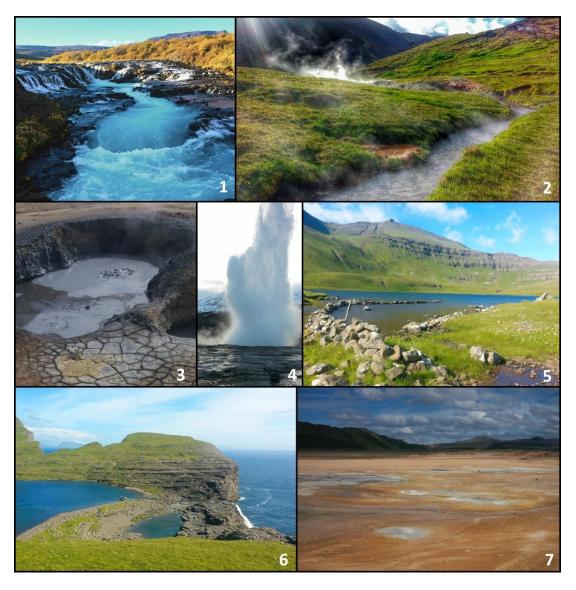


Figure 3.1 Diverse landscapes across the North Atlantic. 1, Brúarfoss, Iceland; 2, Reykjadalur, Iceland; 3, Mývatn, Iceland; 4, Strokkur, Iceland; 5, Fámjin, Faroe Islands; 6, Sørvágsvatn, Faroe Islands; 7, Mývatn, Iceland (photos: L. Hogg).

The region was notably diverse notably in the fact that some areas were already populated prior to Norse settlement whereas there were also vast expenses of land which were devoid of any human settlement. Around AD 825 Dicuil, an Irish Monk as the court of Charlemagne, wrote about islands a two day journey from Scotland which were inhabited only by birds and sheep (Dicuilus 1967). It is believed that Dicuil is referring to the Faroe Islands (Jones 1986). Permanent substantial settlement in the Faroe Islands and the other sparsely, seasonally and unpopulated areas of the North

Atlantic would have dramatically transformed the land. This has been noted to have happened in Iceland where it is acknowledged that, in particular, there would have been a certain level of deforestation (McGovern *et al.* 2007, 29; Buckland 2000, 146; Smith 1995, 320) although this would have continued into the high-middle ages (Vésteinsson *et al.* 2002, 5). Prior to settlement in Iceland the largest terrestrial mammal would have been the arctic fox and therefore the introduction of domestic species brought by the settlers would have been major agents of environmental change, especially herbivores and pigs.

Terrain

As mentioned in the previous section, the terrain of the North Atlantic colonies may have, in some places, resembled the terrain in parts of the Scandinavian homelands (Einarsson 1994, 37; Vésteinsson 2000, 165). Therefore, these similarities would have probably proved to be an encouraging enticement for the early settlers seeking land to farm in the west as this would have allowed a degree of familiarity with the landscape for the Scandinavian settlers. Bjarni F. Einarsson (1994, 38) argues that their 'ecological heritage' would have encouraged them to settle in Iceland, drawing on their understanding of 'good land' based on their knowledge of their homelands. Similarities, such as geology, can be observed: for example steatite can be quarried in both Shetland and Norway. It has been noted by Einarsson (1994) that on first appearance the settlers would have drawn similarities between the landscape in certain areas of Iceland and several regions in Norway. This region was surrounded and connected by the sea and this would have been important in constructing a sense of identity and understanding of the wider world. The sea should be seen as less as a barrier and more as a facilitator of communication and wider networks. Far from being marginal the colonies in the North

Atlantic were well connected and eventually established good trade routes and wider networks. The seascape would not have only provided a means of communication but it would have also offered the opportunity to fish which would have become an important component in the diet of these coastal and island populations (Sigurðsson 2008, 566). The sea would have also provided seaweed which could be used for compost and fodder (Buckland 2000, 147). This would have occurred across the North Atlantic region, as seen at Viking Age sites such as Alþingisreiturinn (Garðarsdóttir 2010) and utilisation of seaweed in this manner is still observed during the 20th century on coastal sites across the North Atlantic, such as at North Ronaldsay, Orkney (Fenton 1969, 207).

However, there were noticeable differences between the landscapes of the North Atlantic. Despite their close proximity the landscape of Orkney differs considerably from Shetland and has much more in common with Caithness on the mainland of Scotland (Omand 1995, 102). At the *landnám*, the Faroe Islands would not have had much forest cover (Buckland 2000, 147) and also, in contrast to Iceland, all of the land is within a short distance of the sea. This proximity to the sea has determined settlement choices and farming would have been confined to this restricted area and was probably similar to modern farming practices on the islands (Vésteinsson 2000, 165). In contrast, Iceland offered extensive coastal plains and inland valleys (Buckland 2000, 147) and this would have allowed for different farming practices and overtime farming changed to a much greater emphasis on sheep husbandry (Vésteinsson 2000, 167). In further contrast, Greenland would have consisted of barren mountains and valleys containing birch and pine forests (Bertelsen 1991, 22). Notably Iceland would have had a particularly challenging terrain, shaped by glaciers and volcanic activity, to the settlers used to Scandinavia and Britain. Along with dry lava flows there would have

also been hot springs and steam vents which would have created a landscape quite unlike the homelands of the early settlers. This goes some way to demonstrating that despite the homogeneity of the North Atlantic land- and sea-scapes there were also considerable and significant differences which the inhabitants of this region would had to confront.

Weather & Climate

It has been repeatedly suggested that the climate may have been particularly favourable for the first settlers in the North Atlantic (Buckland 2000, 147; Ogilvie et al. 2000, 34; Sigurðson 2008 567). Ogilvie (1991, 235) utilised written sources to glean evidence that could suggest a milder climate but she noted the lack of sources from the first few centuries of settlement. However it could be suggested that Iceland experienced a milder climate than present prior to the thirteenth century. Scaling of the hemispheric composite to the Northern Hemisphere temperature records indicates a warmer period followed by cooler temperatures (Crowley & Lowery 2000, 54). This favourable climate would have enabled the diaspora that characterises this period. The climate across the North Atlantic region would have probably been temperate enough to the extent that it was probably warm enough at L'Anse aux Meadows that the animals could be left out to graze during winter (Wallace 2008, 609). The story of Iceland's first settler, Flóki Vilgerðarson, details how he spent the first summer hunting the abundant wildlife but failed to prepare sufficiently for the winter. Buckland (2000, 147) suggests that this highlights how 'all landscapes can look deceptively productive in the right season'. The early conditions may have proved favourable but with changing climate conditions, seen through evidence from fauna, and the introduction of species to a landscape previously

unused, would have transformed conditions dramatically resulting in decreasing productivity (Buckland 2000, 147; Dugmore & Buckland 1991).

It has been noted that reliable data for the climate in the North Atlantic during the Norse period is limited (Byock 2001, 57). However a number of scholars have made arguments in regards to the type of climate that the settlers on the North Atlantic Islands may have experienced. Prior to settlement of Iceland in the 9th century, Gísli Sigurðsson (2008, 567) argues that, the climate would have been comparatively cold with the temperature rising steadily from the late ninth century. He notes that the Greenland icecap is a 'kind of natural chronicle' documenting changes in temperature. He also notes that Raven-Flóki is said to have named Iceland, supposedly reflecting the climate. Gísli Sigurðsson does note that the settlers in Greenland would have at first experienced a more favourable climate and suggests that the failure of the Greenlandic settlements was due to the climate becoming harsher from the middle of the 13th century. Other scholars (eg: Ogilvie et al. 2000) have utilised both scientific data and documentary sources to demonstrate that until the mid-14th century the North Atlantic region would have benefited from a notably mild climate.

Earlier attempts are reconstructing the climate were based on documentary evidence. More recent advances have allowed for studies of core samples drilled from the Greenland icecap and these results proved fruitful in understanding Viking Age environment. From both the ice-core data and the documentary sources it can be concluded that temperatures were generally higher in this period compared with the centuries preceding the 4th century (Ogilvie *et al.* 2000, 43). This would have facilitated not only exploration but also given ample opportunity for settlement. Arneborg (2003a, 10) notes that when the farm at Gården under Sandet was constructed the environment would have been vastly different from today and would have provided a favourable

landscape for farming. During the centuries after the *landnám* the climate would have been favourable and the general climate across the region would have probably been fairly similar with recognisable distinctive seasons. Notably, Greenland would have had a similar climate to Iceland but the summers would have probably been warmer and the winters colder (Bertelsen 1991, 22). These slight variations across the region would have allowed the settlers to adapt daily activities and practices to suit the variations in environment.

Natural Phenomena

Unlike Iceland, the homelands of the first settlers would have not have had active volcanoes. Volcanic eruptions would have probably been a terrifying experience, especially for the first settlers. In the early literature the most active Icelandic volcano, Hekla, is known as 'the gateway to hell' (Karlsson 2000, 174). Stöng, a Viking Age farm preserved under a layer of ash, is testament to the fact that volcanic eruptions would have proven a challenging force which the inhabitants of this land would have had to encounter and confront. The AD 1104 Hekla eruption destroyed numerous farms in the previously very fertile valley, Þjórsárdalur [see fig. 3.2], in which Stöng was located (Dugmore *el al.* 2007, 1; Stenberger 1943, 314). At some point between AD 900 and 1000, volcanic ash from Katla was deposited across southern Iceland (Smith 1995, 326). These examples serve to highlight that the impact of a particularly destructive eruption upon farming and everyday life could occur for a significant period of time after the actual event.



Figure 3.2 The barren volcanic landscape at Þjórsárdalur (photo: L. Hogg).

Although a challenge for the Norse settlers, these volcanic eruptions are useful for scholars when interpreting Icelandic settlement, especially for the first few centuries. Tephrochronology has been described as 'a uniquely powerful tool for the assessment of landscape change in general, and human impacts on geomorphology in particular' (Dugmore et al. 2000, 32). The tephra, a generic term for the solid particles ejected during volcanic eruptions (Byock 2001, 89), in certain circumstances provides a thick layer of ash which can be correlated with associated earthworks. Once a date can be given to the particular layer then it is possible to associate a date with the earthworks. When identified, tephra layers can be used to assess spatial variation and sediment accumulation and thus can reveal distinct settlement phases (Dugmore et al. 2000, 32; McGovern et al. 2007, 2). The usefulness of tephrochronology has meant that since its

introduction it has become the standard dating method in Icelandic archaeology, preferred over other conventional dating methods (Vilhjálmsson 1991, 97).

Tephrochronology started to be developed during the second quarter of the 20th century. Whilst excavating Þjórsárdalur in 1939 the archaeologists were joined by a geologist, Sigurður Þórarinsson, who started to apply the tephra layers to archaeological evidence to utilise it as a dating technique (Dugmore el al. 2007, 28). Early approaches correlated the identified tephra layers with written accounts of volcanic eruptions. However, many of these sources were written a number of years, sometimes centuries, after the event in question. This use of written accounts with tephra data was heavily criticised by scholars such as Vilhjálmur Vilhjálmsson (1991, 103) who noted 'the information from the annals has unfortunately been used as if it were scientifically measured and verified data'. It was also noted that many of the tephra layers were difficult to distinguish between and that could lead to cases of misidentification (Vilhjálmsson 1991, 103). However, a significant amount of research has been undertaken since Vilhjálmur expressed his concerns. For example, the so-called landnám tephra layer has now been securely date to C.E. 871±2 by analysis and correlation with the Greenland Ice Sheet (McGovern et al. 2007, 28). The source of the ash layer named the 'settlement layer' was the Vatnaöldur fissure in southern Iceland, and from this the eruption responsible can be determined (Grönvold et al. 1995, 152; Zielinski et al. 1997, 26, 632). Analysis of this enabled scientists to date the settlement layer revealing a date for Norse settlement in Iceland. The recent developments in tephrachronology (Dugmore at al. 2000; 2006; Mairs et al. 2006) have vastly improved its application in archaeology and, as such, it is an extremely useful tool for archaeologists in Iceland and, sometimes, across the North Atlantic.

Faunal Assemblages from North Atlantic Excavations

There are various restrictions and limitations to consider when assessing faunal remains from archaeological sites in the North Atlantic. Due to the nature of the North Atlantic topography many of the sites are situated in coastal locations and, as such, the preservation of remains varies considerably, especially as coastline in some locations has deteriorated quite significantly. This is particularly evident at Kilpheder, South Uist, which has notably good preservation conditions for inorganic materials but severe coastal erosion has impacted significantly on the site, exposing remains and in the process destroying the evidence (Parker Pearson *et al.* 2011, 62; Parker Pearson *et al.* 2004, 235). Severe coastal erosion impacts upon many sites across the North Atlantic, including Freswick Links, Caithness (Morris *et al.* 1995, 207).

Issues of taphonomy are especially problematic in North Atlantic assemblages. Unfortunately not all excavation reports note the soil type at the site. Given this lack of information and that preservation conditions can vary dramatically across the region, it is sometimes necessary to use one's own judgement. For example, the lack of faunal remains observable at Biggings, Papar Stour, Shetland (Crawford & Ballin Smith 1999), could suggest poor preservation conditions.

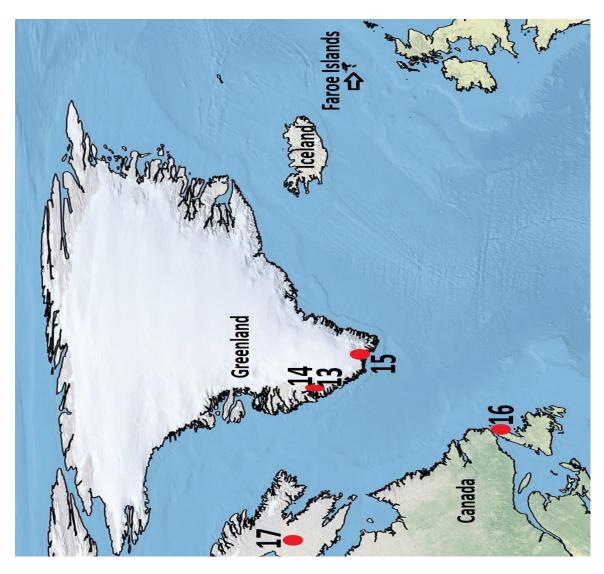
Other factors, such as the type of site or deposit excavated, can impact significantly upon domesticate representation in an assemblage. A high number of cattle bones were found at Freswick which could be a reflection of an excavation focus on midden deposits. It has been noted that midden deposits usually only contain food waste and so are likely to reveal a high frequency of cattle bones reflecting consumption (Beck & Hill 2004, 305). As well as coastal erosion other external factors may impact upon the recovery of faunal remains. For example, in the Faroe Islands many of the places mentioned in the written sources are still occupied (Arge *et al.* 2005, 605). This

would dictate the focus of excavations and therefore the representation of types of site in the archaeological record.

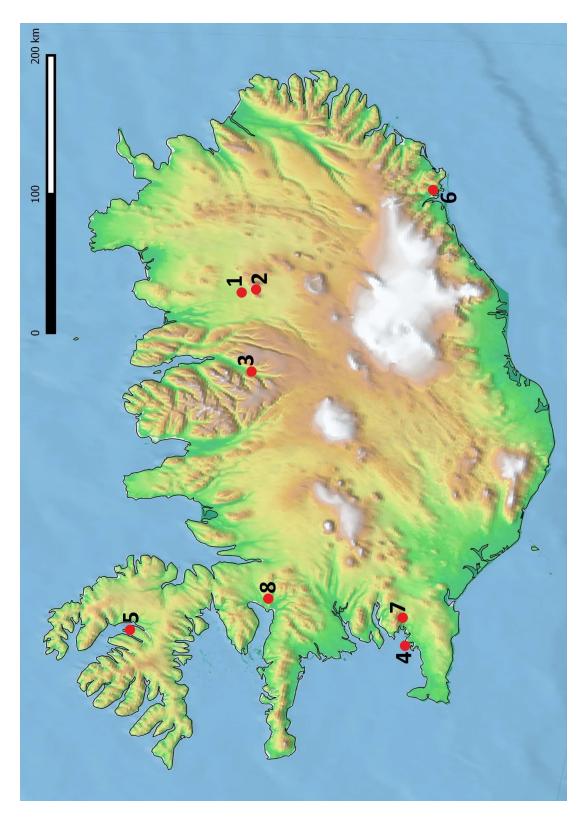
As already noted, the detail of excavation reports varies considerably. Notably not all of the excavation reports are detailed enough to record the way in which the samples were obtained (for example: sieved or hand-collected). Often raw data are excluded from published reports, or simply not accessible, which limits conclusions that can be drawn from the evidence. For instance, age of slaughter can be particularly insightful in interpreting the use of and human interaction with animals. Unfortunately ageing data is not always available due to the nature of some published literature which excludes raw data. In addition, there is no standardised method for recording animal bone data which has resulted in a mixture of approaches utilised. Generally two techniques are employed: NISP, Number of Identified Specimens, and MNI, Minimum Number of Individuals. Generally MNI is recognised as a more interpretative method as it is reliant upon the judgment of the person undertaking the analysis and is susceptible to error (Sykes 2007, 9). Both of these techniques have flaws. For instance it is well-known that cattle bones fragment more and therefore cattle have a higher NISP (Marshall & Pilgram 1993, 264). However, from the published excavation reports it can be observed that NISP was more consistently used to record animal remains. The inconsistent nature of the data presented in published reports demonstrates one of the many issues encountered when using this form of evidence to interpret the animals present on different types of site in the Viking and Norse North Atlantic.

Table 1: Main sites considered in this study [see maps. 1, 2 and 3].

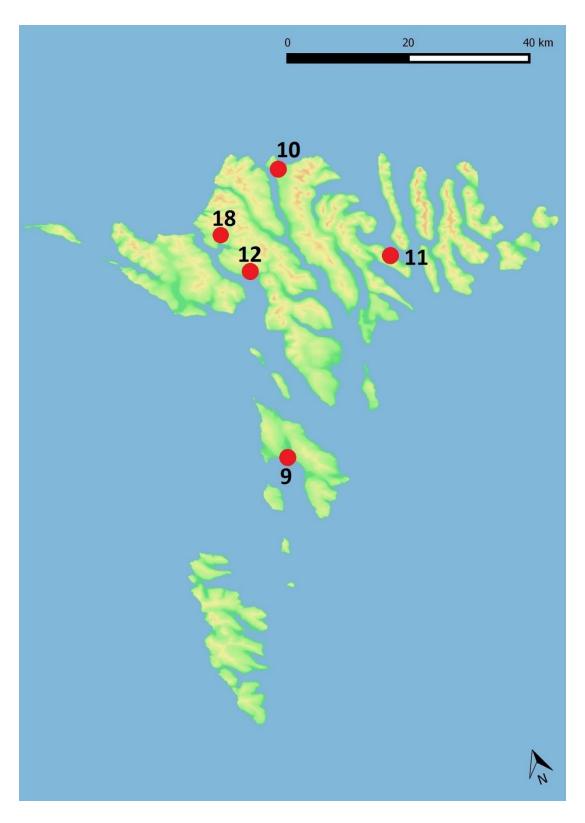
Site Name	Page number	Corresponding number on map
Iceland		
Hofstaðir	91	1
Hrísheimar	94	2
Sveigakot	94	2
Granastaðir	95	3
Aðalstræti, Reykjavík	97	4
Alþingisreiturinn, Reykjavík	98	4
Vatnsfjörður	99	5
Hólmur	100	6
Hrísbrú	102	7
Eiríksstaðir	104	8
Greenland		
Gården under Sandet	107	13
Sandnæs	109	14
Brattahlið	110	15
Canada		
L'Anse aux Meadows	112	16
Baffin Island	113	17
The Faroe Islands		
Undir Jukarinsfløtti	119	9
Argisbrekka	122	10
Toftanes	124	11
Kvívík	126	12
Vestmanna	129	18



Map 3.1 The North Atlantic with the sites in Greenland and Canada marked. Map data from: Viewfinder DEM (http://www.viewfinderpanoramas.org/dem3.html#nat) and Natural Earth (http://www.naturalearthdata.com/)



Map 3.2 Map of Iceland with the key archaeological sites marked. Map data from: Viewfinder DEM (http://www.viewfinderpanoramas.org/dem3.html#nat) and Natural Earth (http://www.naturalearthdata.com/)



Map 3.3 Map of the Faroe Islands with key archaeological sites marked. Map data from: Viewfinder DEM (http://www.viewfinderpanoramas.org/dem3.html#nat) and Natural Earth (http://www.naturalearthdata.com/)

Table 2: Zooarchaeological data from the main sites (only domesticates are listed).

Site	Horse		Cattle	Sheep/Goat	Horse/Cattle Cattle Sheep/Goat Sheep Goat	Sheep	Goat	Pig	Pig Chicken Dog	Dog	Cat	Animal
				•	/Cattle	•))		bone
Aðalstræti 14-16¹	3		1	32				118				
Alþingisreiturinn ²	32		551	111		325	68	27	1.	8	1	
Argisbrekka³			7	71				1				
Brattahlið (early 11th) ⁴			7	9		1	-					
Brattahlið (late 11th-12th) ⁸	1		25	28		9	2					
Eiríksstaðir ⁶				7								7
Gården under Sandet ⁷	1		82	107		23	18					
Granastaðir ⁸	46		312	570		63	1	72				
Hofstaðir ⁹	73		2114	5702		620	2	299		2	13	
Holmur ¹⁰	~		Λ	^				7			2	
Hrísbrú ¹¹		1	10	64	13			1			2 33	
Hrísheimar ¹²	9		371	1667		298	25	347			351	
Kvívík ¹³	~		Λ			1		7				
L'Anse aux Meadows ¹⁴							8	۸.			2	
Sandnæs ¹⁵	1		37	31		9	1	6			2	
Sveigakot ¹⁶	14		217	575				103				
Toftanes ¹⁷			97			109		3				
Undir Junkarinsfløtti ¹⁸			21%	%69		4%		16%				
Vatnsfjörður ¹⁹	2		16	102		6	1	30				
Vestmanna ²⁰												7
İ	000						7		1			

McGovern 1994, 9. McGovern 2009; 10. Einarsson 2015; 11. Zon & Byock 2014; 12. McGovern et al. 2006; 13. Dahl 1951; 14. Wallace 2009; 15. McGovern et (1. Tinsley & McGovern 2001; 2. Pálsdóttir 2010; 3. Gotfredsen 2007; 4 & 5. McGovern & Pálsdóttir 2006; 6. Ólafsson 2001; 7. Enghoff 2003; 8. Amorosi & al. 1996; 16. McGovern et al. 2004; 17. Stummann Hansen 2013; 18. Brewington 2011; 19. Pálsdóttir et al. 2008, and Dupont-Hébert 2011; 20. Michelsen &

Arge 2009, and Paulsen & Arge 2008)

Iceland

There have been a number of excavations undertaken in Iceland in recent years and therefore the excavations have been carried out with modern methods and as a result are generally well recorded. However, as noted by Vésteinsson (2004, 82), there is a tendency for these excavations to be concentrated in particular areas of the country. He has highlighted that there is a concentration of excavated sites in the northeast, the Mývatn area, and in the southwest, within a two hour driving radius of Reykjavík. There are significant gaps in our archaeological knowledge in the northwest and far east of Iceland. This is possibly a reflection of contemporary issues such as access to these archaeological sites. Many archaeologists are based in Reykjavík and transportation is generally better in this region. Despite this geographic inconsistency our knowledge of early Iceland has been dramatically enriched by the data obtained from these successful and thorough archaeological excavations.

In Iceland zooarchaeology has been extremely influential in understanding human impact and climate change, especially in relation to the *Landnám* and early medieval period (McGovern *et al.* 2001; 2007). It is often remarked that prior to *Landnám* the largest terrestrial mammal in Iceland was the arctic fox, and there was probably a few hermits on the island who subsequently fled when the Norse arrived. Therefore, faunal assemblages from early settlement sites support the documentary evidence which describes how the settlers brought with them the animals they required to continue farming. Faunal remains from Iceland have therefore been especially useful in gaining an insight into the animals the settlers brought with them. This reveals much concerning how these early settlers would have utilised the landscape and the pastoral farming techniques employed. The evidence suggests that there was a heavy emphasis on dairy cattle and sheep (Sveinbjarnardóttir *et al.* 2008, 1).

However, the preservation rate of faunal remains varies considerably in assemblages from Viking and Norse Iceland. Often the remains are highly fragmented and have been recovered by flotation and the use of a fine mesh, such as the remains from Aðalstræti 16. It has been noted that the bone from Viking Age sites in Iceland is often calcined and suggested that this probably indicates that early Icelandic settlers disposed of bones by adding them to wood-based hearths (Tinsley 2001, 4). In addition to the number of sites with highly fragmented bone remains, a number of other Viking Age sites in Iceland have produced very few faunal remains. This, of course, may not be a reflection of the environmental conditions, but also an indication of function of the site. In the case of Kot, it is thought that this may have been a shieling structure (Kupiec 2010, 18) and therefore only seasonally occupied. The small amount of faunal remains reflects that processing and conspicuous consumption of meat was not occurring at the site. There is also a tendency to focus excavation and research on midden deposits and whilst these are useful and informative they can also limit our interpretation of the site. Generally, however, useful data are available from enough sites to draw a valid conclusion on the number of animals and species present on different sites.

Faunal remains from Viking Age and Norse sites across Iceland represent the main domestic animals that it is generally accepted were transported from northern Europe during the early settlement. Therefore, *Bos Taurus* (cattle), *Sus* (pig), *Ovis* (sheep/goat) and *Equus caballus* (horse) are all well represented in the assemblages from across the island. However, the volume of the preserved bone varies considerably across the country and this can prove problematic when trying to draw comparisons. Although the assemblages are, to a large extent, similar. There are some noticeable

differences which can reflect the function of the site and the environmental conditions of the area.

The key sites to be considered are, as previously noted, located in certain areas of the country. One is somewhat limited in choice due to the nature of published data and the accessibility of excavation reports. However, comparisons can be made with other contemporary sites, but maybe not to the detail in which one would hope.

Hofstaðir

Hofstaðir is the most extensively published excavation site in Iceland and, as a result, shall be discussed first given the available data. It is a high-status farm located in the Mývatn region in northeast Iceland, dating to roughly the mid-10th to mid-11th centuries. Hofstaðir is often cited in literature dealing with Viking pagan beliefs for being an excellent example of a pagan temple which was a conclusion drawn for a number of reasons, including the size of the main hall and the place name (Lucas & McGovern 2007, 7-8). It has been the subject of extensive excavations and it was the focus of the first monograph from the Institute of Archaeology Iceland (FSI). The 1908 excavation by Daniel Bruun resulted in the site being classed as a temple, an interpretation that lasted for most of the early twentieth century (Lucas & McGovern 2007, 8). The excavation in 1965 led Olsen to define Hofstaðir as a farm with a chieftain who also acted as a priest (Lucas & McGovern 2007, 8). The most recent excavations were the subject of the first Icelandic archaeology fieldschool and were conducted as an open air excavation focusing on the Viking Age hall and its associated buildings (Lucas 2009a). It was through these excavations that archaeologists were able to reinterpret the site concluding that rather than a religious temple it was in fact a high-status farm. This excavation was therefore a pivotal moment in Icelandic archaeology whereby the

application of new archaeological methods and techniques were providing a new insight into the way in which Icelandic archaeology was undertaken and interpreted.

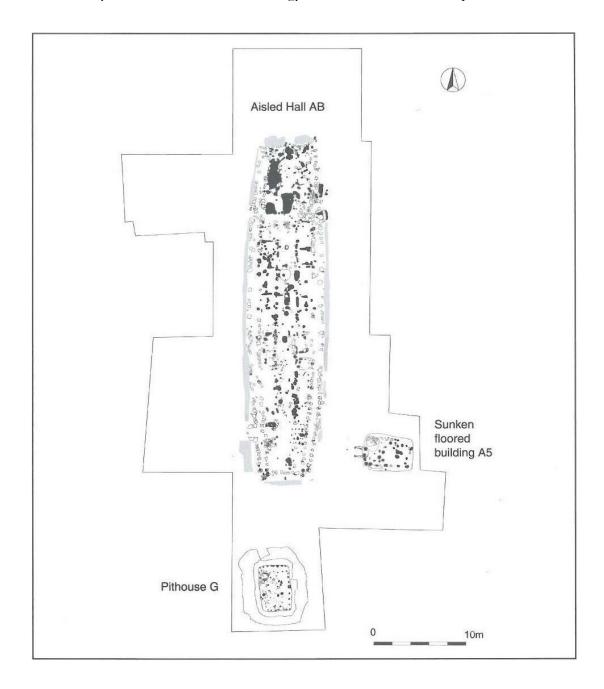


Figure 3.3 Phase 1 settlement plan (Lucas 2009a, fig. 3.4)

The open area excavation was particularly beneficial for comparing the bone assemblages with the wider stratigraphy of the site (McGovern 2009, 168). This was especially useful and the faunal assemblage was obtained from the larger excavation area

and structures as well as the various middens. Also, the application of more modern excavation and recording techniques allowed for the faunal assemblage to be more adequately obtained, for example all the contexts at Hofstaðir were sieved through a 4mm mesh (McGovern 2009, 169).

From the assemblage it can be seen that dogs were present on the site, although dog bones are rare, as dog tooth marks are widespread throughout the assemblage (McGovern 2009, 220). It is also demonstrated quite clearly that animals had a special role on this site. There are numerous cattle skulls which reveal evidence for specialised butchery and prolonged display on the outside of the building (McGovern 2009, 236). There are also several concentrations of cat bones, although McGovern (2009, 221) does not believe these were deliberate deposits as no complete skeletons were found. He has noted that there were cut marks on the bones consistent with skinning. Gloves made of cat fur are noted in several places in the Sagas, including the *Granlendinga saga* where reference is made to a powerful sorceress who has gloves made of white cat fur.

It is notable that the percentage of cattle bone in the assemblages actually increased from around 23% in Phase I to around 25% in Phase II-III. This is a pattern that contrasts with other contemporary sites, such as at the nearby site of Sveigakot where cattle bone decreases from around 35% in the early deposits to 20% by 11th century (McGovern 2009, 188). It also contrasts with what is generally accepted as a change from a bovine to a caprine economy, to meet the demand created by the expanding market in wool. This is one of the many reasons given in the interpretation of this site as high-status.

Hrísheimar

Hrísheimar, like Hofstaðir, is located in the Mývatn region of Iceland. Unlike Hofstaðir, occupation at Hrísheimar was comparatively short-lived and the site is sealed by H-1104 tephra (McGovern 2009, 168). It is thought that Sveigakot and Hrísheimar were occupied at the same time and that their later phases coincide with Phase I and Phase II at Hofstaðir (McGovern 2009, 168). Similar to Hofstaðir, Hrísheimar is thought to be a wealthy site. Significant evidence for abundant iron production has been interpreted as indicating a household with wide economic contacts (McGovern 2009, 168). The excavation itself did not concentrate on the main farm building, but rather the area surrounding the farm mound. The excavation uncovered a midden complex, as well as several sunken feature buildings, early turf structures and a boundary wall (Edvardsson and McGovern 2006).

What is notable about the bone assemblage from Hrísheimar, despite its significant quantity, is that it contains the highest relative percentages of pig bones in Iceland. After around *e*. 940 and by the mid-late 10th century there is a significant increase in pig keeping at the site (McGovern 2009, 218). From the assemblage it has been interpreted that the primary animal husbandry concern was that animal strategies were focused upon food production (McGovern 2005, 15). This is fairly consistent with the high percentage of pig remains in the assemblage. There is also abundant evidence for dog gnawing on the animal bones, which is similar to the situation in Hofstaðir. However, despite the large volume of animal remains the site suffers from severe erosion and the only reports available at the time of writing record up to the 2004 excavation season.

Sveigakot

Sveigakot is located in close proximity to Hofstaðir and Hrísheimar, although it is notably smaller and located in a more isolated and less desirable location (Vésteinsson 2002, 6). Similar to Hrísheimar, the site has suffered from erosion which may have impacted upon the preservation of its faunal remains. Sveigakot is notable in that the site name was probably given to the site at a much later date, possibly after it was exposed from erosion, and as such the farm is not mentioned in any historical documents (Vésteinsson 2001, 5).

The occupation period of Sveigakot in many ways reflects that of Hrísheimar. It is a low-status site which was most prosperous in the mid-10th century but then declined in the 11th century and was abandoned sometime in the 12th century (McGovern 2009, 168). Most of the faunal remains fragments recovered from the site were notably small but reflect the typical mix of settlement period animals present at other contemporary sites.

Granastaðir

Granastaðir is a farm site located in the north of Iceland, around 50km south of the modern city of Akureyri (Einarsson 1994, 69). It has been the focus of a number archaeological excavations, the most recent undertaken by Bjarni F. Einarsson from 1987 to 1991. Bjarni (Einarsson 1994, 69) notes that the site, itself, is surrounded by place-names which refer to domestic animals, primarily sheep and pigs. Fortunately the faunal assemblage was substantial and reasonably well-preserved. From this it can be seen that caprines dominate the assemblage, with cattle also well represented as the second main domesticate on site, and pig and horse equally represented after sheep and cattle (Amorosi & McGovern 1994, 190). Despite no dog bones being present in the

assemblage, canine-type tooth marks on bones strongly suggest that dogs were present on the site (Amorosi & McGovern 1994, 182). Butchery marks on the horse bones reveal a similar treatment to that of the cattle bones indicating that horses were slaughtered, butchered, consumed and discarded in the same manner as the cattle (Einarsson 1994, 99). Consumption of horse flesh was a practice that occurred across the Norse world, even after the conversion to Christianity when the practice was condemned (Jennbert 2011, 149; Meens 2002, 4-11). Evidence for the consumption of horse, similar to that at Granastaðir, can be seen at other Icelandic sites such as Hofstaðir. Poole (2008, 110) also notes that of the eleven late Anglo-Saxon sites with evidence of horse consumption eight are located in the Danelaw but he only names five of these, Norwich, Thetford, York, Sedgeford and Flixborough. Evidence of horse consumption can also be seen at other contemporary sites in northern Germany and Denmark (Randsborg 1985, 237) and Norway (Sikora 2003-2004, 87).

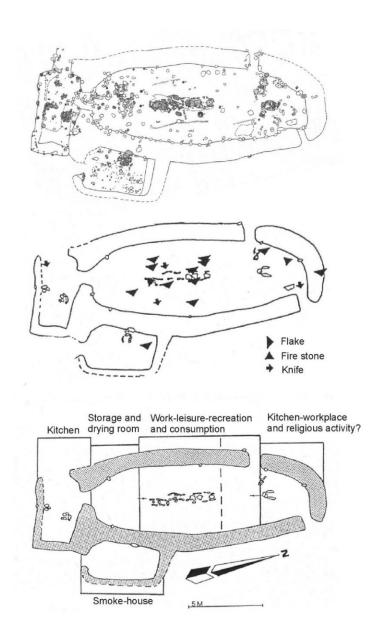


Figure 3.4 Space interpretation at Granastaðir (Einarsson 1994, figs. 26, 43, 46).

Aðalstræti 16

This site is situated in the modern capital of Iceland, Reykjavík, and is now the subject of an impressive museum, The Settlement Exhibition: Reykjavík 871^{±2}, concerned with the settlement of Iceland. The excavation of the site was carried out between January and June 2001 (Roberts 2001, 1). It uncovered the most complete remains of a Viking Age *skáli* in Reykjavík (Roberts 2001, 41). Located at the north end was a byre where animals would have been kept.

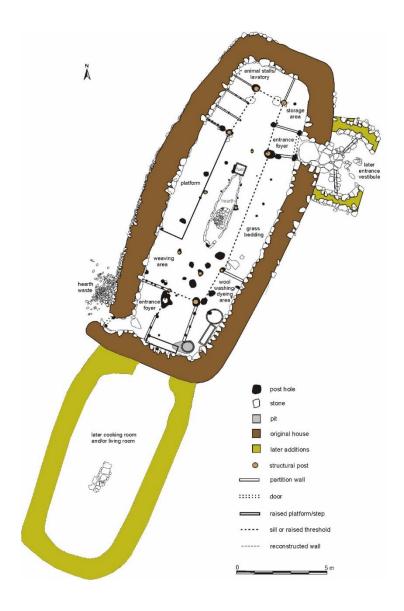


Figure 3.5 Plan of Aðalstræti 16 with later annex shown in yellow (Milek 2006 fig. 4.42).

The excavation of the Viking Age *skáli* produced a collection of highly fragmented burnt animal bones. This highly fragmented collection was recovered through flotation and retention using a 1mm mesh (Tinsley 2001, 1). Calcinated bone appears to be common on other contemporary sites in Iceland and is likely to reflect a disposal method whereby the leftovers were added to the central hearth (Tinsley 2001, 4). Out of the 5091 fragments of bone only 169 fragments could be identified which has led Tinsley (2001, 3) to conclude that with only 3% of the assemblage identified a meaningful interpretation cannot be made.

Alþingisreiturinn

Alþingisreiturinn is another site located in Reykjavík, proximately 60m from the Aðalstræti 16 site. It is contemporary with Aðalstræti 16 and therefore when fully published will be an interesting comparative case study. Early interpretations of the site indicate that it was a sizeable farm which was possibly involved in iron working, although whether this was an activity solely for use at the site or for external trade is still unknown (Garðarsdóttir 2011, 43). Although it is a multi-period site with several distinct phases, there is well-preserved early remains especially from the 9th to 14th centuries (Garðarsdóttir 2010, 8). The excavation area in 2008-2009 was 2000m³ which enabled archaeologists to reveal a significant area during excavations (Garðarsdóttir 2011, 43).

There is a small collection of animal bone from the Viking Age phases of the site. The preliminary analysis from the bone assemblage recovered during the 2008-09 excavation shows that cattle were the most dominated species on site (259 NISP) followed by caprine (157 NISP) and there were small numbers of horse, dog and pig bones (Garðarsdóttir 2010, 105; Pálsdóttir 2010, 15). Julia Best (2013) has undertaken an analysis of the bird bones from the site. Best noticed that during the earliest phase of the site (IV – ϵ . 871-1226) puffin and great auk bones dominated the assemblage with 17 and 12 identified fragments respectively and she also noted that there was a possible bone from domestic fowl during this early occupation. As she suggests, it is unlikely that chickens were a significant feature in the early occupation of the site. This is not dissimilar from other contemporary North Atlantic sites, which could reflect the reliance on wild avian resources over domestic species or the preservation of faunal remains and the lack of expert insight from bird bone specialists. Reports from the site are available, although the reports from the 2012 summer excavation are difficult to

obtain. Once fully accessible and published, more interpretions will be drawn from the rich archaeological evidence at this site.

Vatnsfjörður

Vatnsfjörður is a site in the Westfjords, a region that has been notably understudied in comparison with other areas. It is the site of multi-period occupation and since 2005 has been the subject of the fieldschool for Institute of Archaeology in Iceland. Preliminary survey work and test trenching was carried out at Vatnsfjörður in 2003 and was followed by an open area excavation of the *skáli*, dating to the tenth or early eleventh century, in 2004 (Milek 2007, 10). The form of the *skáli* was comparable to other contemporary dwellings in Iceland (Milek 2007, 10).

The bone material discussed here was recovered from the 2003 to 2010 excavation seasons and was recorded in the preliminary reports from 2008, 2009, 2010 and 2011 (Pálsdóttir *et al.* 2008; Dupont-Hébert 2009, 2010, 2011). The faunal assemblage from the Viking Age part of the site was recovered through hand collection and sieving; at least 25% of all contexts were dry sieved through a 4mm mesh and several samples were selected for flotation through a 2mm mesh (Pálsdóttir *et al.* 2008, 5). Preservation rates vary considerably across the site, between the Viking farm and the early modern farm, but also across the Viking area of occupation, as noted in the report from the 2009 season (Dupont-Hébert 2010, 82) where it was highlighted that that year's faunal assemblage was much more considerable than other years and it had notably been from different structures on the site. It was noted that considerably more than 50 per cent of the assemblage was calcined. This was suggested to reflect the refuse from daily activities which would have included hearth cleaning and dispersal of waste as fertiliser (Dupont-Hébert 2010, 82).

Both caprine and cattle are well represented in the Viking Age faunal assemblage and pig also appears in a significant amount. However only two fragments of horse bone have been recovered. Despite no dog bones being identified from the assemblage there are canine tooth marks on bone fragments of other species indicating that dogs were present on the site (Pálsdóttir et al. 2008, 8). It is likely that the dog bodies were not disposed of in the same way as the other species which were being consumed. Therefore, species, such as cat, which were not part of the human diet could also be present on the site and their remains not disposed along with the food waste. It was suggested that the inhabitants of the site would have heavily supplemented their consumption of domestic animals with wild resources, mainly of marine origin (Pálsdóttir et al. 2008).

Hólmur

Hólmur is now the first definite Viking Age farmstead site in the district of Austur-Skaftafellssýsla (Einarsson 2008, 157). The site is rather intriguing and has been researched and interpreted with interesting results, challenging the way in which particular structures have previously been viewed. Attention was first drawn to the site at the start of the 20th century when human bones were exposed due to erosion and Daniel Bruun then excavated the burial in 1902. In the late 1990's Bjarni Einarsson initiated further excavations to locate the farmstead connected to the burial. The bone material recovered from the excavation reveals that the domestic animals present at the site are the standard species found on other contemporary farm sites, including cattle, sheep/goat, pig and horse (Einarsson 2008, 171). In 1997, approximately 250metres away from the Viking Age burial the remains of a farmstead were discovered and, later, in 1999 a small semi-subterranean structure was noted (Einarsson 2008, 145). It is this,

small structure measuring only 4.4 square metres (Milek 2012, 97), that has been the subject of intrigue and its purpose heavily debated. Bjarni Einarsson (2008, 145) has proposed that this structure is a *blót* house, a type of private cult site where ritual pagan activities could take place. He (2008, 150) perceives it to be an area considered a platform between the living and the dead world given its proximity to the grave and domestic items, such as loom weights, found near the structure. Milek is not convinced by this interpretation, arguing that the *blót* house is actually a *jarðhýsi* (pit house). Her (2012, 92-3) argument highlights that the form of the structure and artefacts associated with it are similar to other *jarðhýsi* in Iceland and that the building was stratigraphically below the cultural layers that Bjarni Einarsson associates with it. In addition she notes that his interpretation was heavily influenced by Old Norse documentary sources which reference types of cult buildings, although there is some discrepancy between the written description of these buildings and the structure at Hólmur.

Hrísbrú

Hrísbrú comprises a Viking Age longhouse, a conversion-period stave church and a cremation burial which has been the subject of some controversy (Vésteinsson 2011, 48). The excavation has been heavily influenced, and in some instances been directed, by documentary sources (Byock *et al.* 2003, 75). Davide Zori (2010, 303) has concluded that the site is a high-status residence and a chiefly seat of power based upon the archaeological evidence, the presence of a church, the size of the longhouse and the quantity and quality of the portable material culture. The longhouse at Hrísbrú has been dated, through tephrachronology, artefact and house typologies, radiocarbon dating and stratigraphy, to between AD 871 and 920-934. It was partially rebuilt after AD 920/34 and completely abandoned by the 11th century (Zori 2010, 305). Similar to other

contemporary sites, such as the *skáli* at Vatnsförður, the longhouse at Hrísbrú has comparable dimensions and structure. The excavations recovered a sizable volume of artefacts, such as spindle whorls, iron nails and fittings and imported glass beads (Zori 2010, 307).

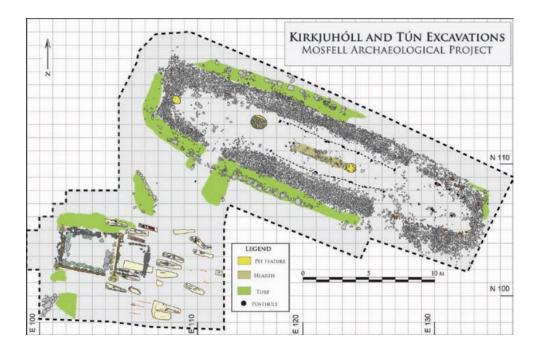


Figure 3.6 Plan of the excavated Viking-Age farm at Hrísbrú and conversion era Church (Zori & Byock 2014, plate 1).

A significant faunal assemblage dating mostly from the 10th-11th centuries has been recovered from Hrísbrú although, due to unfavourable conditions, almost the entire assemblage comprises calcined bone fragments (Zori *et al.* 2013, 157). This assemblage reveals that the occupants' diet consisted mainly of domestic land mammals, sheep, cattle and pig, with evidence for the consumption of horse. In addition, the number of fish bones is relatively high (Zori *et al.* 2013, 159) which could be a reflection of the sites location near the coast. Isotope analysis on a 10th century skeleton from the site has shown that roughly 27% of the diet comprised of marine resources (Byock *et al.* 2003, 74). Given the percentages of domestic animal bones in the assemblage (86% from the long-house) this is not an unrealistic figure and suggests that although the

inhabitants ate primarily domestic mammals they also supplemented their diet significantly with fish. It has been noted that the assemblage is not dissimilar from other archaeological remains from other comparable sites in Iceland. This could be attributed to the large open area style of excavation employed (Zori 2010, 381). It is therefore interesting that it is similar to the assemblages from other contemporary similar sites as it indicates that the midden deposits are an accurate demonstration of consumption choices on site. However, at Hrísbrú the ratio of cattle to caprine bone is 1.92:1, the largest ratio of cattle compared to caprine from any site in Iceland and this has been interpreted by the excavators as demonstrating the high-status of the site, the favourable environmental conditions of cattle husbandry and the preference of the early settlers to maintain the 'settlement subsistence package' transported from their homelands in the east (Zori et al. 2013, 157). This site is producing extremely interesting results, of which we will be fully aware once it is completely published although the site directors are happy to share the information they have. It will make an interesting comparative study with other sites especially given its high standard of excavation and specialist analysis.

Eiríksstaðir

Despite frequent references to a farmstead belonging to Eirík the Red, only one Viking Age archaeological farm site is known which lies in the land belonging to Vatn and Stóra-Vatnshorn, and this has led many scholars to conclude that it must be Eiríksstaðir (Ólafsson 2001, 147 & 151). There have been several excavations at the farmstead including one by Porsteinn Erlingsson in 1895 and in 1938 by Matthías Þórðarson with the most recent excavations being undertaken by Guðmundur Ólafsson from the National Museum of Iceland during 1997-1999. Porsteinn Erlingsson came to the conclusion that Eiríksstaðir consisted of two parallel buildings with a small bath-house

in close proximity but Matthías Þórðarson concluded that there was only one building, not two parallel buildings (Ólafsson 2001, 148). The work undertaken by the National Museum provided a more complete insight into the site. An initial survey in 1997 suggested that a full-scale archaeological excavation should be undertaken, which happened in 1998-9 (Ólafsson 2001, 149). From this is was ascertained that the hall, 12.5 metres in length and 4 metres wide at the centre, was a typical of a Viking Age hall from 9th-11th century AD and it was noted that it was built sometime after the *landnám* tephra (Ólafsson 2001, 149-51). A zooarchaeological report for the site was never completed but from the National Museum of Iceland's database (sarpur.is) it can be seen that bags of animal bones were recovered from the site. The only indication that any identification has taken place is one entry marked 'sheep bone' whether that is a bag of confirmed sheep identified from goat is unclear but seems unlikely. It can therefore be noted that animal bone was recovered from the site with sheep/goat present.

Greenland

The Norse first arrived in Greenland around AD 1000 and their settlement lasted to around the 15th century. Several theories have been put forward as explanations for reasons why the Norse left Iceland to go to Greenland, including overpopulation in Iceland (Ólafsson 2000, 145). The theory of overpopulation has been increasingly critiqued and a more plausible proposal suggested. It was proposed that rather than increasing demographics as the main 'push factor', settlement in Greenland was due to restricted social movement. Iceland was, what Dugmore *et al.* (2007, 16) have termed, 'over-chieftained'. The reasons for the demise of the Greenlandic Norse settlement have been even more heavily debated. Often the primary reason cited has been climate change, with a worsening climate seen sealing the Greenlandic Norse fate (Gulløy 2012,

65). It has been suggested that pressure put on the Greenlandic population by this change in climate change would have encouraged emigration to places such as Iceland (Lynnerup 1996, 133). Recent studies (eg: Dugmore *et al.* 2007, 29) have, however, hinted at a variety of interlinking factors that would have together influenced settlement in Greenland. Changes in the economic situation in Europe would have had wide reaching consequences which would have further impacted upon the fragile population already struggling in a worsening climate. What is apparent is that there is still much work to be done on the Norse settlements in Greenland to answer and understand this aspect of Norse settlement in the North Atlantic.

The Norse settlement in Greenland was concentrated in two areas of Greenland. The Western Settlement was located close to the modern Greenlandic capital, Nuuk, and the Eastern Settlement was situated further south (Mainland & Halstead 2005, 104). There would have been close links Greenland and Iceland, especially during the first years of settlement, as the settlers would have had to import European products (Arneborg 2003b, 170). A significant proportion of trade with Europe would have been via Iceland as suggested by Helgi Guðmundsson (1997) but larger ships would have been able to sail longer distances, therefore allowing direct connections with Norway (Guðmundsson 2009, 69). It has been suggested that, as communication links with the east dwindled, the Greenlandic settlements would have turned to the west to trade vital supplies such as furs and wood (Guðmundsson 2009, 68). In many ways the assemblages from sites in Greenland are similar to those from Iceland. It is notable that domestic animals continue to feature prominently in the faunal assemblages from middens. The Greenlandic settlers from Iceland would have been farmers and the relationship to the land would be reflected in the social structure (Arneborg 2003b, 165). The society was hierarchical and focused upon pastoral farming. Cattle are present in a number of the assemblages, which has been taken to indicate high status (Mainland & Halstead 2005, 104).

Excavations of supposed elite farms in Greenland have revealed a high proportion of cattle bones in relation to other domesticates in their zooarchaeological assemblages (Arneborg 2003b, 166). During the 1970s excavation of a midden at Niaqussat only two of several thousand bones were from fish, highlighting the prominence and significance of pastoral farming in Norse Greenlandic society (Østergård 2004, 39). It is thought that there may have been some variation between the sizes of the domestic animals in Greenland, although the sample size, especially from the Eastern settlement is small. From this data, however, it is thought that sheep from the Eastern Settlement were probably larger than those from the Western Settlement (Enghoff 2003, 57) although given the size of the data set this conclusion is tentative and requires further analysis and results.

A number of sites have been excavated, although in comparison with Iceland the number is small. However, it must be remembered that Norse settlement was smaller in Greenland than in Iceland and settlement disappeared after around 500 years. Most of the research on this island has been carried out by Danish researchers. However in recent years archaeologists from Iceland and City University New York have become more active in this area. Work in recent years has become more regular so our knowledge of Norse Greenlandic society will undoubtedly increase dramatically in the coming years.

Gården under Sandet

The Norse farm mound of Gården under Sandet (GUS) was discovered in 1990 and

excavated from 1991-1996 (Arneborg 2003a, 9). Rather than a historical name, GUS (the farm beneath the sand) reflects the archaeological situation in which the site was found, preserved under mounds of sand around 15 metres deep (Hebsgaard *et al.* 2009, 432). This context proved useful as it preserved archaeological deposits of faunal remains. It is from these deposits that it has been ascertained that the inhabitants of GUS exploited wild fauna but also kept domestic animals and it was noted that from the first phase of occupation that goats almost equalled sheep in terms of numbers (Enghoff 2003, 7).

The faunal remains were retrieved during the course of the excavations and, apart from the collections along the river, they were all located in the building complex (Arneborg 2003a, 14). They were collected through a combination of hand picking bone fragments and sieving of sediment, although sieving was not undertaken systematically (Enghoff 2003, 19). Sheep and goats were the most dominant domestic species in the early phases of the site but cattle were also well represented. However seal dominated the assemblage (Enghoff 2003, 22 & 53). The large number of goats present at GUS is remarkable given that they appear infrequently, or are not regularly identified, in assemblages from contemporary sites in Iceland and Denmark (Enghoff 2003, 75). This could possibly reflect an environment in which goats were particularly well adapted or that their by-products of milk and meat were particularly desired. The sheep at GUS have been noted for their small size and the survivorship curve for caprines indicates that they were kept primarily for meat (Enghoff 2003, 57 & 87). Notably the cattle are also small in stature when compared to the cattle from other contemporary sites in Iceland, but they appear to match the size of cattle from other Greenlandic sites (Enghoff 2003, 74). These may merely reflect the type of cattle bred on Greenland. What has been remarked upon from GUS is the number of horse bones retrieved from

the site, which is considerably more than other Greenlandic sites (Enghoff 2003, 75).

Often horse is perceived to reflect high status, but it is notably that the number of horse bones from GUS outnumber the amount retrieved from Brattahlið, a notable high status site.

Sandnæs

The archaeological farm site at Sandnæs is situated in some of the most favourable landscape for pastoral farming in Greenland and remains indicate that it would have been a sizable farm which has led to the interpretation that it would have been one of the leading farms in the Western settlement, if not the whole of Norse Greenland (Mainland & Halstead, 113; McGovern *et al.* 1996, 97). From the zooarchaeological assemblages it has been shown that cattle, often considered to be an indicator of high-status, would have been one of the most dominant species at the site (McGovern *et al.* 1996). The site has been the subject of a number of archaeological excavations by Bruun in 1903, Rousell from 1932 to 1934 and McGovern in 1984. The excavations in summer 1984 were due to marine erosion at the site and the urgent need to rescue at risk stratified midden desposits and early phase structures (McGovern *et al.* 1996, 94).

The zooarchaeological assemblage is very interesting and from the earliest phases cattle and caprines dominate the assemblage (McGovern *et al.* 1996, 106). However, although the number of cattle bones has been suggested to confer the high status of the site, there are only two horse bones which is unusual for a seemingly high-status site and contrasts with the evidence from the cattle (Enghoff 2003, 75). The site also displays similarities with other contemporary sites, for example dog does not appear in the assemblage (McGovern *et al.* 1996, 106). However, the final floor layers do contain the partly articulated bones of Norse hunting dogs (minimum number

calculated to nine) with some bones displaying cut marks. This is also the case for two other farms, Tummeralik near to Sandnes and Nipaatsoq close to Gården under Sandet where the minimum number of dogs present are three and two respectively (Buckland et al. 1995, 94). This is particularly notable and it has been interpreted that these dogs were killed as a last resort to prolong Norse human survival in an increasingly hostile environment. The contexts which the zooarchaeological remains were recovered should also be considered as the earlier excavation were not undertaken by modern excavation standards and would therefore not be uniform in their approach to the 1984 excavation. With regards to the 1984 excavation, this was a rescue operation and therefore specific areas would have been targeted. There was also a focus on the midden deposits and these are more likely to reflect food waste than general refuse. This may reveal that the inhabitants were eating cattle, but not necessarily consuming horses, and those animals, such as dogs, were not being disposed of with the food waste.

Brattahlið

In *İslendingabók*, the settlement of Greenland is covered and it is mentioned that Erik the Red settled in what is known as Erik's Fjord in Brattahlið, located in the Eastern Settlement (Arneborg 2003b, 163). The potential site of this settlement is thought to have been discovered, and the oldest artefacts that can be associated with Norse settlers have been found in close proximity to the ruins of a church in style similar to contemporary sites elsewhere in the Norse North Atlantic (Sigurðsson 2008, 566). In addition to the artefacts, bones discovered at the site were analysed and revealed to be the earliest bones from any Norse site in Greenland (Arneborg *et al.* 1999, 163). In fact a date obtained from an ox-bone fragment found in a mass grave reveals that the Norse

and their cattle were at this site around AD 985, which reflects the date mentioned in the Icelandic Sagas for Greenlandic colonisation (Arneborg *et al.* 1999, 163).

A report written by Degerbøl (1934) analyses the animal bones recovered from Brattahlið during the early excavations at the site and although, like many excavations of that time, it was not carried out stratigraphically it still provides a good insight into the types of animals present at the site. Degerbøl suggested that the early settlers would have kept pigs rather than imported cured ham and that the inhabitants would have maintained large hunting dogs, presumably for hunting caribou. Later research at the site was undertaken in 2005 and 2006, and employed more modern standards of excavation. For example 100% sieving through a 4mm mesh dry sieves was done during the excavation season (McGovern & Palsdóttir 2006, 2). The conditions were noted, and ranged from fair to excellent and it was noted that sheep and goats were equally represented on the site (McGovern & Palsdóttir 2006, 4). From the zooarchaeological assemblage it can also be seen that, although caprines were numerous, cattle were equally well-represented in the remains.

Canada

References to Norse contact with North America can be observed in the Sagas, such as *Grænlendinga saga* and *Eiriks saga ranða*. Although the historical accuracy of these documents is somewhat debatable, an aspect that has received much discussion, when paralleled with archaeological artefacts it is clear that there was Norse presence in North America. There was a short-lived Viking colony in North America, located in Newfoundland. Unfortunately, although there are references to it in the literature, this settlement left very little trace (Wallace 2003, 207). Therefore, the purpose of this

settlement, its duration and population, is still the subject of much debate. Wallace (2008, 605-6) has challenged the view that this Vinland settlement was an attempt at colonisation arguing that the main purpose of the Vinland voyages was exploration for resources and exploitation of those resources for the colonies back in Greenland. However, the Grænlendinga saga does suggest that livestock was taken on Porfinnr Karlsefni's expedition, with the intention of establishing a permanent settlement if possible (Wallace 2008, 606). This, therefore, highlights the ongoing uncertainty surrounding the Norse in North America. In addition there is further archaeological evidence suggesting contact between the Norse and the inhabitants on North America. It is not unlikely that there are other potential Norse sites, seasonal camps, across the east coast of Canada. There are a number of artefacts, which appear to medieval European in style and manufacture, recovered from a variety of locations around Baffin Island (Sutherland 2008, 613). Without doubt there was contact between the Norse and the inhabitants of North America however the form of this contact, settlement, trade, chance encounters, is subject to debate and more extensive work needs to be undertaken.

L'Anse aux Meadows

L'Anse aux Meadows is located 50°35'N and 55°32'W, on the northern tip of Newfoundland, Canada (Ingstad 1977, 21). Archaeological investigations at the site of potential Norse activity in North American were undertaken in the 1960s and 70s. These revealed a number of structures that are comparable to the building structures of the Norse. The evidence obtained from the site has resulted in a date of the early eleventh century for L'Anse aux Meadows (Ingstad 1977, 233). There is no doubt that the excavations revealed the presence of the Norse in North America. By using saga

sources alongside the sparse archaeological evidence, the site at L'Anse aux Meadows proves that the Norse were in Vinland (Wallace 2008, 604). However, there is a notable lack of artefacts and an absence of zooarchaeological remains. From the excavations in the 1960's two bones were identified as pig by Rolf Lie (Ingstad 1977, 265-6). However, the pig scapula, which had also been identified as 'an animal the size of a deerhound or larger' by Haakon Olsen (Ingstad 1977, 267), has now been identified as a seal by Anne Rick, Arthur Spiess and Frances Stewart (Wallace 2009). The second fragment of bone was identified as domestic pig by Rolf Lie (Ingstad 1977, 265) but was lost in the post between Bergen and Oslo and so has not been analysed by any other zooarchaeologists (Wallace 2009, 120). In addition to this dearth of faunal remains it has been noted that L'Anse aux Meadows lacked structures for livestock which would have meant that if domestic animals were present they would have been left outside in the winter, or consumed prior to that (Wallace 2008, 607). Although the evidence is lacking, it is highly unlikely that the Norse would not have brought animals with them. It may suggest that animals were not abundant on the site, therefore indicating that this was not intended as a long-term settlement. However, a spindle whorl has been recovered from the site (Ingstad 1977, 261) which indicates that, although there is a lack of direct evidence for animals, animal by-products were present on the site and were being processed. It is disappointing that more cannot be said about the Norse in North America at this stage, but it is likely that the relationship between the Norse and animals in North America would have been similar to those in Greenland.

Baffin Island

Recent work has begun to provide evidence to reveal some of the extent of Norse presence in North America. Work undertaken by Patricia Sutherland, formerly of the

Canadian Museum of Civilisation, on Baffin Island, has been providing a tantalising glimpse into Viking contact with native populations in North America. A number of artefacts have been recovered from the area with the largest concentrations located on Baffin Island (Sutherland 2008, 615; Sutherland 2009, 280). Sutherland argues that this is evidence of trading, however as her research is not fully complete the evidence could be said to be insufficient and maybe trophies of war. Although given the nature of the artefacts it seems unlikely that these were the spoils of war. It is more likely that at some level at least peaceful interaction and trade was taking place. A notable figurine of Dorset culture manufacture but wearing western European style costume (Sutherland 2008, 616) would indicate that there was a level of interaction presumably peaceful given the way in which the two cultures have been combined.

Accessing any data from this site has been particularly difficult and what is presented here is a mere summary of the scarce peer-reviewed publications available. This is not necessarily a reflection of poor-quality archaeological work undertaken by Sutherland but, according to news websites and blogs that dominate the results of any Google search linked to her name, wider developments. Sutherland is no longer employed at the Canadian Museum of Civilization and consequently due to limited research resources available, the excavations at Baffin Island have been suspended and related articles and a book remain incomplete. It is likely that future publications and archaeological investigation will provide more evidence of Norse presence in this region. Until then it should be noted that the Norse were active in what is now Canada and any work in this area should be encouraged.

The Faroe Islands

The Faroes are an archipelago, consisting of 18 islands, situated in the North Atlantic, roughly 300km northwest of Shetland and 780km southeast of Reykjavík at a latitude of 62°N, 7°W (Arge 2005, 22; Church et al. 2005, 179). The coastline is extensive and no place on the islands is more than 5km from the sea (Stummann Hansen 2003, 33). The Faroe Islands (Føroyar) are said to be translated to mean sheep islands (Matras 1959) which highlights the significance of this particular domesticate to the islands in the Norse period; although their prominence in the landscape stresses the longevity of their significance in Faroese agriculture. In contrast to sheep, pigs became extinct in the Faroe Islands in the Middle Ages. However pig-related place-names reveal earlier locations of pig farming (Church et al. 2005, 190). There has been some research into pig-related place-names on the islands of Sandoy which revealed that the area around Lítlavatn had several place-names that were subsequently interpreted as revealing areas of pig farming in the Norse and early medieval periods. These include Svínsstøuheyggjurin (the mound by the site where pigs are collected) and Svínstíaheyggjarnir (the mounds by the path along which the pigs are driven) as well as Stíggjurin á Svínhúsinum, which refers to a now extant pig building (Lawson et al. 2005, 676). The use of linguistics has not been focused purely on animal-related activities and significance. Studies of place-names have also aided archaeological excavation greatly, examples can be seen in the study of Ærgi used to indicate shieling sites, and evidence from Argisbrekka and Ærgi Í Skarðsvík demonstrated how this type of evidence can be utilised in collaboration with archaeology. This interdisciplinary approach is useful especially as Faroese archaeology is still relatively young in comparison with other Northern European countries.

The first antiquarian committee in the Faroe Islands was established at an open meeting in 1898 during Ólavsøku (Ólaf's wake), a public holiday and festival, and two years later the Faroese Parliament supported the committee financially with a gift of 50DKK (Stummann Hansen 2002, 13-14). However, it was still some decades before the first excavations were undertaken in the Faroe Islands. Sverrir Dahl initiated a series of excavations at the farmstead site of Niðri á toft in Kvívík in 1941. This was shortly followed by further notable excavations such as Tjørnuvík and Fuglafjørður. Since then there have been a number of excavations although the volume of excavations is not comparable to the number undertaken in other northern European countries.

The lack of archaeological excavations is, in part, due to the nature of the Faroese landscape and landownership. In these islands there is tendency for a continuous occupation sequence at the same site owing to a legality whereby farmsteads must be located in a fixed area, heimrust (Stummann Hansen 1988, 58). In fact less than 5 percent of the land is cultivated today, all of which is located in areas of dense settlement occupation (Arge et al. 2005, 601). Therefore earlier settlements are located beneath current settlement which may have potentially destroyed the remains of any earlier occupation. As a result sites of the most well-known modern excavations have been revealed through construction work. For example, Toftanes in Leirvík (excavated by Stummann Hansen in 1982-7) was excavated ahead of a planned construction of a road and the shieling site of Argisbrekka (excavated by Mahler 1985-1987) was excavated during the construction of a dam at Eiðisvatn. The recent excavations in Vestmanna were initiated after the municipality decided to construct a retirement home on the site (Paulsen 2008, 200). In comparison, rescue excavations were undertaken at Undir Junkarinsfløtti (excavated by Arge in 2003-6) and Á Sondum (excavated by Arge and Jensen) due to coastal erosion. These excavations were not exhausted as a recent

trip by the author to the site of Undir Junkarinsfløtti revealed further erosion and exposure of archaeological deposits. Coastal erosion is an issue in the Faroe Islands, as many other North Atlantic sites, due to the nature of the landscape, coastal, and settlement patterns, often located in close proximity to the water. Furthermore, there is currently limited financial resources in the Faroe Islands for research projects and sites such as Undir Junkarinsfløtti and Vestmanna could still reveal significantly more archaeological data. Although the potential of further investigation at these sites is clear, any additional excavation for research purposes will have be postponed until sufficient financial investment is made. Whilst financial restrictions are limiting it also must be noted that geographic and demographic factors would also impact upon archaeology. The Faroe Islands are a relatively small landmass with a historically small population, resulting in proportionally smaller archaeological remains and resources to undertaken detailed archaeological investigation.

Archaeology in the Faroe Islands must also contend with varying degrees of preservation across the archipelago, due to diverse soil conditions. The most widespread soil type is peaty and podsolised wet and acidic soils which prove particularly poor for the preservation of bone and shell materials (Church et al. 2005, 185). However, notably the soil type can vary significantly across a small area, such as at Leirvík on Eysturoy (Arge et al. 2009, 19). An example is from the site of i Uppistorubeitinum, located in the upper part of the old field, where a number of well-preserved animal bones were recovered in the 1990s excavations. However during the 1980s excavations of a Toftanes only small fragments and cindered remains were discovered (Arge et al. 2009, 19). This makes the consistency of the recovery of zooarchaeological remains vary widely across the islands, impacting upon our understanding of how past islanders lived. This is undoubtedly reflected in the limited

zooarchaeological assemblages available from the Faroe Islands. The first complete zooarchaeological assessment of a site in the Faroe Islands was at Undir Junkarinsfløtti (Church et al. 2005). However earlier excavations did uncover bones during their investigations. One of the first excavations undertaken by relatively modern excavation standards, Niðri á Toft in Kvívík, recovered animal remains and instigated speculation into the possibility of pig farming in early Faroese society (Arge et al. 2009, 19). The lack of zooarchaeological information has meant that how the first settlers utilised the landscape is still relatively poorly understood.

The issue of the Faroese landnám has attracted a notable amount of attention in Faroese archaeology and academic scholarship. For centuries this has been a subject that has interested scholars, similar to the situation in Iceland. Símun Arge has extensively reviewed, through his thesis and articles, the scholarship surrounding this debate. In addition, Arge and other scholars (Church et al. 2013) have recently contributed new evidence to the debate from A Sondum on Sandoy proving that the Faroe Islands were colonised before the Vikings, potentially as early as 4th century AD. In his earlier reviews Arge (1991) commented that earlier arguments heavily utilised written sources, which he noted are unreliable and he stressed the importance of archaeological evidence including reanalysis of old excavation material. There is still much to be understood of the Faroese landnám with evidence littered across various forms of evidence. One especially interesting and unique piece of evidence is one of the three rune stones discovered in the Faroe Islands found in Sandavágur in 1917 and dated to the 13th century (Young 1979, 116). It reads 'Porkell Ônundr's son, man of the east from Rogaland, lived in this place first' (borkell Onundar sonr, austmaor af Rogalandi, bygði þenna stað fyrst). It would suggest that a man called Þorkell came from Norway and lived in this place first. However, one could simply not rely on one runic inscription

carved several decades after the events to interpret the landnám. Fortunately as Arge is demonstrating evidence is available from various sources and these must be used together to derive any understanding of early settlement. An interdisciplinary approach was also championed by Faroese historian Hans Jacob Debes (1989-90) who noted that not all disciplines had been integrated successfully in the past, using the work of Jóhannes Jóhansen as an example. Jóhansen (1971) had used paleobotanical evidence from Tjørnuvík to argue for an earlier date of colonisation in this location to 600-650 AD. He was not the only one to suggest earlier occupation of the islands as place-name scholars, Jakobsen and Matras, had noted names of Gaelic origin potentially suggesting an earlier Irish settlement (Debes 1989-90, 30). This highlights the ongoing settlement debate with many scholars suggesting potential evidence for earlier settlement. However, it is the recent work by Arge and others (Church et al. 2013) whereby an interdisciplinary approach has been taken that the issue of settlement in the Faroe Islands has been most accepted. This demonstrates the potential for Faroese archaeology, the importance of interdisciplinary research and the need for much more detailed investigations, especially of early Faroese history.

Undir Junkarinsfløtti

The site of *Undir Junkarinsflotti* in Sandur, Sandoy, was revealed after large areas of the embankment close to the church collapsed, caused by an extended drought during summer 2000 (Arge *et al.* 2009, 20; Church *et al.* 2005, 181). This erosion exposed extensive archaeological deposits and was significant for the volume of extremely well-preserved faunal remains (Arge *et al.* 2010, 13). The archaeological investigations at *Undir Junkarinsflotti* took place from 2003-2006. In 2003 small-scale excavations on Sandur were undertaken by an international NABO team (North Atlantic Biocultural

Organisation), the 2004 excavations were led by Mike Church and Ragnar Edvardsson and they were later, in 2005 & 2006, joined by Julie Bond and Steve Dockrill (Arge *et al.* 2010, 13, 15 & 19). The earlier excavations focused on locating and excavating any archaeological remains associated with the archaeology from the eroding cliff and later the focus extended to the eroding cliff east of the main area of excavation (Arge *et al.* 2010, 15 & 19). During the 2004 excavation three main phases were identified and dated through radiocarbon, UFJ 1 (9th-12th centuries), UFJ 2 (11th-12th centuries) and UFJ 3 (11th-13th centuries) (Arge *et al.* 2010, 15; Brewington 2011, 3).



Figure 3.7 The landscape around Undir Junkarinsfløtti. Evidence of activity in this area extends back to the earliest settlers on the islands (photo: L. Hogg).

A key feature of this site, the reason for the exceptional preservation of bone material [see fig. 3.8], is the soil type. The neutral pH and free-draining nature of the soil on the site provided the best preservation of bone material excavated anywhere on the Faroe Islands (Arge *et al.* 2009, 21). This site is therefore a key example in highlighting the diversity of soil type across the Faroe Islands. The soil was very different from other

recently excavated sites, such as Toftanes and Argisbrekka (Church et al. 2005, 185). Therefore, *Undir Junkarinsflotti* produced the best and most substantial zooarchaeological assemblage from any site in the Faroe Islands. In fact it is the first Faroese site with a fully comprehensive analysis of the faunal remains, although these have yet to be fully published or made available. This in part reflects the excavation methods which followed NABO protocol which required that all deposits were dry sieved through a 4mm mesh to collect bones and artefacts (Arge et al. 2010, 15; Brewington 2011, 3).

It has been noted that domestic animals comprise a very small percentage of the total number of species in the assemblage with the Undir Junkarinsflotti being notable for the large percentage of wild animals, in particular wild birds, present (Brewington 2011, 5). This high higher percentage of wild animals in comparison to domestic animals is particularly noticeable, and is not seen on the sites in the northern islands. This could suggested that the inhabitants of *Undir Junkarinsflotti* were especially reliant on hunting. The faunal remains at *Undir Junkarinsflotti* indicate a diverse range of activities undertaken by the early Norse settlers, including farming, fishing and also hunting of wild birds. There is a significant amount of pig remains spanning the whole chronology of the site, supporting the idea for long-held tradition of pig farming on the Faroe Islands (Church et al. 2005, 194). The most represented species, over half of the assemblage throughout all phases of the site, was sheep/goat (Brewington 2011, 6) which thus demonstrating the importance of sheep to the Faroese settlers and similarities between this archipelago and the other North Atlantic islands. However given the dominance of wild species, it is noted that the diverse faunal assemblage differs from those from contemporary sites in Iceland and Greenland, where there was generally a more significant reliance upon domestic species (Brewington 2011, 5). At *Undir Junkarinsflotti* the inhabitants were utilising their rich resource much longer than

other contemporary sites across the North Atlantic. This, once again, highlights the difference between the Faroese settlement and the Icelandic and Greenlandic settlements.



Figure 3.8 The midden is eroding into the sea and bones from the Viking Age lay scattered on the surface. Bone preservation is exceptional (photo: L. Hogg).

Argisbrekka

The site is located near the northern tip of Eysturoy around 1.5km inland on the edge of flat pastoral land next to the Eiðisvatn, the third largest freshwater lake in the Faroe Islands (Hannon & Bradshaw 2007, 307; Mahler 1991, 60). Prior to the excavation there was little archaeological evidence of activity in the area but place-name evidence and two unexplained earth mounds, noted during survey work in 1982, provided enough incentive for archaeological excavations to occur from 1985-87 ahead of the construction of a reservoir (Mahler 1991, 60-1). Place-name evidence proved to be

Dahl had suggested the potential of a shieling economy in the Faroe Islands and linguist research by Matras enabled Dahl to locate 18 potential shieling sites (Mahler 1991, 60). There are a number of factors which would suggest that Argisbrekka is a shieling site, in addition to the place-name evidence. The location of the site, close to the lake of Eiðisvatn, is also indicative of shieling activity as proximity to water is key to life at a shieling (Mahler 2007, 452). Furthermore the number of artefacts have been recovered from the excavations are few (Lucas 2008, 95) especially when compared to contemporary sites such as Toftanes (Mahler 2007, 448-9). However, this reflects the purpose of the site and few artefacts are to be expected from a seasonally occupied site, unlike Toftanes which was a constantly occupied farmstead. Argisbrekka has been noted for its high standard of archaeological excavation (Arge *et al.* 2009, 20).

Furthermore, the evidence from Argisbrekka suggests that this site was only occupied for around three centuries and has been used to suggest that the shieling system was phased out during the 11th-12th centuries (Lucas 2008, 96; Thomson *et al.* 2005, 741).

During the excavations the remains of 23 buildings were uncovered, of which 22 can be dated to the Viking Age or the earliest Middle Ages but the 23rd structure was noted to be 'fairly recent' (Mahler 2007, 446). Notably the faunal assemblage from Argisbrekka revealed a high percentage of domestic species present at the site. Fowl were also well represented with puffin, guillemot and auk being most prominent highlighting the diverse subsistence and use of wild bird resources in the Faroes. Notably however caprine dominate the assemblage, significantly more than pig or cow (Gotfredsen 2007, 284). This once more reflects the importance of sheep in the Faroe Islands and demonstrates that sheep were transported to summer grazing pastures and therefore their dominance at Argisbrekka is not unsurprising for s shieling site. This site

contrasts with Undir Junkarinsfløtti where reliance on wild resources is more apparent indicating a difference in site function and also a difference in potential access to resources. It might also reflect the landscape whereby the northern part of Eysturoy is notably hilly and suited to transhumance whereas Sandoy is flatter.



Figure 3.9 The site of Argisbrekka is now under the recently constructed dam, Eiðisvatn (photo: L. Hogg).

Toftanes

Toftanes (Leirvík) on Eysturoy is a longhouse site dating from 9th to 10th centuries and was excavated during the 1980s (Stumman Hansen 2000, 99). The site was excavated due to the construction of a major tunnel which would connect the two villages of Gøta and Leirvík on Eysturoy (Stummann Hansen 2005, 7). The excavation was notable as it was the first time that such a well-preserved farmstead from the *landnám* had been uncovered (Stumman Hansen 1988, 75). Originally intended as a short rescue

excavation in 1982, it continued until 1987 as the full extent of the archaeological remains was revealed (Stummann Hansen 2005, 7). The area excavated eventually comprised of approximately 900m², in which the ruins of five structures from the Viking Age were discovered (Stummann Hansen 2005, 10).

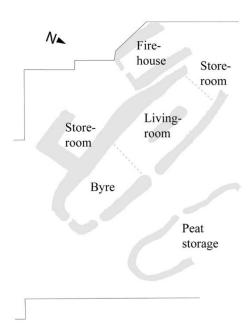


Figure 3.10 Plan of Toftanes (Stummann Hansen 2013, fig. 57).

The bone preservation was notably poor due to peaty and moist deposits at the site which, however, proved notably favourable for the preservation of wood (Stummann Hansen 2005, 15). However, a few hundred bones, most of them burnt or tooth-lamella's, survived at the site and were analysed. Of these 90% could be identified to derive from sheep, while there were only a few from cattle, and even fewer from pig (Stummann Hansen 2005, 29). From this limited evidence it has therefore been suggested that sheep was the dominant domestic animal at *Toftanes* (Vickers *et al.* 2005, 704). Despite the poor bone preservation, *Toftanes* revealed a wealth of other evidence. It is the first Viking Age site on the Faroe Island to have paleoentomological and paleobotanical evidence collected (Stummann Hansen 2005, 7). From this evidence, in

particular evidence for dung beetles, the presence of grazing animal has been confirmed (Vickers *et al.* 2005, 706). Furthermore there is further evidence to suggest the importance of sheep to the occupants of *Toftanes*. Over 50 spindle whorls have been recorded (Stummann Hansen 2005, 16) indicating that a significant amount of spinning, and weaving, was occurring at the site. Of the finds, although few objects were recovered, one in particular is notable due to its decoration. A circular brooch with a diameter of 2.6cm was discovered, ornamented with three animal-heads surrounded with ribbons in which are dotted lines (Stummann Hansen 2005, 20). Although not directly related to animal husbandry or production and manufacture of animal products, it is interesting as it gives some insight into the way in which the residents of the site perceived animals.

From the available archaeological evidence scholars have been able to ascertain that the landscape around *Toftanes* was mainly open with a largely pastoral economy during the early years of settlement, characterised by domestic animals and grain growing (Amorosi *et al.* 1998; Stummann Hansen 1991, 52). Therefore, despite the sparse zooarchaeological evidence an understanding of the type of farming and animal present at the site can still be gained.

Niðri á toft in Kvívík

This particular site is mainly well known due to its prominent position in the village of Kvívík, Streymoy, and that the longhouse structures have been preserved in such a way as to make it easily accessible for visitors and tourists. However, information from the site is scarce, very little has been published and available evidence is scarcely accessible. It was excavated during the period 1941-1957, by Sverrir Dahl, the late former State Antiquarian of the Faroe Islands (Matras 2005, 99). The dates of this excavation also

explain the lack of detailed and easily accessible information on the site as this was prior to modern excavation techniques being applied as standard. Furthermore, *Niðri á Toft* was never completely excavated and the floor layer was not fully excavated (Matras 2005, 107). The reasons for this, as explained by Dahl, were due to other pressing excavations that required attention and because he felt that it was important to leave the site for future researchers with more resources available (Matras 2005, 108).

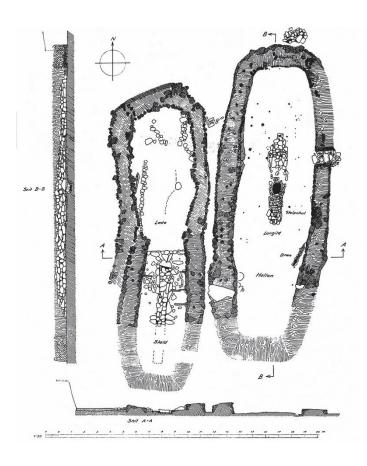


Figure 3.11 Plan of Kvívík (Stummann Hansen 2013 fig. 151).

The longhouse was constructed with a double stone wall with soil and turf infill, similar to contemporary houses in the Faroe Islands. The longhouse was 21-22 metres in length and 5.75 metres wide (Matras 2005, 101). Niðri á Toft appears to display many of the characteristics of comparable contemporary Faroese buildings, such as its proximity to flowing water, and has been noted for its similarities with Toftanes. This

includes the earliest phase being characterised by two parallel buildings with one appearing to be the dwelling with a hearth located in the centre (Stummann Hansen 2003, 52). In addition both the house structures at Niðri á Toft and Toftanes are aligned downslope (Stummann Hansen 2003, 52). Dahl originally suggest that the smaller building at Niðri á Toft was the byre but Matras (1995) has reinterpreted the byre as being located at the lower lying end of the house which would be comparable to the location of the byre at Toftanes (Stummann Hansen 2003, 52).

Of the structures excavated at Niðri á Toft the earliest construction, characterised by curved walls, dates to the Viking Age and the latest phase (phase three) is the medieval house (Stummann Hansen 2003, 40; Matras 2005, 105-6). There was some difficulty in dating the site, and constructing a clear stratigraphic sequence, as the archaeological material from different phases has been mixed due to interference at the site by recent activity (Matras 2005, 105). Fortunately, many artefacts were recovered that could be used for dating, including spindle whorls, beads, leather artefacts and notably a wooden toy horse from the 1957 excavation (Matras 2005, 101). In addition, animal remains were recovered and examined at the zooarchaeological museum in Copenhagen whereby cattle, sheep, horse and pig were identified (Dahl 1951, 89). However the analysis and results of the animal remains are not detailed and published reports remain elusive.



Figure 3.12 Kvívík today, preserved for visitors (photo: L. Hogg).

Vestmanna

Vestmanna is a village located in the northern part of the island Streymoy, roughly 13km from Kvívík. The name itself gives an indication to its past, suggesting that it may have been named for men from the west. Possibly this could indicate early settlers from Britain (west men came from Britain and east men from Scandinavia). Archaeological evidence has also revealed early occupation of the area. There are the remains of an early Norse structure (Arge 1991, 115) and recent excavations in the village have revealed another archaeological site of a Viking Age long house (Paulsen 2008).

Test pits were first dug in 2005 to assess the archaeological value of the site when it became clear that these were significant remains excavations were carried out in 2006, 2007 and 2008 (Michelsen & Arge 2009; Paulsen & Arge 2008; Paulsen 2008,

200). The number of finds from the site is small but there was a notable find of a blue glass bead that could be dated typologically to the Viking Age and two spindle whorls which were also early medieval (Paulsen & Arge 2008, 60; Paulsen 2008, 207). The spindle whorls are particularly interesting, one is thought to have potentially to have had a secondary use as a loom weight and the other was identified as a Bryggen Type A (Paulsen & Arge 2008, 59). Bryggen Type A spindle whorls are often found on North Atlantic sites and can be seen in the assemblages from the Icelandic sites of Hrísheimar (Edvardsson & McGovern 2006, 16) and Hofstaðir (Lucas 1999, 92). At present no midden for the site has been discovered and no significant bone assemblage has been recovered. It has been noted that during the 2007 excavations part of a possible waterlogged dump or midden was located although further excavation towards the east is required to examine this further (Paulsen 2008, 207).



Figure 3.13 The ruins of the site at Vestmanna, situated on a hill overlooking the modern settlement and fjord (photo: L. Hogg).

Some conclusions

There are a number of issues with the data presented here. Although broadly similar, a range of archaeological excavation methods have been employed with certain techniques, such as the employment of sieving, varying from site to site. In addition, preservation conditions can range quite dramatically across the region concerned. Whilst the number of sites excavated in Iceland has dramatically increased in recent years this is not the case everywhere. The volume of recent excavations in Iceland also means that these have been completed to modern excavation standards and the reports are generally quite detailed. The majority of these reports are also available via the North Atlantic Biocultural Organisation (NABO) website, although these tend to be of the excavations undertaken by the Institute of Archaeology Iceland (FSÍ) and reports compiled by City University New York (CUNY) and therefore only show a particular insight into the array of excavations currently being undertaken in Iceland. In comparison to Iceland, the data from Canada remains poor especially in regards to the excavation on Baffin Island which is currently suspended. Alternatively, Greenland is currently attracting notably increasing attention from researchers in Denmark, Iceland, New York and elsewhere. It is expected that the available data from this island will significantly increase in the near future due to this growth in attention. It is also likely that there will be a notable amount of publications in English as well as Danish, the standard language until now, as more international teams are involved. In comparison the Faroe Islands have not attracted the same level of international attention, although the recent excavations at Undir Junkarinsfløtti have increased international research on this archipelago. The amount of archaeological work on the Faroe Islands, in comparison with Iceland, might also be a reflection of the inaccessibility of some of the sites which have been continually occupied since the settlement period and the limited

resources available reflecting the archipelagos demographic. Therefore, Iceland may appear to be disproportionately represented in comparison to the other islands but this should merely highlight the work that needs to be undertaken in this area to fully appreciate the whole North Atlantic, which at this time would have been well connected with communication links and trade routes.

Although the availability of data varies from different locations across the region, the available assemblages do provide an insight into the species of domestic animals present at the sites in the North Atlantic. It is worth noting, however, that all the sites list the data as NISP and whereas, for various reasons listed earlier, this is probably the best way to represent the animals there are of course problems that one must consider when using data in this way. As NISP is the number of identified fragments this can lead to a skewed representation of the animals represented as this method tend to over represent the larger species (Tinsley 2004, 52). Most of the zooarchaeological assemblages have been gathered from midden concentrations, in fact a number of excavations have focused solely on middens. These deposits generally comprise of kitchen waste and therefore reflect consumption patterns. However, from the assemblages it can be seen that the main domesticates, cattle, sheep/goat and pig, are generally represented in similar volumes on the sites. The presence of horses does vary across the region and at the different sites with them being numerous on some sites but completely absent at others. Cats and dogs are also known to be present at sites although they are not numerous and sometimes completely absent from the assemblages. Although dogs are often not present in the assemblages we know that they are present on the site because of teeth marks on the bones from other animals. Therefore the assemblages are more likely to reflect what the occupants were consuming rather than necessarily reflecting the animals they were living in close

proximity to. Therefore, other evidence must be considered to get a more complete understanding of the relationships between humans and animals during this period.

CHAPTER FOUR

The Role of Animals in Human Society

physical presence they had an impact on and influenced human perception and interaction. These impressions include, but are not limited to, the way in which humans engage with each other, the space and the wider landscape. Naomi Sykes (2009, 22) noted how introducing two free range hens into her garden changed the space, smell and feel, and altered the way in which her and her family engaged with the space. 'We spend more time in the back garden but our patterns of movement within it have also changed as we collect eggs, attempt to avoid the deep dust bowls and avoid or collect the genuinely awesome quantities of shit produced by these small animals.'

This kind of intimate involvement would undoubtedly been more associated with animals in close contact with humans. Although all animals would actively impact upon human perception of landscape and space, animals that either shared the same living space or lived in close proximity to humans, such as cats, dogs and also domestic farm animals, would have had a major role in human social activities and society. These interactions would have been multifaceted and not all would have had a positive impact on human society. Notably, a rather negative result of this is that living in close contact with animals is recognised as a way of spreading disease (Serpell 1996, 14). Noteworthy examples of this from modern human society are avian and swine flu (Van Reeth 2007). However, even this negative consequence demonstrates the role of animals within human society and how their physical presence was significant in human everyday life.

Animals were also key in human social activities not just through their physical presence but also through the importance of their products. This could encompass a

variety of activities from the actual rearing of the animal, to the manufacturing and processing of the products, to the wearing, consuming or utilisation of the final items. Human perception and understanding of the animal was influenced by how the animal was interacted with and the desirability of its products. The ways in which people interacted with particular animals would not only define their perception of the animal and their own social identity but the interaction would further serve as a social marker to society as a whole. This would have been particularly important during the Norse period where social, economic and political changes led to people increasingly searching for ways in which to define and display their particular social identity. For example, as today, many trades and activities are associated with particular social classes. A good example from the Norse period is the production and manufacture of woollen textile goods where aspects of the manufacturing process become associated with different social identities. As mentioned, this was a period where society was becoming increasingly stratified and elites were seeking to define their social standing through inventive ways, including clothing (Loveluck 2009, 107). Increasingly elites attempted to remove themselves from the production and manufacturing process and instead become solely associated with consumption. This is not as apparent in the North Atlantic islands as it is in places such as Britain and Scandinavia. In the latter areas often archaeological evidence shows the deliberate isolation of the elites from the areas of manufacture, through earthworks and similar constructions. This would have led to a greater specialised dependency on sheep-farming, which became increasingly removed from the full economic role of the animal, altering human-sheep interactions and perceptions of sheep from different social classes. Those with a more practical role in rearing the sheep may not have been afforded the status granted to those undertaking the specialist weaving, turning it into a desired product, and those participating only in the consumption of the product. This, in particular, helps to demonstrate social

transformations within society. The example of textiles shows how peoples' interactions with animal products, and the importance of those, could define social status and identity and influence worldviews.

In addition, animals played a vital role in activities which helped to create and define shared cultural perceptions. A shared understanding of the roles of animals in human society defines the cultural identity of the society. The Viking Age and the Norse period has been the subject of many studies concerning cultural identity. Much attention has been given to identifying Scandinavian culture as a means of locating Scandinavian settlement, with earlier approaches utilising material culture as a method of identifying Scandinavian cultural and ethnic identity (Fenton & Pálsson 1984; Ritchie 1977). However, material culture is not always a direct reflection of cultural identity. Steatite artefacts were seen as Scandinavian cultural indicators but soapstone may be quarried in Shetland as well as Norway (Richards 2000, 298). However, the use of steatite artefacts is generally perceived to be a Scandinavian trait. Although the concept of cultural-historical archaeology was a product of archaeological culture, the assumptions concerning culture and identity continue to underpin processual and, to some extent, post-processual archaeologies (Jones 1997, 137). Ethnic identity cannot be determined from static material culture alone; it can be self-defined, fluid and situational composed of many aspects that define social identity (Barrett 2003, 75). As part of this, human-animal relationships are multifaceted and reveal much about social and cultural identities. How we relate to animals reflects our notions of social reproduction, status, ideology and materiality (Sykes 2009, 20). The way in which domestic animals were perceived and interacted with would indicate an aspect of the way in which individuals identified with themselves, society and the natural world. Notably maritime culture is associated with the Viking Age and the sea would have become a way in which ideas,

beliefs and practices could be transmitted. By exploring the role of animals in social activities in the North Atlantic islands the way in which inhabitants identified and related to the rest of Northern Europe is apparent.

It can be seen that animal-related activities are key to defining social identity. These therefore provide revealing insights into the structure of Norse society, notably the transformations that were occurring during this period but also the shared perceptions of society within the communities of the North Atlantic Islands. They expose differences in social structure but also reveals shared perceptions and identities within the society. In particular it is animals, normally classed as 'domestic', with which humans spend the majority of their time and thus undertake activities, which in turn create identities. As mentioned in previous chapters much has been written on domestication and what that entails and how it can be defined. O'Connor (2013) has written about the closeness of animals and humans, in particular in regards to a shared living landscape. The fact that animals and humans occupy the same space is key to understanding the relationships between the two as human perceptions and interactions with different animals therefore reflect identity, worldviews and beliefs.

During the period of this study, c. AD 850-1100, one can observe a mixed farming economy across the North Atlantic with some regional differences and a general growing dependence upon sheep farming. This undoubtedly reflects the growing importance of the wool economy. This increasing demand for wool is largely the result of wider social changes across Northern Europe. With access to trade routes and growing international exchanges a new social class began to emerge which had access to luxury items and therefore portable material wealth was no longer directly associated with elite identity (Loveluck 2009). Consequently elites sought other ways to distinguish their social status and textiles were a good option as they could provide

striking and obvious public displays of status. Certain geographic regions are more suitable for sheep husbandry, in particular the islands of the North Atlantic. These do not provide the best environment for arable agriculture and were therefore a good option for pastoral, especially sheep, farming. Other regions of Europe simply just did not produce good quality wool. It has been noted that Frisian textile producers were dependent upon imported wool as the quality of wool from Frisian sheep was such poor quality and good, elite, quality woollen items needed to be made from wool from multiple sources (Faith 2012, 687). This would have therefore meant that wool from the North Atlantic islands would have been in demand across Europe, especially in places were the native quality was poor and where excellent wool was manufactured for elite consumption requiring wool from various different sources. This demand would have created an increased specialisation in animal, sheep, husbandry where specialist roles were defined thus creating social identities. This differs from a subsistence based living and instead reflects the need to meet the demands of the geographically expanding and increasing sophisticated trade routes.

Particular activities can be seen to take a more prominent role within society as they became more standardised and more intensive. Amongst these certain animal-related activities can be seen to be particularly prominent in Norse society. These include textile production, dairying and butchery. Hide and leather production was taking place although evidence for these activities are limited. Of course other activities, such as bone and horn carving, were also occurring; however these were likely to be to a lesser degree important and could be viewed as a by-activity of other pursuits rather than an industry or primary occupation in their own right. By examining the key activities it can be seen how social identities, such as gender, status and age, were defined by aspects of these occupations. They also reveal social perceptions of animals

and the natural world and thus indicate worldviews and beliefs. Moreover they demonstrate how Northern Europe was transforming, politically and economically, and reveal that the North Atlantic islands were becoming further removed from the increasingly urbanised landscapes of southern Britain and Scandinavia.

Product Processing and Manufacture

Animal husbandry and the seasonal movement of livestock and people

A key aspect of any animal product processing and manufacturing, especially textile production and dairying, was the rearing of domesticates. In addition, fundamental to understanding the socio-economic organisation of the North Atlantic islands are the domesticated animals in the Norse society. In particular the economy and society of Greenland was heavily dependent upon animal husbandry, especially cattle, sheep and goats (Mainland 2006, 238). Animal husbandry was not focussed solely around the main farm but instead involved significant movement of livestock across the landscape. Although seasonal movement and the practice of transhumance existed in other parts of Europe, such as northern England, it was particularly prevalent and notable in the Norse North Atlantic. Shielings were utilised across the North Atlantic islands. Excavated examples include Pálstóftir in Iceland, Argisbrekka in the Faroe Islands and Mountain Farm in Greenland. Shielings were prevalent in this region from the start of the settlement. However, it is likely that the numbers slightly decreased from around the 12th century onwards, but ethnographic, historical and archaeological evidence shows that they were still in use until the 20th century (Ledger et al. 2013, 819-20). The shieling system reflects a type of animal husbandry at the time where the population was utilising the resources available effectively. The domestic animals required access to

good pastureland to graze upon in the summer months but it was also crucial to have good access to land from which fodder could be harvested to feed the animals during the winters (Mainland 2006, 238). Thus this activity, and the various activities associated with transhumance, created social identities that existed as part of this process. There would have been members of society who were actively engaged in transhumance, moving the animals between pastures and staying there for the whole season; equally there would have been others who visited the summer pastures regularly or sporadically and some who never left the home farm to go to these sites. This movement would have the potential to expose those who participated to experiences they may not otherwise encounter. This could include other people, activities and landscapes. And thus, these new experiences would facilitate different social identities. It is also possible to consider that the social identities a person chose to display may be dependent upon location. Thus they may have a very different identity whilst participating in transhumance in comparison to the identity they may choose to reveal when located in a fixed position, with regular social norms. The potential for social identities within this is almost limitless as the movement would have allowed for a certain amount of fluidity whereby the participants would have quickly adapted to changes in circumstance.

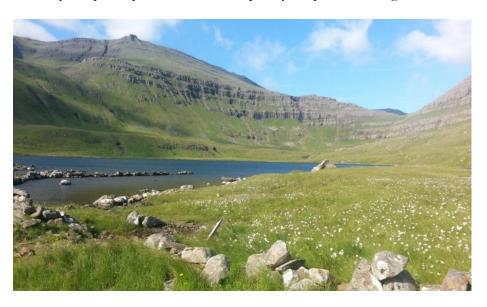


Figure 4.1 The site of a potential shieling in an uphill area close to Famjin on Suðuroy (photo: L. Hogg).

Given the importance of shielings to North Atlantic society one would expect our knowledge of these sites to be much more comprehensive. However, previous poor and lacking archaeological research on shielings has hampered our understanding of shieling sites, their purpose and locations. In comparison to the North Atlantic the Scandinavian homelands have received much more attention and were the focus of earlier research. From this it was established that in the most basic sense shielings were used as temporary shelters when the animals were in the summer pastures. Research based on Norwegian shieling sites in the early second half of the 20th century divided shielings into three types. Helsaterbrug (complete shielings) where animals and humans stayed all summer and so more buildings were required to house and store dairy products produced during those months. Malkesaterbrug (milking shielings) where animals were milked and the milk taken directly to the main farm for further processing. Høsletsæterbrug (hay-making shielings) were only occupied for short periods of time and the primary aim was to harvest enough hay to be used as fodder during the winter months (Reinton 1969). However, as the volume of research on North Atlantic shielings continued to increase it became apparent that Reinton's 1969 shieling model, based on Norwegian shielings, was not that appropriate for North Atlantic shielings (Sveinbjarnardóttir 1991). Conversely, although research on North Atlantic shielings is increasing it has mainly focussed upon identifying and locating shieling sites, often utilising geoarchaeological methods such as micromorphology and entomology (eg: Borthwick et al. 2006, 299; Matras et al. 2003; Lucas 2008; Vickers & Sveinbjarnardóttir 2013; Sveinbjarnardóttir 2008).

The reason for the previous lack of research in the North Atlantic maybe due to that historically locating shieling sites was difficult. Even when located these potential sites may not have been preferred sites for excavation given that they are often located in marginal areas and priority therefore would have been given to at risk sites, such as those in areas at risk of erosion and modern development sites. Earlier approaches utilised place-name and linguistic evidence, this is especially notable in the search for seasonal shelters in the Faroe Islands. The -erg element is an Old Norse loan word from the Irish 'airge' which means 'a shieling or a summer pasture' (Higham 1978, 7). This type of evidence not only suggests potential locations of these sites but also reveals the seasonal nature of these structures. More recently researchers have utilised geoarchaeology in their search to locate these sites (Kupiec et al. forthcoming, Vickers & Sveinbjarnardóttir 2013). There are some differences observed in the evolution of shielings in the different islands and there are several arguments that have been suggested as possible explanations. For example, in Iceland a significant proportion of shieling sites were only in use for a few centuries after the landnám (Ledger et al. 2013, 819) although shieling use continued until the early modern period (Vésteinsson et al. 2002). It has been suggested that the earlier shielings may have evolved into tenanted farms (Sveinbjarnardóttir 1991) or that these shielings sites were not intended for use as such but acted instead as 'land claims' during the settlement (Lucas 2008, 98). Current research suggests that the situation in the Faroe Islands was different to Iceland. Although shielings stopped being utilised it is unlikely that they simply evolved into farms, as Sveinbjarnardóttir has suggested is the case in Iceland.

Although it can be seen that research on shieling sites in the North Atlantic, and across Northern Europe, is increasing in general there is still very little known in regard to the social aspects of these sites. As previously noted, a large proportion of the more recent research has been focused on locating and identifying these sites. This is an important development as through this our understanding of North Atlantic shielings is significantly improving. It is now necessary to start considering how these sites were

used and who utilised them. Unfortunately there is very little documentary evidence for this from the Norse period. Furthermore there is a distinct lack of research in this area with only one article by Kupiec and Milek (2015), which considers the role of gender identities at shieling sites. There are, however, several references to the proper use of shielings in the Icelandic law books, *Grágás* (12th century) and *Jónsbok* (13th century). There are also references to shielings in the Icelandic Sagas, such as *Laxdæla saga*, *Egils saga*, *Grettis saga* and *Hrafknels saga*. However, it has long been accepted that sagas are a reflection of the period they were written in rather than the period they are written about and the majority of scholars agree that they are not necessarily a reliable source of evidence of the Viking Age (Sigurðsson 2004).

The sagas, however, imply that it was usually women who were present and working at the shieling sites. This is further supported from oral testimonies from nineteenth and early twentieth century Iceland where shielings were commonly the domain of women due to the nature of shieling activities which focused on milking and dairying. If a shepherd was present to tend the flock they slept someway from the shieling (Kupiec & Milek 2015). From Argisbrekka, Faroe Islands, a toy boat was discovered (Mahler 2007, 97) hinting that children were also present at shieling sites, most likely being looked after by their mothers. The status of these women is another matter for debate. It has been noted that the tasks undertaken by female slaves would not have been too dissimilar to those of other household women (Mazo Karras 1988, 81). However, based on the types of activities, and the associated gender connotations, occurring at the sites it would therefore be feasible to conclude that the prevalent gender identity at shielings was female.

However, interesting evidence from, the limited, archaeological work undertaken at shieling sites suggests that other activities not commonly associated with

females, such as making charcoal and iron extraction, also took place at shielings. At Pálstóftir, in Iceland, Lucas concluded that textile production and iron working must have taken place given the finds of loom-weight, spindle whorls and slag (Lucas 2008, 94). This suggests mixed gender activities associated with shielings as iron working is considered a male task in Norse society. Notably, milking and textile production are considered female tasks. Males were very unlikely to undertake milking and there are references throughout the saga literature to insults directed at men in relation to milking activities. However, potentially whilst at the shieling different genders could undertake tasks that would not be the case at the home farm. Thus this would create unique identities at the shieling sites. Although the archaeological evidence hints at a more complex social situation we are, at this time, severely restricted in the conclusions that can be drawn due to the lack of full-scale archaeological investigations at these sites.

Shielings would have helped facilitate the movement of livestock and this would have been a seasonal occurrence, whereby farmers could utilise land at a further distance from the home farm pastures during the dryer and warmer summer months. From ethnographic, documentary, micromorphological and other geoarchaeological methods there is a general understanding of which animals were present at the North Atlantic shielings. The animals that were likely to have been at these sites are sheep, goats and cattle, although evidence might also suggest the presence of pig and it is likely that dogs were also present. These sites demonstrate how the seasonal movement of livestock would have dictated human lifestyles as these structures were utilised during summer months for milking of sheep and cattle (Matras *et al.* 2003, 206). This also indicates how social identities may have been formed through the use of shielings. As these sites are located away from the farmstead, research in Iceland suggests on average up to 5km (Sveinbjarnardóttir 1992). Although relatively close in distance, to get to

these sites one would have still had to cross the homefield boundary; thus this could suggest that shielings were perceived as on the fringes of civilised society. As such they may have been understood to be removed from every-day society and thus identities and activities which may generally have been seen as abnormal could have been normal. This seasonal movement would have required certain members of society to spend extended periods of time away from the main area of occupation, beyond the home boundary wall, and thus could have been removed from social norms. This potential removal from society would have undoubtedly resulted in very different behaviour and methods of expression in the individuals at these sites and could have created new identities, based on the perception and identity of the shieling site. As suggested in the previous paragraph, identities may have been created that would not have been recognised within normal society. Upon leaving the relative safety of home farm these people would encounter a more unstable and hazardous world.

The Icelandic sagas imply that the remote locations of these sites fostered naughty behaviour and encounters with the supernatural. For example in *Laxdala saga* the murders of Bolli and Helgi take place at a shieling and Einarr is murdered in *Hrafnkels saga* at such a site. Other forms of violence are also mentioned to occur at shieling sites such as the rape of Kolfinna in *Hallfreðar saga vandræðaskálds*. Kupiec and Milek (2015) have noted that due to the removed nature of Icelandic shieling sites a person crossing the boundary wall of the home farm to journey to these places could have indeed had some aspects of their social identity altered with this transition. They do note that in Iceland the shielings are not necessarily located a far distance away from the main farm, but that given the topography it might not have been possible for a visual connection between the two creating a sense of isolation. Therefore, these sites could have created and defined a person's identity whilst they were at the site.



Figure 4.2 driving horses across the Icelandic landscape (photo: L. Hogg).

It could be concluded that shielings were generally the preserve of women, although men were also likely to be present. As Kupiec and Milek (2015) note, the gender constructs at these sites would have also been highly ambiguous. The location of the shielings, remote and isolated, reveals their marginal position within Norse society and indicates that identity at shieling sites may have been very different from that identity at the home farms. Furthermore, shielings reveal an intensified farming of sheep and cattle mainly for wool for textiles and milk for dairy. Also it is likely that horses were grazed in the summer pastures, close to the shielings, as is mentioned in *Hrafnkels saga*. Although pigs were also moved to summer grazing pastures, given the faunal remains available from site across the North Atlantic, it is more plausible that sheep and cattle were the main livestock and the primary reason for this movement across the landscape. The dominance of these particular species reflects demand for their by-products and this special rearing of the animals suggests an intensifying of animal husbandry through increasing specialisation which would have removed people from the full economic role of animal.

Textile production and manufacture

One of the key activities during this period is textile production and manufacture. There is abundant evidence on multiple sites across the North Atlantic islands mainly comprising of artefacts used in production such as spindle whorls and loom weights. However, evidence of actual textile material is sparse due to poor preservation of organic materials or because the cloth was continually used, transformed for other uses, until very little remained (Hayeur Smith 2014, 5). The wide distribution of textile production artefacts demonstrates how extensively this activity was undertaken. This is, in some ways, unsurprising given the crucial importance of textiles in human society, at the most basic these are important as a provider of warmth and protection in the cool northern climes. Sheep were key in wool textile production and, as has been seen in previous chapters, were dominant in the North Atlantic landscapes. The various activities associated with the whole process of woollen textile manufacture also reveal social status, gender and age identities. The production of woollen products was of great importance in the North Atlantic Islands and is thus reflected in the material culture.

Evidence of textile processing and manufacture is revealed through a number of artefacts such as spindle whorls and loom weights. Spindle whorls are numerous in this geographic region [see fig. 4.3]; for example more than 50 were discovered at Toftanes on the Faroe Islands (Stummann Hansen 2005). It is noticeable from the archaeological reports that spindle whorls and loom weights are generally the most well-recorded textile related artefacts from sites in the North Atlantic. This may reflect preservation conditions, as these are robust tools and so could be utilised sometimes for several generations, or it could reflect the excavator's ability to identify these as distinct from

other tools as they often serve a single purpose and so were unlikely to be mistaken as tools for other activities. Spindle whorls were often made from steatite, clay or bone, and loom weights from stone and clay. However, it has been noted that perforated femurs, commonly observed on Viking-age sites, could be misidentified as spindle whorls (Sharman 1998, 152). An example can be observed from 13-14th century contexts at Chevington Chapel in Britain where it is argued that the perforated cattle femurs were components of rosaries or paternosters (Stallibrass 2005, 108-9). As these were found in great quantity inside a chapel it is not inconceivable that these may have been components or paternosters. However, it is also accepted that perforated cattle femurs were commonly used of a long period for time as spindle whorls (Walton Rogers 1997, 1743). Therefore, given the context of the North Atlantic sites considered, domestic settlements, it is more plausible that these were used as spindle whorls. Other tools associated with textile production are wool combs, the teeth may be expected to be found on settlement sites, and weaving tensioners which were probably used with weaving battens. However, by far, spindle whorls and loom-weights are the most documented from sites in the North Atlantic, potentially this is a reflection of the numbers of these that would have been in use in comparison to other tools, of which there would have only needed to be a small number.



Figure 4.3 Spindle whorls. Left-right, top-bottom. A runic spindle whorl translated to 'Vilborg owns me' from Alþingisreiturinn (photo: L. Hogg. Reproduced with kind permission of Reykjavík City Museum); 2 stone spindle whorls from Aðalstræti 16 (photo: L. Hogg. Reproduced with kind permission of Reykjavík City Museum); 4 spindle whorls from Kvívík (photo: L. Hogg. Reproduced with kind permission of Søvn Landsins).

Woollen textiles were a key export during this period and were crucial to the economy of the North Atlantic Islands. Quality and the economic value of woollen cloth (vaðmál) were legally defined in the Icelandic medieval law codes, Grágás (AD 1117-1271), Járnsíða (AD 1271-1281), Jónsbók (after AD 1281) and Búalög (12th-19th centuries). These laws regulated the production of the vaðmál, and indicate importance of this commodity in economic transactions (Ingimundarsson 1995, 33). Research undertaken by Hayeur Smith (2014), at various archaeological sites across Iceland, demonstrates the standardization of cloth production is most evident from the 11th century onwards. This highly regulated cloth manufacture reveals the economic importance of the commodity and supports the written documentation.

With significant demographic growth across Northern Europe there was a greater demand for clothing and textiles. This was facilitated by an expansion of trade networks and international connections which allowed for more efficient trade and exchange. In addition with the creation and expansion of urban centres craft became more specialised thus creating demand for items, such as wool, which had previously formed an essential part of household subsistence. As craft became more specialised people took on roles focussed on producing one or few items and therefore relied on textile producers to meet their need for this essential item. Woollen items were heavily regulated and the value of these woollen goods were fixed to a comparable amount in silver dependent upon length, width and quality (Kilger 2008, 296). Strict laws controlled any transactions of these woollen products with penalties for the production of inferior vaðmál (homespun woollen cloth) (Hayeur Smith 2014, 2 & 4). This economic importance of wool would have had significant impacts upon the society in the North Atlantic. Notably it would have made what otherwise might been perceived to be marginal unattractive land profitable. Sheep could thrive on land that would not be suitable for arable farming. In addition to these considerations during this period textiles also became a much desired commodity to create and define social status. The high levels of diaspora and expanding international trade networks elude to the changing social dynamics of this period. This would have provided the opportunity for social mobility, and access to luxury goods via trade and exchange would have meant that material wealth did not necessarily directly reflect aristocratic identity and therefore high-status individuals would have sought other means by which to define their social ranking (Loveluck 2009, 107). Specific types of cloth or access to surplus textiles would indicate a certain level of status. It has been noted that although vaðmál was of significant economic importance it was found at a variety of sites across Iceland (Hayeur Smith 2014, 14). This is probably a reflection of the fact that vaðmál was

produced on farmsteads in Iceland and that the production of this item was not confined to elite residences. Textiles would have provided the perfect medium through which to very publically proclaim and distinguish social identity.



Figure 4.4 Bone needle from Suðurgata 3-5, Reykjavík (photo: L. Hogg. Reproduced with kind permission of Reykjavík City Museum).

Status and wealth within society could be reflected by wearing coloured clothes not of natural colours, such as brown, black, grey and white (Byock 2001, 45). In Laxdala saga both Olaf and Kjartan are gifted clothes coloured scarlet by King Harald and King Olaf respectively. The fact that the author directly specifies these clothes as scarlet in colour, noting it several times, demonstrates the significance and importance of this particular colour of clothing. The styles and colours of clothing and their associations with status and identity would have been widely appreciated. Larsson (2008, 183) has stated that variations in clothing were more likely to represent differences in social status than reflect regional differences thus arguing that textiles and style in the Viking Age were uniform across a wide geographic area. Rich textiles have been found in high-status burial contexts, such as the high-quality wool and silk

preserved in the Oseberg ship burial, Norway (Larsson 2008, 181). One notable example is the Mammen burial. The male burial at Mammen, Denmark, is a high status burial containing a man of possibly of elite, princely, rank. Alongside the ornate and expensive artefacts, such as a silver-inlaid axe, there were textiles decorated with superb embroidery (Price 2008a, 263). Larsson (2008, 183) has noted that on the whole male burials contain more decorative textiles in comparison to their female counterparts. This suggests that more ostentatious clothing may reveal a male gender identity. This is interesting given that textile production was generally associated with females. This increasing importance of textiles as status indicators therefore resulted in a growing demand for textile goods across Europe. There was a great demand for high quality woollen clothing and as no region can provide all the diverse grades of wool required to produce different textiles (Bender Jørgensen 1992, 137) there was therefore an increase in the wool trade to enable the production of high quality garments.

Despite textiles becoming an indicator of status there is nothing to suggest that the production of these items was perceived as an activity associated with a particular rank within society. In fact, spindle whorls occur at sites of various status, including elite, ecclesiastical and low-status sites, which indicates the social importance of spinning within the whole spectrum of society. However, textile tools may indeed give some indication to the status of the site. Evidence from Sweden suggests that the economic status of the site was reflected in the type of the textile tools (Andersson 1999, 22). It has been suggested that small spindle whorls could indicate fine textile production (Walton Rogers 2007, 102). This has been argued to be the case at the site of Flixborough in northern Britain where the textiles produced have been argued to reflect the elite status of the site. The spindle whorls were smaller and more standardised than contemporary spindle whorls from other sites and this is thought to

indicate the production of fine textiles (Walton Rogers 2007, 106). However, this is not noticeable at contemporary sites in the North Atlantic and so needs further material culture evidence before a valid conclusion can be reached. However, it is clear that textiles were key in revealing social status and were vital for the economy on the North Atlantic islands during this period of great social transformation.

In Iceland *vaðmál* was a standardized textile woven on a warp-weighted loom in households across the island. This was a long-lived practice and continued from the settlement of Iceland until roughly the 18th century with women producing this woollen cloth of normally a 2/2 twill in great quantities (Hayeur Smith 2012, 510). *Vaðmál* had a high export value. Each grade of *vaðmál* was roughly equivalent to a weight of silver, and it was used as clothing but it could also be waterproofed with animal fat and used as sailcloth (Byock 2001, 44 & 45). Given its versatility and corresponding value, its importance to Icelandic society is not surprising. In fact, Byock (2001, 46) and Hayeur Smith (2012, 517) have noted that prior to the fourteenth century *vaðmál* was vital to society as not only was it exported and important in international trade but it was used as a form of currency within Iceland itself.

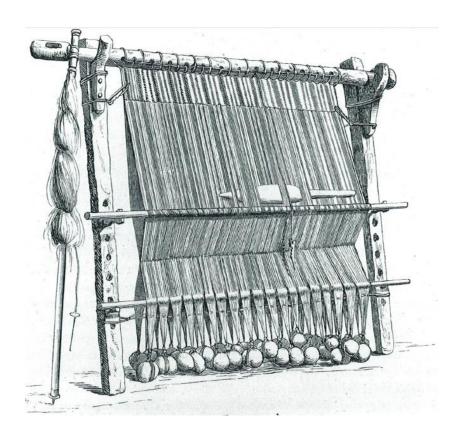


Figure 4.5 An etching from 1854 of a Faroese warp-weighted loom (Østergård 2004, fig. 22).

Vaðmál has been argued to reveal more than social identities and potential could provide an insight into the climatic changes during this period. The fact that it was water resistant is widely recognised (Byock 2001, 445) and this was due to the weft yarn being spun from the inner fleece which created a fabric that was waterproof and also warm (Hayeur Smith 2012, 517). It is the warmth of the fabric that Hayeur Smith has focussed on when considering how technology changes may reflect a cooler climate. She notes that in Greenland there are substantial changes in the way in which textiles are produced roughly coinciding with the start of the 'Little Ice Age'. The Norse inhabitants of Greenland began to incorporate more weft threads into the 2/2 twills (Hayeur Smith 2012, 520) and thus creating a warmer, more insulated, textiles. This is unlikely to be a coincidence and can be considered alongside other evidence when examining changes in temperature during the Norse period. It is clear that vaðmál was of

significant importance to the inhabitants of the North Atlantic Islands. Notably, it was not until the 17th and 18th centuries when the production of *vaðmál* diminished in Iceland, as the warp-weighted loom was replaced by more technologically advanced horizontal looms.

Gender can be seen to play a significant role in textile production. Women were the principal textile producers, responsible for this crucial activity. Hayeur Smith (2012, 523) has noted that they 'were creative in their weaving, changing to environmental and economic circumstances'. It is apparent from material culture remains that textile activity generally took place within close proximity to the main domestic dwelling. This activity was therefore prominent in the everyday existence of the occupants but it could also indicate that the weavers needed to be close to the dwelling to undertake other activities in the vicinity. Women are associated with weaving, on a warp-weighted loom, during this period and given the proximity of the main production of textiles to the farm this further suggests that gender played a role in this particular process. It is likely that women may have had to stay closer to the main dwelling in order to undertake other activities including general household management, child care and food preparation. However, there is also evidence of textile production is also apparent at shieling sites (Ledger et al. 2013, 820) which are located some distance from the main farms, in the summer grazing pastures. It is understood that women were present at these sites to undertake the key shieling activity of milking the animals whilst they were away from the home farm at the summer pastures. Therefore, given the importance of the production of textiles in society, it is now unsurprising that they would have continued, probably in a smaller capacity, whilst at these seasonal shelters.

Whilst weaving remains an activity with strong female associations in the North Atlantic islands, throughout the Norse period and beyond in other countries the gender connotations change during this period of transformation. In southern Britain and Scandinavia, with the commercialization of textile production, weaving became a maledominated task. As the warp-weighted loom was replaced by the horizontal and treadleloom and weaving became more efficient and production moved from households and into urban environments men become associated with the activity. However, the situation in the North Atlantic islands is different to that of their other northern European neighbours. The warp-weighted loom was not replaced until the 18th century in Iceland and it is unlikely that the use of the warp-weighted loom was completely abandoned, and it probably continued in use to produce textiles for the household (Hayeur Smith 2012, 510; Robertsdóttir 2008). Due to the rural nature of these islands, although textile production was an important aspect of the economy, the activity remained within the household and undertaken by women. The continued rural nature of this activity meant that it was not overseen by guilds or central workshops, unlike in southern Britain and Scandinavia; nonetheless the products were standardised and legally regulated (Hayeur Smith 2012, 510). This highlights the connection between women and warp-weighted looms, rather than weaving in general. This association between women and warp-weighted looms is more common than a direct association between women and textile manufacture. Weaving as a female activity was highly symbolic and in Norse mythology the goddess, Frigg, was symbolised by a spindle (Østergård 2004, 45). In fact a lot has been made of the apparent connection between female supernatural beings and weaving. Although weaving is commonly associated with fate and is indeed a good metaphor for it, there is sparse evidence to connect female supernatural beings with weaving (Bek-Pedersen 2009, 23-24; 2007, 1). Bek-Pedersen (2007, 2) has undertaken a study to show that the evidence is extremely limited and notes only three examples of female supernatural beings being associated with spinning in the Poetic Edda, Snorra Edda and skaldic poetry. There is one

mention of weaving valkyrjur (Darraðarljóð), one of spinning women (Volundarkviða), and one of nornir working threads (Helgakviða Hundingsbana)'. Therefore, it could be argued that there is some association between females, the supernatural, weaving and fate, although the evidence is limited. However, it can be seen that the connections between females and weaving, and even fate, are stronger. Therefore the economic importance of textile manufacture is further increased through the connotations of fate which reinforce the social significance of weaving and those doing the weaving within society.

Textile tools are not confined to settlement sites but are also observable in burials. Many female burials contain spindle whorls, such as the Scar boat burial (Smith 1999, 100). However, this could merely represent an idealised view of society rather than social reality (Stoodley 1999, 139). Although it has been noted that weaving battens are more common in female's graves in Norway than Scotland, these items were included in graves at Islay and Barra (Ritchie 1993, 47). One female burial at Westness contained a weaving batten and a pair of wool combs (Kaland 1995, 314; Jesch 1991, 9), another burial contained a weaving batten and other burials incorporated various weaving tools, including spindle whorls (Kaland 1995, 315; Graham-Campbell et al. 1994, 155). Two stone spindle whorls were recovered from boat burial at Scar and the grave also contained a weaving batten and whalebone plaque, associated with linen production (Owen & Dalland 1999). Weaving battens and whalebone plaques are valuable items and are often recovered from rich burial contexts highlighting the significance of textile production (Walton Rogers 2009. 287). However, textile tools in burials are not well represented across the North Atlantic islands and in Iceland only around five spindle whorls, two weaving battens and one whale bone plaque have been retrieved from burials (Janis Mitchell pers comm. 22/01/2014). Notably Norway has many more textile tools in female graves than any other part of the Norse influenced

world. The lack of tools in graves is unlikely to reflect an absence of association between females and textile production. It is more plausible that the tools maybe did not carry the same symbolic significance that they did in the Scandinavian homelands or that these items were deemed too useful to be put into graves. However, given the notable lack of artefacts in graves from the Norse North Atlantic in comparison with the Scandinavian homelands it is more likely to indicate that artefacts were rarely placed in graves in this part of the Norse world.



Figure 4.6 Possible bone beaters on display at the Settlement Exhibition in Reykjavík from Aðalstræti 16 (photo: L. Hogg. Reproduced with kind permission of Reykjavík City Museum).

It can be seen that textile production was a key activity, economically and socially, in the North Atlantic islands. It was an activity explicitly associated with females and remained so throughout the Norse period, which contrasts with other areas of Norse influence that were geographically reasonably close by, including Britain and Scandinavia. Unlike the North Atlantic islands in other regions textile production was

becoming a male-associated activity with the replacement of the warp-weighted loom with more technologically superior looms designed to be more efficient and produce standardised items. Weaving on a warp-weighted loom can also be seen to have potential spiritual connections, unlikely to be strongly associated with supernatural beings but seen as instruments of fate.

Dairy products: milking and other associated tasks

Another activity, key to the northern Norse societies, was dairying. This would have provided a vital source of nutrients to the Norse diet, but as noted in medieval texts, would have versatile uses, such as a lubricant, medicine to treat wounds and illnesses and many others (Critch 2011, 9). Activities associated with dairying would have taken place at the seasonal shieling sites and these also have gender connotations. It is an activity which is difficult to precisely reveal in the archaeological record, which may offer an explanation for the distinctive lack of detailed research in this area. However traces of this activity can be seen. Shielings would have played a key role in milking and the production of dairy products. Studies on shielings in Sweden have shown that butter production would have taken place at the shielings sites closest to the home farms so the dairy produce could be delivered back to the farms at regular intervals (Nyman 1993). This would have allowed maximum production of these milk-based goods during the summer months. It would also suggest that the shieling sites closest to the farms were utilised primarily for this kind of process whereas the shielings further away may have been utilised for other animal husbandry related practices such as the rearing of animals for meat consumption. However, this is difficult to prove through the archaeological record. Although shieling remains do exist, evidence for the actual processes associated with dairying is pretty much impossible to detect through the

archaeological record. Churns to make butter are made of wood so their presence in the archaeological record is dependent upon preservation conditions. An unusual example is from farm Ø71 in Vatnahverfi, Greenland where a milk tub was found to contain over 110 mice and so it is thought that it was partially filled with milk and used to attract mice which subsequently became trapped (Vebæk 1991, 9). Further evidence may be gathered from remains of building structures, such as shielings and larger buildings used for animals husbandry. There is evidence for shielings across the North Atlantic and there is considerably evidence for stalling of sheep/goats in Greenland (Mainland 2006, 249). Sheltered housing would have been extremely important for some animals which are particularly sensitive to temperature and environmental changes such as cattle. However goats are particularly well adapted to grazing outdoors during snowy conditions (Mainland 2006, 249) and this may explain the large number of goats present in Greenland in comparison with the rest of the North Atlantic.

Faunal assemblages also indirectly give some indication to the practice of dairying. For example, large numbers of bones from infant calves may indicate culling of young animals so that the milk may be collected from the mother for human consumption. This has been suggested as an explanation for the large number of infant bones from calves from faunal assemblages on sites in the Outer Scottish Isles (Mulville et al. 2005; O'Connor 2004, 429). It has also been noted that the high numbers of infant bones in comparison assemblages from other Scottish sites could reflect the better preservation conditions for bones on the island sites (Mulville et al. 2005, 170). It could also reflected better excavation techniques with a standardised system for retrieval of small unfused bones associated with the very young. Other factors have also been recognised as reasons for the high death rate amongst the young calves in the herd and these include factors such as poor husbandry and marginality of the land (Mulville et al.

2005, 173). McCormick (1998) has strongly argued for the suggestion that poor animal husbandry, exacerbated by lack of fodder, was to blame for this high infant mortality rate. However, this is based upon the fodder being gathered from hay but the cattle could have been fed on other sources such as oats and seaweed (Mulville et al. 2005, 178) so it is unlikely that bad husbandry and lack of fodder would have resulted in such high death rates for infant cattle. It is more likely that the suggestion put forward by Mulville et al. (2005, 178), that this discrepancy can be explained through deliberate culling to produce more milk, is more credible. As well as the slaughter of young calves it could also be expected that any faunal assemblage would contain the bones of elderly cows which were no longer of use as milk producers (O'Connor 2004, 429). From faunal assemblages that display these cull patterns O'Connor (2004, 429) believes that we can therefore be certain that dairying production was practised in parts of Britain where there was Scandinavian influence and islands in the North Atlantic. It is therefore certain that the Norse in the North Atlantic were undertaking milking and diary processing.

Dairying was not restricted to cattle herds but sheep and goats were also considered dairy animals. In fact there are multiple references to sheep being milked throughout the sagas although it is likely that cattle were valued primarily for milk whereas sheep and goats could also offer other products. However, the quality of milk, and therefore butter, obtained from sheep/goats would be of a much poorer quality than that from cows. It has been noted that sheep milk is of an oilier consistency and when combined with milk obtained from cows it creates an inferior butter milk (Challinor 2004). However, sheep and goats would have still been important in the dairy economy of the northern Atlantic islands. It is estimated that a typical North Atlantic sheep flock size would have consisted of between 30-50 sheep per household and that

these would have provided milk, wool and meat for the household (Thomson et al. 2005, 755). The age of slaughter that can be obtained from the faunal remains reveal whether sheep were used primarily for meat or utilised for their by-products. This would be particularly insightful to appreciate the importance of specific commodities as it is uneconomical to utilise the sheep for all the by-products it is capable of providing (Ingimundarson 1995). If one were to utilise all the by-products the overall quality of each would be severely reduced and consequently be of extremely poor quality. For example, if the sheep is being milked regularly then it would lose nutrients that would benefit the quality of its meat and it may also take longer to gain the weight required prior to slaughter. This is also true of animals which have many by-products that can be utilised, for example cattle. However, it is likely that dairy cattle would have been slaughtered at the end of their use as a provider of milk and consumed, although the meat would not be as good quality as meat from cattle reared for meat consumption and slaughtered at a younger age.

Dairying, as with textile manufacture, has often been associated with females during the Norse period in northern Europe. Dairying would have stayed associated with women until the early modern period and beyond across the region. This contrasts with the situation regarding textile production, in continental Europe and the British Isles, whereas process became more industrialised it became to be associated with the male gender. There are many references to dairying being associated with women in the documentary sources from across Europe during the period of this study. According to the *Rectitudines Singularum Personarum* the only woman specified among the estate workers was the cheese-maker (Hagen 2010, 261) and butter churning as a female task is referenced in riddle number 54 from the Exeter Book (Crossley-Holland 1978).

with women, as in Egils saga where women go to the milking shed and thus discover Grani's body and Njáls saga where Gunnar sees women at the milking post. English documentary sources note that as the sheep was a dairy animal: if a husband and wife parted the woman kept the sheep rather than the swine (Hagen 2010, 94). There is some suggestion that there may have been a taboo against males milking during the Norse period (Flygare 2011, 224). Milking will occasionally be mentioned in the Icelandic Sagas as a means of insult towards men. In the eddic poem, Helgakviða Hundingsbana I, Sinfjötli insults Guðmund by saying that he is devoid of morals having milked Gullnir's goats. Oðinn insults Loki by comparing him to a maid milking cows in Lokasenna. Furthermore, in Iceland it has been noted that milking was the task of female slaves (Myrdal 2008, 70). In Bjarnar Saga Hítdælakappa, Þórðr orders his wife Oddný to milk the sheep; however she refuses, as it is a degrading activity for a lady of her rank (Jochens 1996, 112). This inferior association between dairying and slaves is interesting as the various products associated with this activity were extremely important to northern societies during the Norse period. Notably butter became an item associated elite status and was of significant economic value: for example in Sweden it was comparable to cereals in notable economic value (Flygare 2011, 224). During this period butter became an accepted form of payment for trade and taxes (Myrdal 2008, 68) as, in addition to its economic value, it could be transported easily and efficiently and preserved well. In economic significance of milk and butter may explain Porgeirr's anger upon discovering that his sheep have been milked on the orders of Þórðr in Droplaugarsona Saga.

Although a prestige consumer good and staple in the diet it is interesting to note how the process of making butter and associated dairy produce was associated with low status women working on the fringes of society, at shieling sites in the North Atlantic.

In fact as demonstrated it could perceived as insulting, for a male or high-status female, to be associated with the process of milking the animals. It is an interesting dichotomy which highlights the social differences between the producers, those with direct and constant contact with the animals, and the consumers who are removed from the process of manufacture and therefore do not share the same relationships with the diary animals as the low-status females of society.

Butchery

As well as utilising animal by-products, certain animals were also consumed by the human population. This consumption required expert knowledge of butchery to efficiently carry out the task and prevent the product from going bad. Most evidence of butchery in the archaeological record can be revealed through the examination of animal bones for surface modifications, marks as a result of cutting up the meat. Although this activity did occur, and was probably significant to the population, it is difficult to detect this activity in the archaeological record, apart from some evidence gleaned from faunal assemblages. Aside from the butchery marks on the bones, revealing that carcasses were cut apart, concentrations of bone deposits, especially of bones such as skulls which were likely to have been discarded, may reveal where butchering was taking place. However, as Jennbert (2011, 82) has noted, slaughtering and butchering may have been undertaken anywhere within the wider landscape but this is difficult, if not impossible, to detect archaeologically. It is likely that it was undertaken reasonably close to the main settlement site so the food could be quickly transported to the household or easily stored for later consumption. It is probable that someone with a certain level of experience would have undertaken the task to minimise distress and mess and to get the maximum yield from the carcass. An interesting example from

Greenland has been used as a possible explanation for the demise of the Greenlanders. At three separate farm sites, Sandnes, Tummeralik and Nipaatsoq, the partly articulated remains of butchered Norse hunting dogs were discovered in the final floor layers of the building. It has been suggested that this was a desperate last act which subsequently destroyed any ability to hunt efficiently and effectively and thus resulted in the gradual starvation of the Greenlandic population (Buckland *et al.* 1996, 24). Dog bones do not often show signs of butchery, presumably as they were regarded as work dogs and not meat producers, and so these examples are quite unusual and could indeed suggest that starvation led to their consumption.

Many different aspects of social identity, economy and society can be revealed through meat and butchery. It can be revealed through the different species that are present in the assemblages, whether these are wild or domestic, and the element distributions which reveal which cuts of meat were being consumed. From the butchery marks zooarchaeologists can infer whether the meat was acquired as a whole or as a specific cut, which could indicate the cost and therefore status of the site. However, it is difficult to apply modern analogies concerning meat to the Norse period, whereby cuts that are not particularly desired in modern society were valued much more highly (Ashby 2002, 44). As mentioned it is not desirable or, indeed, profitable to utilise an animal for all of its by-products, although as seen a cow may be kept for dairy but could also be culled for meat after it reached a certain age. To utilise an animal only for meat, or one end product, may reveal wealth as time and finances are focussed solely on one end product. Pigs have often been cited as an example of this as they have no wool for textiles and one cannot milk a pig. Pigskin is a useable product but traditionally in northern Europe pigs have been butchered without skinning (O'Connor 2003, 3232). The dearth of pigskin artefacts could indicate preservation issues but is probably more

likely to suggest that cattle and sheep hides were available and were the hides most commonly used (O'Connor 2003, 3233). In addition, pigs can be used to clear vast stretches of land that can then be utilised for farming so can, in fact, be of great use to human society before they are consumed. It has also been argued that low status may be reflected in exploitation of whole carcasses for meat and marrow, revealed through heavily butchered bones, as every part must be utilised and nothing can be afforded to go to waste (Ashby 2002, 45). However this may just reflect a desire to use the whole carcass rather than a desperate need to reap as much as possible.

Meat and butchery also reflect taboos and preferences which reveal social identities connected with social identities bound up with perceptions of belief, self and worldviews. The consumption of horse flesh has been cited as a taboo in Christian belief (Simoons 1994, 187) but it is difficult to draw firm conclusions on taboo meat consumption prior to Christian conversion in the north Norse world (Jennbert 2011, 145). It could be that particular animals were consumed during different seasons, or by different genders or ages. Modern anthropological studies hint at the vast complexities of this area and reveal the difficulties encountered when attempting to draw conclusions during the Norse period. Ritual and belief systems can also be understood from the method in which certain animals were dispatched. A good example of this is Hofstaðir, where a minimum of 23 cattle skulls have been recovered. These reveal interesting butchery marks which indicate that the animal may have been killed by a blow to the head, as indicated by depressions in the skulls (Lucas & McGovern 2007, 7). It could have been that this was an effective way of culling cattle. However, it has been suggested that this method was utilised for a dramatic effective, creating the maximum blood from the death, which was further heightened through the display of the cattle heads (Lucas & McGovern 2007, 23). Given the locations of the cattle skulls and

indication of display it is likely that this was for the purposes of dramatic effect. It further proves how meat consumption, slaughter and display were a key part of worldviews, belief systems and so the act and the consumption could be perceived as ritual, defining social identity and revealing belief and perceptions.

Horn, bone and leather working

As mentioned above pigskin was a useable by-product obtained from pigs but it does not appear to have been utilised, or utilised extensively, in the Norse North Atlantic. It is likely that the hides of other animals, notably cattle and sheep, would have been more commonly used. However, there is sparse or little evidence for leather working activity in Greenland, Iceland or the Faroe Islands. It has been suggested that leather goods would have been imported from Norway rather than significant large-scale production occurring in the North Atlantic islands (Mehler 2007). The shoe from Niðri á Toft in Kvívík [see fig. 4.7], although probably dating to the 12th century, shows parallels with Norway and Sweden suggesting that leather items were traded between these areas (Young 1979, 117). In addition to the lack of evidence for leather working there is also very little evidence for any horn or bone working. There is a notable lack of any structure that could be identified as a craft workshop. However, the function of jarðhýsi are still heavily debated (as is the case with their European counterparts, Grubenhäuser). It is likely that these structures hosted multiple activities, as is demonstrated by the artefacts recovered from the jarðhýsi at Storaborg which included items such as a knife, loom weight, whetstone and glass bead (Snæsdóttir 1992). Mehler (2007, 227) has suggested that many activities were undertaken by the household with everyone expected to assist in craft production and undertake multiple craft specialisations. There is a lack of evidence in Iceland, Greenland and the Faroe Islands

for these crafts as specialised industries. It would suggest that these islands were more self-sufficient that their neighbouring countries where there were urban centres, larger demographics and subsequently the ability to allow for greater levels of craft specialisation. This high level of specialisation in places such as Britain and Scandinavia removed their population more obviously away from the full economic role of the animal and isolating some from the natural world. And this further suggests that the inhabitants of the North Atlantic islands therefore shared a much closer connection with the animal world. Furthermore, it highlights the trade links between these islands and the wide world and demonstrates that these islands were not, as could easily be perceived, isolated.



Figure 4.7 Leather shoe from Kvívík (photo: L. Hogg. Reproduced with kind permission of Løvn Landsins).

Working with Animals

Across early medieval Europe humans were working alongside animals to cultivate the land for arable farming. This primarily involved a plough, made from iron and wood, pulled by an ox or oxen and guided by a human. The damp, heavy soils of Northern Europe mean that this was a region more suited to the use of a plough compared with the drier sandier soils of southern Europe where the use of a plough would have increased the loss of moisture from the soil in effect making it less productive (Klápště & Nissen Jaubert 2007, 98). Evidence for ploughing in the Norse North Atlantic is almost impossible to find presumably because these Northern societies were pastoral based, focussing their efforts on animal husbandry and gathering marine resources. Furthermore these northern islands, especially Greenland, had significantly shorter growing seasons than the rest of Europe (Buckland et al. 2009, 114). Thus, the focus would be upon pastoral rather than arable farming as it would produce greater results. It has also been noted that there is an uneven distribution of archaeological finds of plough parts, with most concentrated in northern central Europe (Klápště & Nissen Jaubert 2007, 99). In general it can be acknowledged that rarely traces of ploughs survive (Bill & Roesdahl 2007, 255), plough parts, especially wooden, may not preserve well and traces of tillage (plough marks) are exceptionally difficult to locate and identify.

There is little archaeological evidence for the use of a plough in the North Atlantic islands, although evidence for small-scale cultivation of barley (Church *et al.* 2005. 193) does suggest that some amount of soil preparation must have occurred. A simple method of cultivation would have been to use a spade but this would have only been suitable for small-scale cereal production. A metal object [see fig. 4.8] was discovered during the excavation of a Norse site at Suðurgata 3-5 in Reykjavík and has been interpreted as perhaps being part of an ard or scratch plough (Vésteinsson 2006b,

101). However archaeological evidence is very scarce, indeed evidence of plough usage in the Norse North Atlantic from any discipline is rare. It has been acknowledged that the word for plough does not appear in Old Norse prior to the 11th century (Puhvel 1964, 180-181). However, there are several mentions in the sagas, notably written several hundred years after the events they describe. In *Njáls saga* it is mentioned that prior to Otkell riding over Gunnar he gallops over a ploughed field. There is a direct mention of the plough in *Egils saga*, it notes a suggestion that a shilling of silver should be given for every plough in the realm in return for friendship between Athelstan and Olaf. This reference connecting financial wealth to the plough could give some indication to the importance of this machine, in England at least. However, this is speculative as it is difficult to discuss the importance of the plough and the working relationship between human and animal with so little evidence.



Figure 4.8 Artefact interpreted as an ard with carbonised barley grains in the background (photo: L. Hogg. Reproduced with kind permission of Reykjavík City Museum).

A special and distinctive working relationship between humans and animals is highlighted through human-dog interdependencies. Dogs were the first animals to become domesticated and to live alongside and work with humans. They would have aided early hunter gatherers with the hunting of wild animals and this has continued until the modern day. Given this long standing interaction between the two it is unsurprising that dogs appear to be of importance in human societies and are widely referred to as 'man's best friend'. In fact, during the Viking period dogs, along with horses, were the most common animal to be deposited alongside humans in graves (Jennbert 2011, 65). Given their versatility they are able to undertake many roles, including herding livestock and hunting, they are also obedient and loyal and can be very protective of their human companions and so can also be used as guard dogs. Jennbert (2011, 70) notes that the obedient nature of the dog would have meant that it could have had a functional role as well as a close relationship with humans. So the dog would have been perceived in a practical but also personal way. Given these qualities it is then somewhat surprising that they are rarely mentioned in the literature in a personal way. For example, in the whole of Snorra's Edda only two dogs are referred to by given names (Garm and Hrodvitnir) which compares to 41 horses, 17 cattle and 5 goats directly referred to by personal names (Jennbert 2011, 49). It is unlikely that dogs had lost their significance when these pieces of literature were written down as dogs continue to hold a very special place in human society even today. Their absence in the documentary evidence may be explained by their closeness with humans. They may have just been too obvious, too close to humans to warrant further recognition in the literature.

From a functional perspective dogs would have worked alongside humans for a variety of tasks. Those most apparent in the North Atlantic are probably the herding of

livestock across the landscape, especially during the seasonal moves, and hunting. There are early depictions of hunting with dogs in stone work across Scandinavia. One runic stone, dating to around AD 500, from Möjbro, Sweden, depicts a horseman and two dogs and is argued to show a warrior hunting (Jennbert 2011, 207-8). There is other evidence that further demonstrates this connection between hunting and dogs. For example, a dog leash has been uncovered in a Viking Age boat burial at Ladby in Denmark and Jennbert (2011, 65) has argued that it shows that four dogs were leashed together and used in connection with hunting. It is likely that particular breeds of dogs were favoured for particular tasks, as today. Zooarchaeological evidence has revealed that there were at least four distinct breeds of dog in the Iron Age in Scandinavia (Jennbert 2011, 65). Zooarchaeological evidence has further highlighted the role of the dog in hunting, especially from sites in Greenland. It was noted that large deerhound bones were recovered from many Norse sites in Greenland, including the small sites. McGovern and Jordan (1982, 76) drew the conclusion, based on the size and breed, that these were dogs primarily used for hunting and were working dogs. However, it is noticeable that dog bones have not always been recovered from archaeological sites but their presence can be detected from markings, left by their teeth after gnawing, on the bones of other animals. For example this is seen at Hofstaðir (McGovern 2009, 220), Hrísheimar (McGovern 2005) and Granastaðir (Amorosi & McGovern 1994, 182), all located in Iceland. In addition there were a small number of dog bones from Albingisreiturinn (Garðarsdóttir 2010, 105; Pálsdóttir 2010, 15) and fragments of dog bone from Vatnsförður (Pálsdóttir et al. 2008, 8). These unfortunately were too small to allow for much hypothesis. It is likely that dogs were used for hunting across the North Atlantic islands but were probably more suited for this activity in Greenland where the topography, stretches of land, and game, bigger animals, were more suitably for hunting with dogs. It is definitely the case that dogs were used in herding animals, as they are

today. Their absence from the archaeological assemblages suggests that their bodies were disposed of elsewhere than the domestic waste suggesting a greater personal importance within human society than other domestic animals, such as cattle and sheep. It is likely that they were given their own burials reflecting the strong bond between human and dog, a recognition for their importance in work revealing the strong bond of companionship between the two.

Very little has been written about cats during the Viking Age and Norse period. Cats are rarely mentioned in associated literature and documents and their presence is very rarely revealed through archaeological excavation. From some of the written sources we can conclude that cats held a special place within human society and could be associated with magic and important status. It is mentioned in Snorra's Edda that Freyja rides a cart that is pulled by two male cats and throughout the Edda it is noted multiple times that the animal associated with Freyja is the cat. However, there are only a few examples of cats in archaeological deposits. They would have served a practical function of ridding the dwelling of pests, such as mice and rats (Jennbert 2011, 70). Andersson (1993, 31) has argued that as black rats (rattus rattus) did not arrive in Scandinavia for a long time after the introduction of cats then the cat's main task in Scandinavia would have not have been to catch mice. Instead Andersson stresses a more symbolic role, both of ritual and of high-status, and indicates that cats would have been used for their pelts. However, evidence from 9th-10th century contexts at York (Rielly 2010) and Flixborough (Dobney & Barrett 2007, 123) reveal that the black rat was reintroduced to England during these centuries, arguably as a direct result of international trade and travel in large part due to Viking expansion. Therefore, it is unlikely that black rats were absent from Scandinavia. Furthermore the North Atlantic islands were settled by populations from Scandinavia but also Britain and so it would be reasonable to assume that the black rat was present there. However, as many scholars (eg: Karlsson 1996; Hufthammer & Walløe 2013) have noted there is no evidence of the black rat in Iceland until the early modern period. Yet, there is evidence to show that house mice were present on the North Atlantic Islands. Mouse bones have been recovered from Iceland, Greenland and the Faroe Islands but are notably absent from Newfoundland (Jones et al. 2012, 4; Davis 1983, 529). As previously mentioned in this chapter possible mouse traps, composed of milk tubs, have been suggested in Norse Greenland (Vebæk 1991, 9). It is strongly argued that Viking settlers from Norway and the British Isles facilitated the expansion of house mice populations across the North Atlantic. Evidence from Greenland indicates that the Norse house mice failed to survive without the Norse human population and modern DNA analysis supports this revealing that the house mice now present in Greenland descent from Danish house mice (Jones et al. 2012, 5). Therefore it is certainly plausible that cats performed the very important and practical role of 'mouser' in the Norse North Atlantic settlements.

However, cats would have also further served the role as a status indicator. They were rare in Norse Iceland, they were important for catching mice, but furthermore they were connected with the powerful goddess Freyja and given their rarity their fur would have been an elite commodity. In fact, it has been noted that cat skins were so valuable that in 12th century Iceland they were worth as much as three fox skins or three yards of vaðmal (Hårding 1990, 107). Often gloves made from cat fur are referenced in the sagas, including *Eiríks saga ranða* where a powerful sorceress has clothes made from white cat fur (Kunz 2001, 658). At the site of Hofstaðir in Iceland there were several concentrations of cat bones but only partial skeletons were discovered which revealed evidence of cut marks consistent with skinning (McGovern 2009, 221). It is likely therefore that the deposits at Hofstaðir represent the skinning of cats for their fur.

However, there is another site in Iceland in which a cat skeleton has been uncovered that shows no evidence of cut marks suggesting skinning (Brewington 2010, 5). A partial cat skeleton was found alongside human skull fragments at the site of Ingiriðarstaðir, one of the largest pagan burial grounds in Iceland. This is an interesting case and potentially highlights the role of the cat in ritual, highlighting its spiritual conations in the Norse world. Given the rarity of cats in the North Atlantic it is plausible to see why they were desired, and maybe even venerated, but their practical role living closely alongside humans in their living sphere should not be overlooked.

Similar to the cat, another animal that is seemingly almost impossible to detect through the archaeological evidence is the chicken. In 1974 the Icelandic Agricultural Research Institute took measures to prevent the extinction of the old poultry populations. Although the origins of these populations is not definitely known, documentary sources indicate that they were present in Iceland from at least 16th century (Aðalsteinsson 1981, 262). Evidence for the origins of these old populations remain elusive and poultry in general are very rarely mentioned. In Eiríks saga rauða the sorceress, previously mentioned for wearing cat fur gloves, is greeted with a high seat complete with a cushion filled with chicken feathers (Kunz 2001, 658). However, zooarchaeological evidence has yet to produce evidence for chickens in Greenland, and this is the case in the Faroe Islands too. However, there is a possible bird bone from a domestic fowl during Phase IV (c. 871-1226) at Albingisreiturinn (Best 2013). Conversely, it is known from Scandinavia that domestic fowl were present during this period. However, in Scandinavia chickens, like cats, are first found on Iron Age farms which is much later than other domestic animals such as cattle, sheep, goats, pigs and dogs (Jennbert 2011, 57). If domestic fowl were present in the North Atlantic islands then they were not numerous and the human populations were probably more reliant

on wild fowl for things such as eggs and feathers. As was noted in chapter three, wild birds are particularly numerous in zooarchaeological assemblages from the Faroe Islands. However, chickens and domestic fowl would definitely be known from Scandinavia and the rest of Europe. Given their rarity therefore the mention of chicken feathers in *Granlendinga saga* is interesting as, similar to cats, it suggests that their exclusivity was associated with high status and also magic.

Pastimes

Human leisure pursuits often incorporate animals, either on purpose or unintentionally. Within this broad all-encompassing title 'pastimes' it is not just activities associated with leisure to be considered but in addition, and somewhat more notable, everyday activities which would have been considered part of the norm. For example, some activities such as weaving or spinning have already been discussed as although these are activities which people would have undertaken generally these are also an essential part of the economy and crucial to survival. There are some aspects of these activities which are impossible to detect in the archaeological record and we shall never know the full extent of these human and animal activities and the impact they would have had on Norse society. However, it is possible to trace some activities which, in turn, provide a revealing insight in the Norse North Atlantic societies. Certain animals appear to be more prominent in these types of activities revealing how these animals have been perceived by Norse society. Without a doubt, the horse appears to be the animal for which there is the most evidence for human-animal interaction outside of the working world.

The horse plays a prominent role in Norse mythology where it is associated with the gods Óðinn and Freyr. Possibly as a reflection of its physical attributes, the horse can often be observed to be a facilitator in supernatural journeys between different worlds and it addition has also been noted to have an important role in fertility rituals. The role of the horse as a transporter, facilitator of journeys, is significant when considering how humans and horses participated in activities together. Within the Icelandic sagas there are many references to cross-country journeys on horseback, for example such as in *Njáls saga*. In Iceland overland travel would have been challenging, with journeys around fjords and over mountainous terrain. However, the horses imported by the early settlers would have been small Scandinavia horses, ideally suited to Iceland's terrain. In contrast to the rest of Europe it is believed that these horses would have continued to be bred in Iceland retaining the desirable qualities that are still observable in the modern Icelandic breed (Aðalsteinsson 1981, 258).

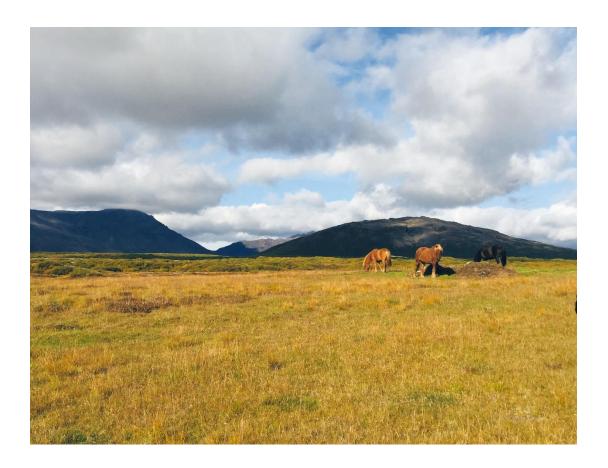


Figure 4.9 Icelandic horses in the landscape (photo: L. Hogg).

It is generally acknowledged that there was an extensive system of horse paths in Iceland (Byock et al. 2005, 204). Archaeological evidence for accommodation booths at the assembly site of Pingvellir are testament to the fact that people had to travel significant distances to participate in routine political activity. The discovery of one of the major interior routes is detailed in the Landnámabók where it is mentioned that explorers from the north saw the horse tracks of the explorers from the south and realised that travel through the interior was possible. It is likely that these routes were the only means the inhabitants had to communicate with the wider population. Even in the early-twentieth century around half the population lived in remote farmsteads, only accessible via these trails. Kirsten Hastrup (1985) has noted that Viking Age horse trails are still in use in modern-day Iceland. This signifies the ongoing relationship that the Icelanders would have had with this landscape. The horse was active in this

transformation of and interaction with the landscape which would have defined human identity through the perception of the space. In addition to practical considerations, horse riding can invoke a strong sense of identity and intense emotions. This is well illustrated in *Hrafnkels saga* for example. Hrafnkel eventually murders Einarr for riding his horse. Arguably, it is through riding that the boundary between human and horse is most permeable. When riding both the horse and the rider are responsible for the safety of each other. This action requires mutual trust and understanding from both of the participants. This dependency upon one another creates a strong bond between horse and rider. The sociologist Ann Game (2001, 9) has written about her riding experience and believes through this interconnectedness the blurring of the boundary between human and animal is most apparent.

The practical importance of the horse in Viking and Norse society is undeniable and this may have resulted in the horse, and riding, being perceived as an indicator of status. Burials containing riding equipment in Denmark have been interpreted as revealing people with military obligations at a high rank within an increasingly stratified and centralised political society (Pedersen 2014; 2011; 1997). Individuals may have had the opportunity to improve their social status through this particular service. In addition to military service, riding services to a lord may have also provided the opportunity for social improvement. The rider would have the opportunity to travel, interact with wider social networks, control trade routes and consequently the movement of wealth.

Therefore, rather than be seen as a service, this role was a privilege to which individuals would aspire. The political and social structure in the Faroes, Iceland and Greenland however differed greatly from that on the continent, being more egalitarian. However, access to a horse provided an opportunity to travel further, thereby allowing for participation at the Alþingi, and allowed for a more efficient method of controlling

trade and exchange. It elevated the rider providing an opportunity to increase their social status though this access to resources that would otherwise be unavailable. From sagas, such as *Njáls saga* and *Grettis saga*, it can be seen that those who owned horses tended to be male of high status, although occasionally lower status riders are mentioned. The horse was a mediator, and through its relationship with humans could facilitate journeys which would otherwise have been impossible. In a practical sense it could cross vast expanses of diverse terrain, but it was also able to travel between different worlds. It is through travel and riding that the active role of the horse is seen in creating and defining perception of social identity.

In addition to riding the horse also performed another interesting activity in human society, horse fighting. However, unlike riding, horse fighting did not foster an intimate interdependency between the two. Horse fighting with stallions was a very common activity in Norse North Atlantic societies and fights were held in the spring, possibly with the intention that the undertaking of this activity would secure a good harvest. Evidence for horse fighting is somewhat limited but place-names give some indication as to where the fights would have taken place. Place-names derived from ON indicate that horse fighting was a widespread activity, for example Hestaping, Iceland, meaning 'horse meeting' and Hestavig, Iceland, meaning 'horse fight' all indicate a location where horse fighting took place. Horse fighting is also mentioned in the sagas such as *Njáls saga* where Gunnarr challenges Starkaðr to a horse fight. Horse fighting is often linked to fertility cults and can be a form of entertainment and display of conflict between rivals. It can also be seen as a highly charged emotive activity in which the horses' owner is at risk of losing their honour if their horse loses. As horses were expensive, both in financial but also practical terms, this was an activity which displayed

and highlighted personal wealth and importance. It was also a display of masculinity and it was a way of displaying that gender to society as a whole.

Conclusions

Domestic animals were key in human society, shaping and creating human social identities through their very physical presence, their products and their associated connotations. Evidence for Norse North Atlantic human-animal relationships is available from a variety of different sources, including archaeology (material culture and zooarchaeology), saga sources, associated textual sources, landscape studies, placenames and ethnography. Domestic animals could literally connect humans with humans, as in the case of the horse which allowed effective transport and facilitated wider communication between dispersed communities. Animals shaping human perception and interaction with the landscape can also be seen in the seasonal movement of livestock. This removed the people participating from the relative safety of their home farms to what could be seen as a more hostile environment and exposed them to experiences that would have been otherwise not ben encountered. Although the locations may be distant, humans and animals alike would have journeyed on the same path year after year and so even leaving the comfort of the home they would have still encountered familiarity using the same pathway and shieling structure during the summer. From horse journeys to transhumance of livestock humans created new identities, shaped by their new experiences and interaction with the animals. Access to a horse would have aided the rider to travel long distances, communicating more widely, participating in events and trade which would have given the rider the opportunity to increase social status. In regard to transhumance, for example, it has been argued that shieling sites were often associated with women and so the activities there defined

gender identity. It has been acknowledged that these activities created many various social identities. Through these activities one can see some of the ways in which animals can shape human perception of and interaction with the wider landscape.

Associations with and perceptions of particular animals defined individual social identity but also the identity of society as a whole. For example, cats and chickens rarely appear texts or in the archaeological record and when briefly mentioned seem to be associated with elite identity and magic. One can also observe these strong connotations between sheep, where wool and textile production is associated with women. And furthermore, through dairying which also has strong gender connotations, with it seen as a female activity and insulting for a male to be associated with it. Furthermore, both textiles and dairy products can be regarded as indicators of status. Variations of textiles could elevate a person's social standing, as seen through dying of cloth with red being a desired and elite commodity. This suggests that whomever had the ability to produce good quality cloth would have been highly regarded in society. Interestingly dairying, although a desired commodity, reveals the opposite where it was regarded as a lowstatus task. Furthermore, one can see how other animal products have strong connotations, revealing wider social implications. For example, the consumption of meat can be particularly revealing of social norms, taboos, culture and religion. The various activities associated with animal products and interactions with animals reveals much about a person's social identity. It has been shown how social identities were created and defined through human interaction with animals and their products. Issues of gender and status social identities have in particular been revealed through these practices. It can be seen that although the North Atlantic communities were in the majority of cases fairly homogeneous there were still marked differences, which are chiefly demonstrated through gender identity in particular.

CHAPTER FIVE

The Role of Animals in Belief

his chapter explores and examines the role of animals in Old Norse belief. The term 'belief' is more appropriate in this context than 'religion' for several reasons which shall be discussed later; however 'belief' is intended to include the connotations associated with religion. Although the conversion to Christianity in northwest Europe started several decades earlier than the conversion in the North Atlantic it was not until the end of the period this study is concerned, around 13th century, that Christianity became firmly established in the North Atlantic. Prior to that there existed belief systems that have often been described or named as 'paganism' by modern scholars to encompass the pre-Christian beliefs of which we still know so little. However, using the term 'paganism' can lead to the misconception that pre-Christian beliefs replicate modern Paganism. Furthermore there is also the assumption that this 'paganism' is easy to detect and define, although this is far from the case. Unfortunately archaeological scholarship on the issue of belief and religion during the Norse period has been somewhat limited and often lacks clarity. There still remains a level of confusion over the terminology of 'religion', 'ritual' and 'belief'. However, as Insoll (2004, 2-3) as noted, despite the fact that it has been neglected by many archaeologists, religion is just as important or noteworthy to archaeologists as other concepts such as economy and society. The interdisciplinary project 'Roads to Midgard' (Vägar till Midgård), which ran from 2000 to 2007 and has published a number of articles and books, aimed to redefine Old Norse religion and to move away from mythology and mythological structure by considering ritual practise and ritual history via a multidisciplinary approach. This has been the only extensive interdisciplinary work

aimed at developing our knowledge of Old Norse beliefs. However, there is still some way to go, as our knowledge is still limited and more studies must be undertaken to gain a more accurate understanding. The small volume of research or attention given to this subject may indeed just be a simple reflection of the complexity of the concept and the fact that it is not a separate entity but rather extensively intermeshed with all aspects of human society.

Many scholars have used the term religion when discussing the belief systems that existed prior to Christianity becoming the dominant religion, although often they do not elucidate precisely what they mean by its usage. The term is particularly problematic in archaeological studies. In the last few decades there have been numerous studies into the archaeology of religion but prior to that there were very few studies. Jennbert (2000, 127; 2011, 17) perceives this as showing that religion had a low scientific value in archaeology and suggests that archaeologists now take a more nuanced approach to their research allowing them to explore the subject more effectively. This issue is particularly pronounced in the study of Norse pre-Christian beliefs. Whilst there has been archaeological research into this subject it remains small in comparison to the historical and literary studies which have been investigating this study for much longer than archaeology. However, the rich corpus of data available from other disciplines is of great benefit to any archaeological research. As is being demonstrated, religion and belief are subjective and impalpable yet they reveal much about a person's identity and society as a whole and can manifest itself in a multitude of tangible ways. Therefore, an interdisciplinary approach is essential as it is difficult if not impossible to fully understand pre-Christian religion from material culture alone.

The archaeological study of religion is problematic and the lack of clarity and decision in regards to the terminology and our understanding hinders research in this

area. Unfortunately there has been a tendency to label anything that is problematic or we cannot understand in a culture as religion. This problem is not unique to archaeology and is seen in other disciplines such as anthropology (Bowie 2006, 3). This merely serves to highlight the complexity of the term religion and associated terms such as ritual and belief. It further highlights how our intrinsic understanding of the term influences how we interpret specific acts and events within a society and culture we are not familiar with. Defining what is meant by religion is difficult, and the question has therefore attracted much debate in many different disciplines (Insoll 2004, 6). Historical studies concerned with defining religion show that this is a debate that is centuries old and reveal wide ranging difference in definition and opinion. Bowie (2006) provides a reasonably comprehensive overview of the changing definitions and perceptions concerning religion by various scholars. It can be observed how widely academic definitions range. Religion is seen as an attempt to make sense of the physical world (Tylor 1871) or religion is a response to emotional stress and the need to assert order in a volatile world (Malinowski 1948). Other scholars, such as Durkheim (1912), focussed on society rather than individuals and therefore defined religion as the embodiment of society's highest goals and ideals. Geertz (1973, 4) took a more practical approach whereby he believes that religion can be seen as a symbolic system that can be decoded. However, Asad (1993, 29) has argued strongly against that asserting that, there cannot be a universal definition of religion. Bowie (2006, 4) has also supported that claim stating that 'attempts to define religion inevitably reflect the theoretical orientation of the writer'.

From the range of interpretations, and the general confusion that surrounds the term and its exact definition, there is no one way of truly exactly defining 'religion'. The way we interpret or understand religion says more about ourselves than the society or

culture we are attempting to understand. This understanding is so inherent in our own personal beliefs and worldviews and it is such a complex entity that it is impossible to distinguish and to view it without compromise. Hence, every scholar will approach the subject in a different way bringing to the debate their own perceptions and worldviews. This is not a bad thing as, just as in contemporary society, ancient societies were just as diverse. Even with this diversity and controversy surrounding the term 'religion' it is possible to define it in some way clarifying how the author perceives it. It is important for the reader to appreciate how the term is being used, and in what context. As Renfrew (1994, 47) stated 'religion implies a framework of beliefs'. There is a unified, to a certain extent, view and a sharing of worldviews within society as a whole. However, that does not mean different religions cannot coexist within the same society. Different worldviews and beliefs can coexist within a society (Bowie 2006 23). Thus highlighting the complex nature of worldviews, beliefs and society and how interlinked these concepts may be but also it highlights how these don't necessarily conform to patterns which stresses the diversity and complexity of this issue. Religion will impinge on all aspects of life, and would not be limited or restricted to symbolic ritual actions. As Hultgård (2008, 212) has suggested, pre-Christian beliefs can be seen from a modern perspective as a 'non-doctrinal community religion'. The divine and other world would have interconnected with the physical world. So intrinsic was this phenomenon in everyday life that it is probably more appropriate to refer to it as beliefs rather than religion. Religion suggests a formal or fixed shared set of beliefs that are practised in a uniform way. Belief allows one to be more fluid in approach to a similar set of shared ideals, worldviews and understandings but importantly acknowledges regional, chronological and other differences or variations. In our modern understanding of religion based on doctrine then belief would be more appropriate to describe the situation during this study. In fact given our limited knowledge or understanding of the

belief systems prior to Christian conversion it may be more appropriate to refer to these in the plural and thus use the more encompassing term pre-Christian beliefs.

Another concept and term that is often thought of in the same category of religion and belief and is sometimes used indiscriminately, with little definition and clarification to what exactly it is, is ritual. Jennbert (2011, 23) believes that a key aspect of the study of religion in archaeology is ritual as thought and belief cannot be studied archaeologically, although that would be disputed by cognitive processual archaeologists, such as Renfrew (1994). However, Insoll (2004, 95) has challenged the cognitive processual approach to studying past religions. One has to exert caution when exploring ritual in the archaeological record. Notably religion impinges on all aspects of life, not just symbolic ritual actions. Additionally interpreting religion or ritual from actions such as burial practices assumes that burials reflect religious belief. Importantly, whilst ritual can reveal a symbolic religious action it can also be secular too.

Hines (2015) has repeatedly stressed the importance of distinguishing 'the 'religious' from the 'ritual". Although these share numerous similarities they are not the same and should not be used interchangeably. To rely solely on a particular activity reflecting a whole belief system is limiting and even dangerous. Religious life is varied and much more widespread than is always appreciated and the wider effects of these beliefs are not always given suitable consideration by archaeologists (Renfrew 1994, 47 & 50). Combining a variety of evidence is more likely to give a credible idea of whether or not an activity is associated with religious beliefs. For example, at Gudme in Denmark (ON: Goðheim), meaning 'home of the gods', significant numbers of hoards and special deposits have been discovered suggesting that these deposits may have indeed been part of ritual reflecting religion (Welch 2011, 867). It is therefore crucial that before making a judgement whether an archaeological deposit is a ritual or not it

should be assessed thoroughly to examine other evidence to support or nullify the claim. However, archaeology is useful in providing evidence for ritual activity related to religious belief which in turn can reveal much about identity, society and worldviews. This further supports the idea that religion and belief are highly complex and to begin to appreciate these it is important to utilise evidence from many disciplines.

Given the considerable amount of scholarship, especially in recent decades, it is clear that the concepts of religion, belief and ritual are ill-defined. However it is impossible to gather a universal definition as they are so multifaceted and interwoven with other aspects of society, identity and worldviews. It is important that scholars recognise this when writing about and researching this subject as it is crucial that they appreciate this complexity when attempting to understand a culture removed from their own. However, this reveals the potential for research into this area to reveal a more nuanced understanding of the social dynamics of the past society. In this chapter it has been concluded that it is suitable to use the term 'pre-Christian beliefs' to describe the situation in the Norse North Atlantic prior to the conversion to Christianity. Significantly animals were integral to these pre-Christian beliefs and by exploring their interactions with humans in this regard it will enable one to fully examine pre-Christian beliefs and to better understand Norse North Atlantic society and social identity. This chapter will undertake a detailed examination of pre-Christian beliefs in the Norse North Atlantic and will explore the integral role of animals in these beliefs. To examine this effectively this chapter will be divided into five discrete but interlinking sections; 'animals and death: the evidence from burials', 'consumption patterns', 'animal imagery and symbolism', 'special deposits', and 'cult sites and buildings'. This will provide a more nuanced understanding into pre-Christian beliefs and how these reveal the

creation and transformation of human society and social identity in the Norse North Atlantic.

Pre-Christian Beliefs

As already briefly touched upon, pre-Christian belief was fluid and permeated everyday life and was not only visible through specific symbolic rituals. It was far from static and was in fact highly dynamic with regional and chronological variation. Little is known about what these beliefs encompassed; actually scholars know much more about what it was not. It is likely that it was labelled as Paganism due to pagani being a derogatory term used by Christians to describe those of different faiths (Roesdahl 1998, 147). Most of the written sources were composed by Christian writers, who merely focused on differentiating it from Christianity. This was probably done by relating it to the Christian belief system in order to highlight differences and thus these writers would not have fully covered the diversity and fluidity of it. Price (2014a, 165) has even noted that the term 'Norse religion' may be a legacy of these early Christian writers. It is therefore highly likely that it was far from our own perception of religion. In fact, whether we can use the term religion with its modern western connotations heavily influenced by Christian doctrine (Bowie 2002, 22) is very debatable. Indeed as Price (2014a, 164) suggests, 'religion' is probably far too simple a term to use to describe these pre-Christian beliefs and notes that they themselves had no direct word for 'religion'. Although there are several words that can be used to describe particular phenomena related to belief such as, seiðr (sorcery), galdr (magic) and gandr (spell/incarnation). However, one should be very careful when using any words to describe activities associated with religion. For example 'priest' is a term we strongly associate with a particular member of a religion who carries out specific tasks and is

regarded in a certain way. Other words such as church, worship and ritual must also be used with caution, explaining what exactly they encompass, if that is even possible. Furthermore one should not expect to find archaeological remains that match our understanding of religion and belief especially as this was much more integrated into life than it is in modern society.

Pre-Christian beliefs have been studied before but were largely the preserve of historical or literary research studies. In contrast there has been little work undertaken in archaeology although there are some notable studies on aspects connected to religious belief (eg: Price 2002). Consequently, archaeology can provide a new and valid insight into this area of study. It is clear that belief impinged on every aspect of Norse life and was not a separate entity. Belief encompassed a much broader area than modern perceptions of belief and religion and involved more aspects of social behaviour than just the human relationship with the divine (Price 2014a, 164). Therefore it is crucial in this area of study to utilise available evidence from various disciplines if one has any intention of thoroughly engaging with the issue. Archaeology is special as it provides the physical material evidence, although belief is much more than physicality as it transcends the physical world and connects with other worlds. Given that, however, it has been noted that the study of belief has been focused in other disciplines and therefore the archaeological evidence, which has been underused until this point, will provide a more expansive database from which to more thoroughly explore the issue of Norse belief. Archaeological evidence includes, but is not limited to, settlement finds, grave finds, votive offerings, picture stones and rock art (Jennbert 2011, 19). By utilising archaeology, the everyday remains and unusual or notable remains, alongside other evidence it is more likely that one would be able to conclude with some sort of reasonable judgement if a particular find or finds reveal belief or religious actions. As

these pre-Christian beliefs were inseparable part of life it is also possible to ascertain an understanding of these beliefs by exploring what the archaeology reveals about worldviews, society and identity.

One of the main problems of researching belief prior to Christianity is the lack of contemporary documentary evidence. Other disciplines have often utilised written sources such as the Prose Edda, the Poetic Edda and the sagas. For example, Fareyinga saga is focussed particularly on the conversion of the Faroe Islands from the old beliefs to Christianity. These sources were all written in Iceland, several centuries after the events they describe. There are numerous problems with using these sources which have been mentioned several times throughout this thesis. But to further highlight here, these sources were written several centuries after the events they document and hence are unlikely to be comprehensively reliable. These were also written by Christians, after the conversion to Christianity and thus have a religious bias. Furthermore these were written in Iceland, geographically removed from the events set in Scandinavia and other regions. These are key issues to consider when utilising these sources. However, it is difficult to investigate this period fully without utilising the literary sources. It has been noted that this period comprised oral societies and therefore this was a period where people passed on knowledge, in regards to creation, belief and worldview, through oral transmission and material culture. Scholars such as Clunies Ross (2008, 231) have noted that these beliefs have left little trace in the historical record. Whilst that is certainly true of the documentary historical record there are other forms of evidence that could reveal much about beliefs during this period. As previously noted, an interdisciplinary approach should provide the most comprehensive insight into pre-Christian beliefs and the issues with the documentary sources further support this assertion. If used alongside other forms of evidence it is likely that the credibility of all sources, especially

documentary, would further increase. Unfortunately it is almost impossible to know anything about certain aspects of pre-Christian belief without access to written sources. The majority of our knowledge of Old Norse gods has been obtained primarily from these 13th century documents (Schjødt 2008, 219).

This was primarily an oral society where understanding of beliefs was obtained through storytelling, through interaction and engagement with others. Similar to modern Iceland, Norse landscapes would have probably been full of meaning relating to belief. The landscape would have been alive with spiritual beings dictating how people interacted within it. These understandings would have been passed between people orally with generations treating the landscape in the same way as per these understandings. Myths were crucial in expressing pre-Christian beliefs as these can communicate and reveal worldviews, cultural values, and expressions of identity and shared ideals (Hultgård 2008, 213-14). Through the transcription of these in later medieval documentary sources one can begin to appreciate what these may encompass. One can gain some idea of the importance of particular individuals, gods and also key ideals and views that are expressed. However, these are also influenced by the perceptions of the transcriber and thus may not be a complete reflection of earlier societies. Although, given that there would have been regional and chronological variation in belief prior to the conversion to Christianity then it is likely that these later sources do contain at least some recurring themes and significant aspects. For example, Óðinn is frequently mentioned and as a result is one of the Norse gods scholars know the most about. However, it has been suggested that his prominence in the medieval sources is a later development, although this cannot be proven (Schjødt 2008, 219). Ultimately the scholar must use these sources with caution but also recognised that

there is potential in these sources if used critically and alongside different forms of evidence.

As mentioned, belief is multifaceted and is not purely physical just as it is also not purely spiritual. The foremost problem when using archaeology to explore Old Norse beliefs is that it only provides an aspect of a much larger belief spectrum. This consideration is also true for documentary sources, which only provide another aspect of belief which may or may not intermesh with the archaeological data. Again, this highlights the need for an interdisciplinary approach. Given that pre-Christian belief permeated every aspect of Norse life then archaeology can indeed be of great use and has, until recently, been noticeably neglected. Furthermore there may be deposits which are striking due to their unusual nature compared to the rest of the archaeological remains either because they are conspicuously different or due to their recurring nature across a specific geographic region. The archaeologist is therefore responsible for constructing a reasonable interpretation as to whether the evidence reflects belief. There are, of course, various issues that arise when making this statement but it needs to be remembered that pre-Christian beliefs were also worldviews and not just symbolic actions. Hence even deposits that may seem to be 'ritual' don't only reflect a religious belief but wider worldviews.

It is difficult to identify any places of worship. It is unlikely that any organised worship was carried out given the non-doctrinal nature of pre-Christian beliefs, however there may have been important places where the physical and spiritual worlds intertwined. It has been suggested that natural places seen in such a way could have included mountains and hills, groves, meadows and arable fields, islands, lakes, rivers and springs, but also barrows and grave-fields (Hultgård 2008, 217). Sacred groves have often been mentioned in textual sources, such as Adam of Bremen's description of Old

Uppsala. Price (2014a, 170) has noted that depictions of hanging people are observed in a number of the Gotland picture stones and that one of the tapestries from the Oseberg ship burial features bodies hanging from a tree. It would be extremely difficult to trace such sites through archaeological remains but Price (2014a, 171) has argued that the site of Frösön is likely to represent such a site. At Frösön a birch tree stump surrounded by bones was discovered by archaeologists in the 1980's. However intriguing this may be it is unusual and could arguably be interpreted differently. However, the assumption that pre-Christians did not have specific structures has been challenged with scholars pointing to excavations at Tissø in Denmark, Borg in Östergötland and Sanda in Uppland as potential examples of cult houses (Price 2014a, 168; Gräslund 2008, 250). These structures appear to have no domestic function and were instead utilised for ritual activities. Textual sources do mention cult houses where ritual activities would have taken place; however little is known about what these ritual activities encompassed although from combined evidence obtained from various sources it is highly likely that it involved animal sacrifice (Price 2014b, 179). It is plausible that these sacrifices would have involved drama and that it would have been intentional to create a display through the act of killing, for example by using violence to produce more blood than normal butchery. Chemical analysis at the site of Götavi in Närke revealed that a huge amount of blood had been spilled within the enclosure (Price 2014a, 168). However, these ritual buildings have been the subject of debate concerning what these actually represent. Milek (2012, 92-3) has argued against the interpretation made by Bjarni Einarsson (2008) that the pit house at Hólmur was actually a blót house where cult activities took place. Milek notes that the interpretation was heavily influenced by documentary sources, which mention cult houses but don't actually give descriptions of what these resembled.

Price (2008b, 245) has effectively utilised documentary evidence alongside archaeological deposits to explore sorcery and witchcraft, seiðr, which he argues are important in revealing how people communicated with the supernatural and their beliefs. Price (2014a, 173) stresses the difference between cult and magic and argues that everyday practices were magic. He notes (2014a, 174) the difficulty in describing and defining these practises given that they were probably not fully understood at the time although he has suggested that magic and sorcery can broadly be defined as people utilising practice to manipulate the supernatural into doing their bidding. From the documentary sources it can be observed that this was a practise that was held in high regard and respected. The sorceress in Eiríks saga rauða has a special high seat prepared for her, with a cushion stuffed with chicken feathers, and at the feast she was served an impressive meal containing the hearts of all the animals from the farm. Furthermore the master of seiðr was Óðinn, arguably the most powerful god. However, it is interesting to note that whereas when seiðr was practised by women it was respected and held in high regard when males practised it they received extreme criticism and stigmatisation (Price 2014a, 175). Archaeological evidence has been argued to reveal and demonstrate seiðr although it is noted that it is difficult to interpret (Price 2008b, 244). Rods from Gävle, Sweden and Fuldby, Denmark have been identified as staffs used in seiðr and coiled snake pendants from female graves may indicate a sorceress (Price 2014a, 175-6). It is clear, however, that evidence for this practice for communicating and interacting with the gods or spirit world is very scarce.

There are various other forms of archaeological evidence that have the potential to reveal pre-Christian belief. These are often unusual deposits which could include the positioning of the deposit, such as in a doorway, or the item being deposited, such as a rare animal or an animal associated with high status or disarticulated animal. For

example, archaeological evidence also includes unusual deposits such as the walrus scapula and vertebrae embedded in the wall at Aðalstræti [see fig. 5.1] (McGovern 2010, 7) which is certainly notable and could definitely indicate some belief. Furthermore, artefacts found in graves can reveal something of belief although caution must be taken when drawing these conclusions and there has been several studies on the subject of revealing religious belief in graves (eg: Burnell & James 1999, 84; Arnold 1997, 149). Williams (2005, 19) suggests that animal cremations and burials did not symbolise the identity of the individual but they mediated the transformation of the dead person between social, cosmological and ontological states. Furthermore how the grave has been constructed may reveal an insight into belief of the mourners. Byock (2001, 294) has suggested that boat burial may be symbolic, or literal, of a boat carrying the dead person into the other world. Other forms of material culture also interlink with the documentary sources. For example the Gotlandic picture stones are said to depict belief, Tjängvide I is said to show Óðinn entering into Valhalla and thus transcending the divide between the physical human world and the spiritual world (Staecker 2006, 365).



Figure 5.1 Walrus vertebrae embedded in the wall of the long house at Aðalstræti 16 (photo: L. Hogg. Reproduced with kind permission of Reykjavík City Museum).

Pre-Christian beliefs were very much integrated into Old Norse society and as has already been mentioned numerous times it is crucial to utilise the evidence from various disciplines. Pre-Christian religion was so integrated into worldviews and identity that it is impossible to separate these. Price (2014a, 166) has argued that it was so much so that 'belief' is not adequate to describe it as there was 'no distinction between physical and spiritual'. Although in order to talk about it and for lack of a better word I believe that belief is adequate at this stage in our knowledge to describe it. This, however, does highlight the huge complexities involved and how broad and allencompassing this belief was. Therefore when investigating pre-Christian beliefs it is essential to appreciate that it is also reflected in worldviews and not just symbolic ritualistic actions which are at risk at being misinterpreted by the researcher. It is key to appreciate that pre-Christian beliefs and society are very different from how modern scholars perceive religion and society to be today. Although it is possible to identify potentially key characters and gods from the medieval sources it is important to not

become too distracted from the fact that these beliefs were more than names and individuals but were in fact all-encompassing of Norse society. Pre-Christian beliefs were fluid throughout the region and chronology of this study and an exact definition, with a clear defined summary of what these beliefs entailed, is difficult if not impossible to construct. This does not mean that scholars do not know anything about this aspect of Norse society but just that it does not have the same clarity of definition as religion does in modern society. It is crucial to appreciate this when researching this aspect of Norse society.

Animals and Pre-Christian Beliefs

Animals had a key and prominent role in pre-Christian beliefs as is seen from the Old Norse sources, for example the Icelandic family sagas and the Poetic Edda, and archaeological evidence. A wide range of animals are portrayed in the documentary evidence and are shown to be fundamental in the pre-Christian worldview. In fact the way in which these animals are portrayed in these written sources can reveal much about Norse social identities and worldviews, although as the texts were written down in the 13th century there may be discrepancies. Notably, the prominent role animals perform in these textual sources reveals a connection or relationship with the natural world that is a stark contrast to Christian attitudes towards nature in the later centuries. Notably one of the key, if not the key, belief in Christianity is that humans were created in God's image and are thus, unique, removed, and crucially superior to other living things. 'And God said, let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth' (Gensis 1: 26). It appears that this perception was not shared in pre-Christian beliefs

where in various documentary sources animals are shown to be strongly integrated into human identity and society. Crucially, however, it is not just in documentary sources where one can see this fundamental connection between animals and belief. Material culture and archaeological evidence also reveals the strong interdependencies between animals and humans, from their presence on settlement sites to unusual deposits that could be interpreted as ritual activity. The animals that appear most frequently on the settlement sites are those that the settlers in the North Atlantic would have brought with them. The animals brought with the settlers would have included sheep, goats, horses, cattle and pigs and, although there is little direct archaeological evidence, it is likely that they also had chickens. Notably, animals in the archaeological record appear frequently in deposits often associated with demonstrations of belief such as burials and special deposits. Although there are many issues to be considered with burial deposits it is clear that animals were thought suitably important or significant to those undertaking the action to be deposited with the human body and therefore this raises questions regarding the connection between human and animal, intentions of symbolism, meaning or worldview.

Particular animals appear much more frequently than others in the documentary sources, such as the Icelandic family sagas, the Prose Edda and the Poetic Edda. The animals that are regularly mentioned often perform key, usually superior, roles and special characteristics and traits are ascribed to them. Certain animals are even given personal names and are thus singled out. They are consequently regarded as special or important as they have been personally identified through this naming and labelling. Notably horses are the animal that most often receive a personal name in the written sources (Jennbert 2011, 50). Horses are often seen to have significant importance with connections and relationships to many of the prominent gods in Old Norse mythology,

such as Oðinn, Freyr and Loki. Horses are seen to be powerful creatures with the ability to transcend physical barriers and move between worlds. In Lándnámabók chapter 83 describes an encounter between Auðun the Stutterer and a grey horse that appears from a lake and then returns and disappears into the lake at the end of the day. It is as though the horse came from water. In particular horses are often described as being able to move between the worlds of the living and the dead, such as in the Prose Edda when Hermóð rides into the world of the dead to try and bring back Baldr. The idea that horses were able to move between life and death and light and day is a fairly common theme. According to Vafþrúðnismál stanza 12, Skinfaxi pulls the day across the sky and in stanza 14 it is noted that Hrímfaxi pulls the night. In Grímnismál stanza 37 Árvak and Alsvin are mentioned as the horses that pull the sun. Horses are seen to be powerful creatures strongly associated with powerful gods and the ability to transport gods and humans between worlds, life and death for example. Other animals that appear frequently or in significant roles are, but are not limited to, goats, ravens, wolves, boars and dogs. Notably some animals that are mentioned less frequently or rarely are often animals which are found in abundance in archaeological excavations of Norse settlement sites. This is especially true of sheep which, as discussed earlier in this thesis, are of notable social and economic importance within Norse society. Mentions of animals in these sources are not limited to wild and domestic but also mystic and fabulous such as dragons.

Each animal was associated with particular traits and characteristics (Hedeager 2011, 84), some of which were more favourable than others. For example, an eagle is often portrayed as powerful and dangerous. A number of Norse personal names derive from the names of certain animals, such as Bjorn (bear), Úlfr (wolf), Ari (eagle) and Ormr (snake). It has been noted that there is a gender imbalance in animal related

personal names, with these being much more commonly male than female names (Jennbert 2011. 187). Often the animals used are associated with aggression, strength and power and therefore it could be concluded that these names reflected, to a certain extent, gender roles where males were involved in warfare and their names were an attempt to reflect or harness the power of the characteristics associated with the animal. The names 'bear' (Björn) and 'boar' (Eofor) in particular appear to be associated with great heroes in both Old Norse and Old English (Hedeager 2011, 80 & 89). It is clear that animals were held in high esteem and respected within the beliefs of pre-Christian Norse society. Humans felt connected to them and even attempted to emulate the attributes. However, it is apparent that some animals were held in higher regard than others in pre-Christian beliefs.

Animals are often seen to perform quite special roles and are frequently associated with particular gods in the written sources. Cats pulled Freyja's chariot, Heiðrún the goat produces a never ending supply of mead for the gods, Freyr rides a boar and Þór's chariot is pulled by two goats. There is a strong relationship between animals and gods in Old Norse mythology hinting at a strong relationship between humans and animals. The boundaries between animal and human often appear quite blurred and flexible which contrasts notably with modern worldviews, where animals and humans are distinctly separate and defined. It has been noted that Old Norse cosmology was permeated by the belief that a person could change shape, act outside their physical human form and act through a different persona (Hedeager 2011, 85). It is mentioned in *Grimnismál* stanza 44 and *Hyndluljóð* stanza 40 how Loki is able to change shape and become a mare in order to distract the stallion and thus delay the giant building Ásgarðr. From this encounter he gives birth to an eight-legged horse, Sleipnir, who is one of the most memorable and notable animals in Norse mythology.

Sleipnir is often mentioned and is noted as being the best and fastest of all the horses, and is particularly special as he has eight legs which undoubtedly aid his reputation for speed. Óðinn is especially noted for his ability to shape-shift, and merge human-animal boundaries in addition to crossing gender boundaries (Hedeager 2011, 82). Óðinn was widely appreciated as being a master at changing his shape and an example of this can be seen in *Ynglinga saga* (Raudvere 2008, 241). This ability is frequently mentioned throughout Old Norse texts and is even respected and considered an enviable trait. In fact it has been noted (Hedeager 2011, 7) that, although in the textual sources there are various names used to identify Óðinn, he is always the most highly regarded god noted for his wisdom and power and he is always connected with shape-shifting and sorcery.

Being able to cross these human-animal boundaries was perceived as sign of great power and this spiritual connection between human and animal is also a crucial aspect of pre-Christian Norse belief. It reveals much about how persons perceived themselves, their identity, in relation to the wider world. To appreciate and comprehend how this may be accomplished or how it could have been perceived it is important to consider the Norse human body and soul. Our knowledge and understanding of this derives from the written documentary sources. It is yet another example of the complexity of pre-Christian beliefs as it demonstrates that the idea of self is very different to modern perception of self and body.

Modern understanding of self can be seen to comprise of three highly interlinked aspects, mind, body and soul, whereas pre-Christian Norse perception of self-comprised of many parts that were not necessarily inseparable, in fact some parts could detach and act outside of the physical entity. The physical outer 'shape' was called the *hamr* which contained the *hugr*, essentially a person's 'mind'. Someone with a strong *hugr* could send it out over vast distances in temporary guise of an animal without

moving their bodies to undertake tasks and gain information (Raudvere 2008, 241). According to the documentary sources, this was a particular trait of Óðinn. Óðinn was able to use his ability to cross human-animal boundaries to travel over great distances in the guise of animal to seek and collect information and therefore become powerful and respected for his wisdom and exceptional abilities. He is often depicted with two ravens, which in eddic poetry are named Huginn (thought) and Muminn (mind). In Gylfaginning it is noted that these birds fly all over the world and return with information for Oðinn. These ravens are mentioned in *Grimnismál*, stanza 20, where concern is expressed that they may not return. This has been suggested to reflect the possible dangers associated with the shamanic trance-state journey (Lindlow 2001, 188). The written documents often describe how Óðinn would fall into a trance and appear asleep or dead whilst his hugr embodied in animal form could travel to seek wisdom and carryout tasks for the benefit of himself or for others (Price 2008b, 246; Raudvere 2008, 241). For example, shape-shifters feature significantly in Ynglinga saga and Óðinn is mentioned to the most notable amongst them. This is significant as it demonstrates the significance associated with Öðinn's abilities and suggests that the ability to cross physical boundaries was held in high regard. This interconnected relationship between Óðinn and animals has been argued to elevate him 'from an earthly king into the king of the Æsir gods' (Hedeager 2011, 16). This further stresses the crucial role and strong bond between humans and animals prior to the conversion to Christianity.

Also encompassed within the idea of self is the concept of *hamingja* which was essentially the personification of a person's luck or fortune. This *hamingja* was a spirit that did have the ability to move independently of the person and could leave the individual (Price 2014a, 173). Similar to *hamingja* was the concept of *fylgja*, although, unlike *hamingja*, *fylgja* would be inherited within a family rather than only being

associated with an individual. *Fylgia* is the embodiment of part of the human self that is represented in an animal form. The *fylgia*, represented by an animal, is a manifestation of the inner qualities of the human it represents and therefore animal visualisation reflects particular qualities such as strength, evil-mindedness and social status (Raudvere 2008, 239). It is said to be linked to the idea of fate and accompanies the human throughout their life. Particular attributes of the animal *fylgia* can be seen to be reflected in the person's identity. For example warriors would utilise this and display images of the animals over their equipment and personal accessories. These would be animals associated with strength and aggression and this display was to demonstrate that the warriors possessed these characteristics (Hedeager 2011, 91). This is a display that would have been widely appreciated and understood and the warriors would have been held in high regard for these abilities. Some studies have examined the role of warriors in crossing these human-animal boundaries demonstrating these warriors were also displaying the ability to cross physical and spiritual worlds as the animals utilised often feature prominently in Old Norse mythology, such as bears and wolves.

Høilund Nielsen (1997; 2001; 2007) has done significant research into artwork and decoration in military ideology and warfare. Specifically she has examined Style-II animal art of AD 6th-8th centuries which featured on extensively decorated weaponry and riding equipment from high-status graves. The animals that were easily recognisable were birds of prey, horses, boars and snakes, and she has identified the rather ambiguous quadrupeds to be a wolf which later develops into a horse and then into a dragon-like creature (Høilund Nielsen 2001, 471). These are all animals associated with strength and power and are frequently mentioned in Old Norse mythology, connected to the gods, suggesting a connection between power, military and belief. As examples of Style-II decorated objects are not restricted to Scandinavian regions but are also found

in continental Europe, this does suggest that there was a shared understanding of the meaning of these depictions (Høilund Nielsen 1997, 129). Høilund Nielsen suggests that this may indicate that this animal style was used as a form of propaganda especially as its appearance coincides with the emergence of royal power in southern Scandinavia (Høilund Nielsen 2007, 162). However, she has also noted that the wolf is the animal that appears most frequently in Style-III, chronologically and geographically, and that it is not only frequently found as decoration on weapons but also appears in illustrative depictions of warriors dressed in wolf skin (Høilund Nielsen 2007, 163). These depictions of warriors dressed in wolf skins and wolf decorations on weaponry Høilund Nielsen argues demonstrate a coalescing of wolf and warrior. Warriors with the totem of a wolf were called *úlfheðnar* and they were similar to Berserkers in that in battle they transformed into wolves as Berserkers transformed into bears. The úlfheðnar were highly regarded warriors of rank who had special duties. These warriors became wolves in battle and thus believed they were crossing this human-animal boundary to harness these special and powerful wolf attributes. The imagery and decorated weaponry was a display of this power, even a warning, and it would have been understood far beyond Scandinavia. Høilund Nielsen (2001, 479) stresses that this association between the occurrence of particular animals on weaponry and images of warriors dressed as animal is a reflection of the importance of animals in military ideology and religion. The warriors were special, powerful and highly regarded as they were able to cross spiritual and physical boundaries. This demonstrates how humans were proud of their association with animals and believed that they were able to harness their power. This further demonstrates the importance of animals in pre-Christian belief. Their spiritual role can be seen to be extensive and integral to the spiritual belief system.

Although the majority of our knowledge of animals in pre-Christian Norse beliefs stems largely from documentary evidence, from these sources animals have been shown to play key roles in pre-Christian belief. The way in which animals are represented in the archaeological record, when considered alongside what is already known, reveals the way in which humans thought and perceived animals which in turn reflects their beliefs. The human-animal relationship was a fundamental part of these beliefs and their role in activities relating to these beliefs can be observed. An often mentioned example of animals used in pre-Christian 'rituals' is the description written by Adam of Bremen based on oral accounts from others who had visited Scandinavia. He describes temple in Old Uppsala where nearby there are sacrifices of seventy-two men, horses and dogs. The bodies of these are suspended from the trees (Gräslund 2008, 250; Hedeager 2011, 102-3). This gives some indication that both humans and animals were important in what has been perceived to be ritual activities reflected pre-Christian belief. Gräslund (2008, 250) has developed this to highlight sites, such as Borg in Östergötland and Sanda in Uppland, with unusual deposits containing high concentrations of animal bones that are rarely discovered on Norse settlement sites. These she argues reflect cult houses where symbolic activities were undertaken in fixed locations in honour of pre-Christian beliefs. Furthermore, animal remains reveal consumption choices which can also reveal belief or a symbolic action. The Christian church outlawed the practice of consuming horse flesh, most likely in response to its pre-Christian connotations. In Norse mythology the horse is also associated with Freyr and so the consumption of horse flesh and horse sacrifice in burial rites becomes an important component of fertility cults (Sikora 2003-2004, 87). Reference is made to consumption and fertility sacrifice in The 'Story of Völsi' in Ólafs saga Helga where a preserved horse phallus grows through demonic powers (Turville-Petre 1964, 256-7). Another account tells of coronation of the King of Ulster where his royal authority is

confirmed through bestial intercourse professing to become the beast and the sacrifice and consumption of the horse (Simoons 1994, 185). Archaeological deposits reveal that consumption of horse meat was continuing although whether it was due to pre-Christian beliefs remains difficult to ascertain, although it was in direct violation of Christian church doctrine. However, Ari Porgilsson writes in *Íslendingabók* that when Porgeir Porkelsson, the lawspeaker, proclaimed at the Law-Rock that Iceland should be Christian and he stated that the old laws regarding exposure of children and the consumption of horseflesh should still apply and ritual sacrifice could continue but in secret (Grønlie 2006, 9). This indicates that Iceland could be Christian in name but that the population could engage in activities, such as eating horse meat, that were generally considering un-Christian. Deposits of animal bones and written sources do continue to highlight the importance of animals within these Old Norse beliefs. It further suggests that animals played a crucial role in connecting the physical and the spiritual worlds.



Figure 5.2 Female figure, maybe valkyrja, wearing a mask on the Oseberg tapestry (Gunnell 1995, fig. 38).

Animals were crucial in mediating human connections with the spiritual world. Shape shifting, obtaining animal characteristics or working alongside animals, were viewed as extremely important and powerful within this belief system. In the

documentary sources Óðinn is respected for his powerful ability to shape shift and through that gain access to the wider spiritual world, to obtain knowledge and greater understanding for his benefit as well as for others. Felt animal masks have been discovered at the harbour of Hedeby and on the Oseberg tapestry a woman is depicted wearing a boar mask and skin [see fig. 5.2] (Gräslund 2008, 256; Gunnell 2008, 302). These may reveal a world in which humans could transcend human-animal boundaries revealing a belief that boundaries were not necessarily so defined or distinct. It also may reveal a perception that animals could access this cosmological world that was inaccessible to humans but that by becoming animal one could connect with it. This importance of and connection between humans and the spiritual worlds may further be revealed through archaeological burial remains and iconography. The Ardre III and Tjängvide I image stones [see fig. 5.3] depict what is thought to be Öðinn riding Sleipnir into Valhalla thus demonstrating the horse mediating the transformation between life and death. Dogs appear frequently in Viking Age graves, although they are more common in Vendel Period burials but nevertheless dog skeletons have been found in burials such as the Oseberg ship burial, Ladby ship burial and the Gokstad ship burial. Gräslund (2008, 255) has argued that after years of study she firmly believes that dogs in burials are not only present as faithful companions, or expressions of social status and identity, but rather that the dogs performed a crucial role in the afterlife and perform a similar role to horses in that regard. The dogs were able to move between the worlds of the living and the dead and their presence in the burial suggests that their inclusion was to do precisely that, potentially to guide the human from the world of the living to the world of the dead. This is also likely to be one of the reasons for the inclusion of other animals, usually dogs and horses, in burials of this time. Furthermore, these also often included riding equipment, often expensive and unique, which could symbolise riding between the two worlds.



Figure 5.3 The Tjängvide I and the Ardre III image stones (Staecker 2006, figs. 3 and 1).

The role of animals in pre-Christian belief is extensive and will be further discussed in this chapter. The previous few paragraphs were intended to give some indication of the roles they played and their importance in this belief system. It was also intended to highlight the crucial importance of further study into this particular area of pre-Christian belief. It is clear that here, maybe more so than in any other aspect of identity, human-animal relationships can reveal important information of Norse society and identity. It also further emphasises the need for an interdisciplinary approach when studying belief. Although there have been significant studies in this area, notably by Jennbert (2011), there is still much more to be understood especially in relation to the North Atlantic region which although shares many similarities to the Scandinavian region is also very, and significantly, different. These human-animal relationships in relation to belief reveal significant information about worldviews, identity and society. Studying belief, religion and ritual in general has the potential to reveal a much greater understanding of past societies as it provides information on thought, perception and understanding. However, animals were key to pre-Christian beliefs and therefore it is

essential to study these interactions and relationships in relation to belief as this is essential in a study on Norse society and identity.

Animals, Belief and the North Atlantic

As discussed Old Norse belief was highly fluid, multifaceted and it was highly integrated into everyday life. Animals were important in Old Norse belief due to their prominent nature within mythology but further because they were fully assimilated into and intermeshed with belief that they could not be distinguished from it. This demonstrates that they were more than important within these beliefs but they were crucial to it as, conversely, belief was crucial to human perception of and interaction with animals. As already mentioned throughout this thesis the medieval texts used to explore Old Norse mythology and belief are of uncertain historical status and it is therefore necessary to explore the material culture and archaeological evidence to discuss how the societies in the North Atlantic expressed their beliefs and what this may reveal about social identities during this period.

Animals and Death: evidence from burials

The evidence from burials is varied geographically across the North Atlantic with many more Norse burials located in Iceland than in the Faroe Islands for example. Furthermore, interpreting evidence from burials is, at best, difficult and many factors need to be considered. One of the most fundamental considerations is whether or not the burial reflects belief and if so whether it is a reflection of those undertaking the activity or of the individual incarcerated within the grave. Burial evidence is subjective and interpretations, to an extent, will lie with the interpreter. However, as previously

discussed in this chapter distinguishing between what constitutes belief and what does not also lies significantly with the interpreter as they bring their own experiences and expectations to the material. A significant amount of work has been undertaken in the past decade examining the way in which scholars interpret burial practices of past societies and this has led to traditional assumptions being challenged and has consequently resulted in a better appreciation for these customs and what these reveal about society as a whole. The death ritual does indeed reveal much about the society in which it is undertaken, as the activity itself is undertaken by the society. Death, as birth, is a crucial event in the human life span. It marks the end of the physical life as humans know it and is then followed by the unknown. Therefore the act symbolises and reveals how the society collectively chooses to display grief and mourning and how it prepares the individual for what its members may believe comes after.

As different methodologies and theories are applied to cemetery evidence perceptions of what these archaeological data reveal have broadened to reflect the diversity and volatility of past societies. These have particularly challenged our understanding of social identity in burials, particularly in relation to gender, wealth, status, ethnicity and religion. For example, richly furnished burials were often considered to be indicators of wealth and thus a direct reflection of a high status individual. Wilson (1976, 3) believed that occasionally high status interpretation could be made from a rich burial. These notions indicate how the structuralist approach to cemetery evidence has dominated this study with material culture seen to actively communicate social interactions. Portable material wealth is seen to directly reflect social status and rank. However wealth does not necessarily equate to high status. Furthermore, identifying social status from such a limited context is difficult as not all social ranks are so easily identified through this medium. Indeed it has become apparent

that burials must be placed within their wider context to fully appreciate and understand their implications. One must consider the multifaceted nature of identity when attempting to infer social status and rank, which earlier approaches to burial archaeology failed to do. Notably feminist theory impacted very little on cemetery evidence until the late 1990's when archaeologists began to consider gender, rather than merely biological sex, within burial contexts (Lucy 1997, 150). However, gender is complex and the perspectives of gender are relatively new to archaeology (Stoodley 1999, 1). Meskell (2006, 29) has highlighted that people are open to manipulation and given anonymity people may change their gender and/or sexual orientation. Blurred gender roles in life may not be necessarily reflected in death when the idealised social structure was articulated (Stoodley 1999, 139). Therefore it is difficult to infer gender identity from cemetery evidence. The absence of sex-linked artefacts could suggest that gender may not have been an important defining aspect of a person's identity (Lucy 1997). It is essential to move beyond assertions based on biological sex in any attempt to understand gender. Lucy (1997) has attempted this, highlighting the roles people would have played in life that are often overlooked in favour of 'male/female' burial labels.

Other factors of social identity that can be interpreted from burial evidence are ethnicity and age. Early interpretations of ethnicity were often simplistic based heavily on the few documentary sources. In 1895 the German prehistorian Gustaf Kossina put forward the idea that archaeology was capable of isolating cultural areas which could be identified with specific ethnic or national units (Lucy 2000, 174-5). However ethnicity is a complex concept and hard to identify so simplistic conclusions cannot be made (Lucy 2000, 177). This was a period when identities were in a state of flux and so interpretations of ethnic identity cannot be made based on the type of cemetery an

individual is buried in. A variety of archaeological evidence must be utilized when interpreting ethnicity as ethnic identity is the collective identification that is socially constructed with reference to putative cultural similarity and difference (Jenkins 1997, 75). Ethnic identity is multifaceted and the concept itself has been challenged (Lucy 2000, 176); therefore it is unlikely to be determined solely from cemetery evidence. A wide range of evidence needs to be consulted when attempting to understand the ethnic identities of the settlers of the North Atlantic.

Children are noticeably under-represented in the burial record. There is some debate surrounding the medieval recognition of childhood, with a belief that childhood in the post-Roman period had 'an atmosphere of affectionate neglect' (Härke 1997, 126). High child mortality may have prevented parents from becoming emotionally attached to their children (Stoodley 2000, 459). There are many issues with interpreting age from cemetery evidence. There is inconsistency with terminology used in excavation reports which can prove very misleading and highlight the need for universal age-related terminology. Evidence from cemeteries is biased and dead children may have been disposed of in other ways (Crawford 1999, 24). Whether children were considering deserving of a burial is also something to consider and currently our understanding of age and transitioning from child to adult during the Viking Age is very limited (Price 2008a, 259). Although based on 13th century literary and saga studies Callow (2007, 54) has suggested that the probable age for males transitioning into adulthood is likely to be between the ages of 12 to 15. Nevertheless, many other factors need to be considered fort the absence of child burials, such as how childhood is defined, whether the grave represents the individual or another identity. Pearson (1999, 10) has remarked that 'we never experience the world of children, only the experiences of adults coming to terms with their premature deaths'.

There is a distinct lack of child pre-Christian burials in Iceland and the North Atlantic. Considering the number of pagan graves excavated in Iceland this is unusual. It could suggest that another type of burial was taking place for them, that they were being buried elsewhere or a simple reflection of the poor preservation of infant bone remains. However, it is likely that early Icelandic society practised exposure, leaving an unwanted child in the wilderness to die. This is the most commonly suggested and plausible explanation for the absence of children from the pre-Christian burial sites. This has been suggested by a number of scholars including Price (2008a, 259), although as Callow (2006, 63) notes it is likely but for obvious reasons it is difficult to find evidence to support this explanation.

Amongst the many considerations to be made when examining burial evidence to make interpretations of social identity are factors of religion and belief. However, attempting to interpret religion from burial practice assumes that burial is a reflection of religious belief. There is a long held misunderstanding that Paganism and Christianity are easy to detect and define (Burnell & James 1999, 84). In early Anglo-Saxon research specific objects or burial rites have often been perceived as 'pagan', such as crystal balls (Leyser 2004, 16), swastikas and *nyrmas* on cremation urns (Arnold 1997, 152) and runes (Arnold 1997, 151). This has led to research on 'Paganism' relying heavily on burial rites (Wilson 1992) which has been heavily criticised as the belief impinges on all aspects of life not just symbolic actions (Arnold 1997, 149). Often grave goods were considered to represent 'pagan' beliefs and the absence of items supposedly indicated a Christian burial. However, this simplistic approach is highly contentious as grave goods are found in burials that would otherwise indicate Christian beliefs based upon the positioning and date. Indeed, continental evidence shows evidence of horse burials associated with rich Christian furnishing (Burnell & James 1999, 90). This is challenging earlier, often

simplistic, interpretations of burials and is encouraging scholars to consider the wider context of these archaeological deposits. These advances have led to a continual development in burial archaeology and this has been particularly significant in the archaeology of the North Atlantic Norse period. The work of Adolf Friðriksson has been of crucial importance to the development of this area in Iceland. He has gone beyond considering what is in the grave and the grave itself and has explored the relationship between burials and the wider landscape. The volume of work that Adolf has produced on Iceland is indicative of the level of knowledge that has been, and can be, retrieved from burial data. Furthermore, it demonstrates the ever evolving subject area as more methodologies and archaeological theories are applied.

In the North Atlantic much of the burial archaeology undertaken has been concerned with locating and excavating pre-Christian graves. This has largely been in an attempt to understand more about belief, the period of conversion to Christianity and garner a more nuanced understanding of society as a whole. However, there is a noticeable disparity in the research across the region with much, for example, being undertaken in Iceland whereas, in contrast, much less in known about pre-Christian burials in the Faroe Islands and Greenland. This disparity may reflect the importance of pre-Christian burial research within Icelandic archaeology. The pioneer of archaeology in Iceland, Kristján Eldjárn, undertook considerable research in this area as well as promoting archaeology as a discipline and engaging the general public through successful and popular television programmes about his research. So synonymous is he with the foundation of archaeological research in Iceland that the national annual archaeological research seminar series is named in his honour, as well as a number of awards. In 1956 Kristján Eldjárn, when the State Antiquarian for Iceland, published his dissertation 'Kuml og Haugfé' which was then the first comprehensive catalogue of pre-

Christian burials in Iceland and in other Nordic countries. In 2002 Adolf Friðriksson updated the catalogue with details of burials discovered between 1956 and until 1999. This pioneering research, without question, not only promoted the study of archaeology as a discipline within Iceland but put a great focus on the archaeological study of pre-Christian burials. This undoubtedly led to the focus on pre-Christian burials in the subsequent decades. There are over 300 identified pre-Christian burials in Iceland and it is likely that the number will increase as more archaeological work in this area is undertaken. For example the on-going excavations at Ingiríðarstaðir, 10km south of Húsavík in north Iceland, have the potential to reveal the largest known pre-Christian grave field in Iceland with potentially as many as 15 burials on the site (Roberts 2012, 2).

The disparity between the number of identified pre-Christian burials in Iceland and the Faroe Islands and Greenland is quite stark. Iceland appears to be abundant with pre-Christian burial sites. This disproportion could be due to a variety of reasons. In the Faroe Islands the number of graves that have been discovered is extremely low which is likely to be due to the amount archaeology being undertaken, which is small in comparison with Iceland. Also burial archaeology is likely to face same the problems associated with general archaeology, which have already been mentioned earlier in this thesis, such as difficulty in locating and excavating sites due to continuous and modern occupation of the area. Furthermore there is the possibility that burials sites are not the subject of rescue and pre-construction archaeological excavation because the location may be removed from currently occupied areas and are unlikely to be in areas that experience erosion or similar conditions that would therefore require rescue excavations. Fortunately, this is likely to change in the future as burial archaeology is beginning to receive attention with archaeologists attempting to locate early Norse

burial sites (Ann Sølvia Lydersen Jacobsen, pers comms. August 2014). In contrast to the situation in the Faroe Islands, the reasons for the lack of pre-Christian burial sites in Greenland are very different. Norse burial sites have been identified in Greenland, however these are considered to be Christian graves and currently there is no evidence of pre-Christian burials in the country.

There are various possibilities for the lack of pre-Christian graves in Greenland. The traditional view for the reason for the lack of graves is that the Greenlanders were already Christian when they reached Greenland. Ólafur Halldórsson (2001, 44) stated that Greenland was Christian, and dated the settlement to c. AD 1000, so argued that the settlers were already Christians prior to settling in the country. As Greenland was settled in the last years of the 10th century and Iceland officially converted to Christianity in AD 1000 then it is plausible, although the dates are very close, and there is reason to suggest that although Iceland converted officially to Christianity the population did not necessarily immediately accept it. However, it is also possible that the settlers did not just originate from Iceland but could have travelled from countries that had officially been Christian for much longer, such as Ireland. However, it is also plausible that even if the settlers weren't Christian when they arrived they could have relatively quickly converted and possibly then decided to reinter their ancestors in Christian burial sites, similar to several instances noted in Denmark (Keller 1989, 179). In either case whether the settlers were Christian when they arrived or quickly converted to Christianity this would have resulted in the lack of material culture that would otherwise reflect pre-Christian beliefs. Although Keller (1989, 179) has suggested that the lack of burials with characteristics often associated with pre-Christian beliefs may not necessarily mean the population was Christian but rather that they were choosing to dispose of the dead in a way not typically associated with pre-Christian

beliefs. Keller notes that later Viking Age graves in Norway displayed similarities with Christian burials and in Iceland the pre-Christian tradition of cremating the dead was noticeably absent, apart from one potential cremation in Hrísbrú (Byock and Zori 2014, 14). The uncertainty surrounding the religious situation in the early settlement of Greenland is acknowledged by scholars in the field (Abrahms 2009, 55; Keller 1989, 178).

Therefore, in comparison to the Faroe Islands and Greenland, Iceland is remarkable for the number of pre-Christian burial sites that have been found and excavated. Furthermore it is remarkable for the type of burials that have been discovered. In Þóra Pétursdóttir's 2007 study she noted (33) that dogs and horses were the most common animal to be found in Icelandic pre-Christian graves and that horses were the most common 'grave good'. This reoccurrence of horses in pre-Christian Icelandic burials is significant and consequently there are more horse burials there per capita than anywhere in Scandinavia (Sikora 2003/4, 91). There are even burials with more than one horse (Sikora 2003/4, 91) although the most frequent type of horse burial is one horse with one individual (Loumand 2006, 130). As the number of pre-Christian burials identified increases so will the number of horse burials. Recently 4 horse burials, including 1 double horse burial, were discovered at Ingiríðarstaðir (Roberts 2012). The role of horses in Norse pre-Christian burials has been extensively debated by scholars. It is clear that the horse was an important part of the burial ritual, especially in Iceland given the proliferation of horse burials across the island. Also the horse was key in pre-Christian Norse beliefs revealed via burial practices (Sikora 2003/4, 87).

Arguably the most obvious reason for the horse being present in the burial is transport, as the Norse believed that they could ride into the next world. This appears

to be the overwhelming conclusion that most scholars argue is the reason for the horse being present in the burial. Although Iceland is notable for its number of horse burials, the presence of riding equipment included in burials is seen from burial sites across Europe. Essentially the riding equipment could have the same symbolic meaning as the presence of a horse in a burial, which is that it was the action of riding, travelling, that was of importance. The idea of the 'riding into death' is also largely supported by Old Norse cosmology where there are many examples of the horse travelling between worlds. In fact the horse is seen as being extremely important in Old Norse cosmology which was discussed earlier in this chapter. Scholars have continually stressed the importance of the horse within Old Norse mythology as well as in Norse society and argued that it is the most important animal within the Norse world (Sikora 2003-4, 87; Loumand 2006, 132). Loumand (2006, 132) applied the work of Kirsten Hastrup (1990), who examined the role of the horse in Icelandic society from 1400 to 1800, to Viking Age Iceland. She argues, convincingly, that later Icelandic attitudes towards horses were unlikely to differ that considerably from the Norse period and that the horse would have retained its fundamental role and significance within Icelandic society. The horse is argued to belong to neither the domestic or wild spheres but instead inhabiting a space between the two. It was grazed on the mountainside pastures between the home pastures and the undomesticated wilderness. This gave it a special status as an animal that could not be categorised and an animal that could move between conceptualized spaces (Loumand 2006, 132). This perception of the horse not only reinforced the idea of it as a mediator and transporter but also further intensified its status and importance within Norse society.

Although the presence of the horse or riding equipment could indicate the dead riding into death there could also be other meanings and another common argument is

the association with social status. The importance of the horse in Viking and Norse society is undeniable which may have resulted in the horse, and riding, being perceived as an indicator of status. Interestingly, both complete and incomplete horse skeletons have been recovered from wealthy Viking Age burials in northern Europe, for example Gausel in Norway (Sørheim 2011), which could suggest that the deposition of a whole horse did not necessarily directly reflect elite status, consequently symbolic meanings were complicated. It is likely that the mere presence of horse or horse-related equipment was enough to represent the symbolic meaning associated with horse-human relationship. Sikora (2003-4, 88) argues that even the most modest horse burials must be understood as expressions of social status and possibly even cultural and political allegiance.

Burials containing riding equipment in Denmark have been interpreted as revealing people with military obligations at a high rank within an increasingly stratified and centralised political society (Pedersen 1996; 1997b). Individuals may have had the opportunity to improve their social status through this particular service. In addition to military service, riding services to a lord may have also provided the opportunity for social improvement. The rider would have the opportunity to travel, interact with wider social networks, control trade routes and consequently the movement of wealth. Therefore, rather than be seen as a service, this role was a privilege and thus it would have attracted people aspiring to a higher social status. These burials are likely to reflect status in a society that was becoming increasingly stratified and politically centralised. It is therefore likely that this interpretation could be applied to horse and riding equipment burials in other countries such as Britain and Norway. However, the political and social situation in Iceland was different to Scandinavia and Britain where centralised states were emerging. Therefore the presence of a horse or horse equipment in a burial

suggests ownership of a horse and thus alludes to a high social status of the human individual. Yet there is a notably high number of horse burials in Iceland. Given the proliferation of horse burials across Iceland this may suggest that these burials had more diverse meanings. Given this high distribution across the population it could be suggested that horses were for everyone in Iceland (Loumand 2006, 131). This indicates that these burials did not indicate high status either because the horse did not have the same connotations of importance that it held elsewhere in the Viking world or because the social structure was different in Iceland from elsewhere. Bjarni F. Einarsson (1994, 62) has noted that these Icelandic graves were not covered with impressive burial mounds and were often shallow so required little labour investment. This, he argues, may reflect a more egalitarian society. Alternatively the horse in the burial rite may not represent the identity of the human individual but rather the social and cultural understanding of human-horse interdependencies. The preserved riding equipment suggests that the items were carefully deposited, indicating that this was not merely a representation of status but could signify the increasing importance of riding and therefore the significance of the human-horse relationship.

Whilst horse inhumation does not appear to be a high status minority right in Iceland, it does appear to be so elsewhere in the Viking world. However, interestingly, horse cremation does not appear to have the same associations as inhumation. An earlier example from the 5th century site of Spong Hill in England has been used by Howard Williams (2005, 28) to explore the common usage of horse cremation rites. He argues that during this period horse cremation does not appear to have the same exclusivity that is associated with horse burials and individuals of high social status. Arguably a similar argument could be used for the Viking period several centuries later where cremation, with both human and non-human remains, was a common death rite

in Scandinavia. Unfortunately this is not something which can be explored in more detail in Iceland owing to the distinctive, and unusual in comparison with Scandinavia and England, lack of cremations.

There is currently only one potential cremation from the high-status site of Hrísbrú, radiocarbon dated to the late 10th or early 11th century. The cremation contains a twenty-centimetre thick deposit of charcoal, ash and burned earth, iron and copper artefacts and the fragments of four human skull fragments from the same individual. The small size the cranial fragments is typical cremation, where pressure would have led to bursting and separation. Further, the human bone fragments all show clear signs of burning and are all calcinated revealing burning at a high temperature consistent with cremation (Byock et al. 2005, 216). The investigators continue to argue that the evidence suggests that this is a cremation burial, and have suggested that it is a demonstration of high status as it would have required much wood for fuel and wood was a scarce source in Iceland at the time (Byock and Zori 2014, 14). This could indeed be an explanation for why there are so few cremations in Iceland. Therefore cremations would be considered a display of high status whereas inhumations containing items such as horses would not have the same status connotations that these archaeological deposits have elsewhere in northern Europe. However, given the great importance and practical need for a horse in Norse Iceland sacrificing one or more for a burial deposit is still remarkable.

The Icelandic horse graves do indicate some shared culture and 'religious' connections between Iceland and the wider Norse world, especially Norway and Scotland. It could be viewed that reliance on the horse was of more practical importance in Iceland where farmsteads were significant geographical distances apart compared to other areas of the Norse world where urban development was occurring

and extensive trade routes were increasing thus shortening the mental distances between populations. Therefore the horse in Icelandic burials was not necessarily representing the identity of the human individual but rather the wider social and cultural understanding of human-horse interdependencies in Norse Iceland. In addition, the density and difference in grave construction highlight differences between the regions. Vésteinsson (2014, 88) has suggested that the earliest settlers in Iceland were relatively equal, and that their elites controlled the settlement of the island from afar. Although later, by 12th century, this develops and society becomes arguably more unequal with a large proportion of the population economically and politically dependent on a select group of chieftains (Vésteinsson 2007a, 137). However, the idea of the earlier society being relatively equal is supported by the early pre-Christian burial archaeological evidence for the number of horse burials, suggesting less status orientated burials. Further, this could be argued to be the case in the Faroe Islands where the early burials that have been discovered show similar uniformity and lack of grandeur. This would suggest that these early communities chose a more uniform representation in their pre-Christian burials, suggesting that the immediate settler community was materially less diverse; and as suggested by Vésteinsson (2014, 89) were possibly controlled by elites not located on the islands. This may not be the case in Greenland, which was settled later than Iceland and the Faroe Islands, and appears to be much more influenced by Christian religious practices than pre-Christian burial rites.

Another type of burial often associated with high social status is the boat burial. Boat burials are found across the Norse world. These are found particularly in Scandinavia but also in the British Isles, especially in Orkney and the Isle of Man, however there is only one Scandinavia boat burial in continental Europe outside Denmark located in Brittany (Price 2008a, 264-5). There are some noticeable

discrepancies in this distribution for example in the British Isles there is only one boat burial that has been excavated by archaeologists on the mainland. This boat burial at Ardnamurchan was discovered in summer 2011 as part of the Ardnamurchan Transitions Project which began in 2006. The only other potential boat burial on the UK mainland is Huna in Caithness where a cluster of rivets was recorded in the early 20th century (Harris et al. 2012, 338). It can also be noted that there is likely to be around 500 Viking Age boat burials in Norway (Halstead-McGuire 2010, 167) which is considerably more than the current estimates for boat burials in the North Atlantic. Currently there are 6 confirmed, but possibly 7, boat burials in Iceland (Roberts & Hreiðarsdóttir 2012, 7). The confirmed boat burial sites are Vatnsdalur, Glaumbær, Kaldárhöfði, Dalvík, Hringsdalur and Litlu-Núpar. There is a possible seventh boat burial at Klumlabrekka in Mývatnssveit. Klumlabrekka is located in the northeast. The rest of the confirmed 6 boat burials are all located in the west or the north of the country, apart from Kaldárhöfði which is located in the south, which is likely to reflect where modern excavations have taken place rather than a regional pattern. Currently no boat burials have been found in the Faroe Islands or Greenland. Considering the high density of other pre-Christian burial practices, such as horse burials in Iceland, this could suggest that lack of wood was a factor in the scarcity of the boat burials in this region and these artefacts were simply too valuable to be utilised in burial ritual. Furthermore, possibly the lack of boat burials was compensated by horse burials.



Figure 5.4 The location of the boat burial of Hringsdalur (photo: L. Hogg).

Aside from the apparent lack of boat burials in the North Atlantic there are also further observable differences. Firstly none of the boat burials discovered in Iceland have been preserved fully. The ship and boat burials in Scandinavia can be particularly impressive and famous as often the entire, or at least a considerably amount of, the boat has been preserved such as at Oseberg, Ladby, Gokstad and Tune. These burials also reveal high numbers of animal sacrifice, usually horse but even exotic animals such as peacock (Price 2008a, 265). It is therefore very noticeable that there is a lack of animal remains in the burials from Iceland. In both Norway and Scotland 20% of the boat burials include horse equipment or horses (Halstead-McGuire 2010, 174). Yet despite the high density of horse burials in Iceland there is a distinct lack of these remains within the boat burial contexts, even when, as at Litlu-Núpar, there are horse burials in very close proximity to the boat burial (Roberts & Hreiðarsdóttir 2012, 7). Furthermore it is interesting to note that only two of the boat burials reveal skeletal remains of females. Vatnsdalur contains a female body along with the remains of 6 others

(Halstead-McGuire 2010, 176) and the remains of three people, one likely to be female, were discovered at Litlu-Núpar (Roberts 2009, 38). These interesting factors of the Icelandic boat burials could reflect a society in which migrant families were seeking new ways to display their identities and connections with their homelands (Halstead-McGuire 2010, 166). Therefore, although there are significant variations - notably a lack of boat burials and an absence of animal remains – the burial practice does reveal an identity connection with Scandinavia but also new identities that are taken into consideration. It reveals a connection with the wider Norse world but further supports the idea that the North Atlantic societies were also distinct with their own social identities and worldviews.

The Faroe Islands have not been subjected to even a small proportion of the amount of research undertaken in the burial archaeology of Iceland. Of course, Iceland has attracted a significant amount of attention in part owing to the number of pre-Christian burials discovered but also received a notable amount of interest probably due to the high density of horse burials on the island. It is notable, therefore, that there is a paucity of published research on pre-Christian burials in the Faroe Islands. What has been published has often been in Danish, although more recently the number of publications in English has increased. Despite few excavations confirming pre-Christian burials there are a number of unconfirmed locations that have a strong connection with oral tradition.

Across the islands there are a number of earth mounds and other features that are the subject of local folklore and oral traditions and, as a result of these tales, are often considered to be burial sites. For example, Øttisheyggur on the promontory of Giljanes on Vágoy, Tórmansgrøv in Vágur and Havgrímsgrøv in Hovi both on Suðuroy and Sigmundargrøv on Skúvoy (Arge & Hartmann 1989-90, 5). Sigmundargrøv on

Skúvoy is considered to be the last resting place of Sigmundur Brestisson, the hero of the Fareyinga saga although the modern Faroese hero is really his sworn enemy Tróndur. Sigmundur had a rather unfortunate end to a rather adventurous and unstable life as he escaped an attack from Tróndur í Gøtu he swam south from the island of Skúvoy to Sandvík on Suðuroy only to be murdered by a farmer intent on stealing his magnificent gold arm ring. It is mentioned in the saga that Tróndur later recovers the body of Sigmundur and returns it to Skúvoy where it is reburied in the church yard. Oral tradition dictates that a stone bearing a carved cross is the location of Sigmundur's grave. However, similar to other features and mounds across the islands associated with oral tradition Sigmundargrøv has not been the subject of thorough or professional excavation and so these locations remain very much in the realm of legend. Hovgrímsgrøv has been subjected to amateur excavations but no skeletal remains were discovered and there is the suggestion that the ancient remains are those of a building structure rather than a burial. These sites connected to folklore could benefit from future research and study to gain not only a better insight into burial archaeology in the Faroe Islands but to also better understand Faroese folklore and oral tradition.

However, there are two very significant excavations of burial sites in the Faroe Islands. The most well-known of these is Yviri í Trøð in Tjørnuvík on Streymoy. The site was discovered in 1955 when human bones appeared on the surface of the sand dunes by a couple of boys playing in the area and it was excavated in 1956-7 and 1959. These excavations uncovered the remains of 12 graves. The highlight of these excavations, apart from the first discovery of pre-Christian burials on the islands, was the discovery of an Hiberno-Norse bronze ring pin (Arge & Hartmann 1989-90, 5). The burials at Tjørnuvík have been dated to around the last decade of the 10th century. This date is derived from the Hiberno-Norse bronze ring pin and two radiocarbon dates,

both of which, when calibrated, centre on the final decade of the 10th century (Arge 2001, 11). Although this date is very precise, it is not unreasonable, but it should be noted that the full radiocarbon ages have not been quoted in the relevant publication. In addition, only the Hiberno-Norse bronze ring pin and poorly preserved human bones remained and thus this prevented any extensive interpretation. However, this site remained, and still is, significantly important given the paucity of pre-Christian burial sites in the Faroe Islands. Fortunately there is now another pre-Christian burial site in the Faroe Islands that also shows similarities with the site at Tjørnuvík.



Figure 4.5 The village of Tjørnuvík. The burial site is located to the left of the houses, next to the road (photo: L. Hogg).

In the summer of 1989 on the island on Sandoy in the village of Sandur archaeologists discovered 11 graves, although only 7 were excavated (Arge & Hartmann 1989-90, 6). It is likely that there are still more graves to be discovered in the area but more archaeological research is required to uncover them. It is already known that there

is significant archaeological remains in the area as a Viking Age hoard was discovered in the south-eastern corner of the same grave yard by a gravedigger in 1863 (Arge & Hartmann 1989-90, 6). There have also been extensive excavations at the church which show a long occupation of the site, possibly even as far back as the first settlement of the islands (Arge 2001). Furthermore there have been recent excavations from 2004-6 at the site of Undir Junkarinsfløtti which is located in the field north of the church (Arge et al. 2010) and on the other side of the bay a settlement period farm mound, Á Sondum, has been the subject of a small scale excavation (Arge 2014, 6). The burial site at Sandur appears to be well organised with the graves aligned parallel to each other in an eastwest direction (Arge 2014, 6). Unfortunately, however, the state of skeletal preservation was poor (Arge & Hartmann 1989-90, 9). Fortunately a number of artefacts have been recovered from these graves, and include silver and bronze rings, bone beads, glass, amber, and iron knives. The burial of one man was particularly interesting as it contained an iron knife, a leather purse with 7 plain lead weights, a bronze fragment with an interlace motif of Irish origin and a bronze strap-end ornamented with an animal head (Arge 2014, 6). This is the only animal related object to have been found thus far in a Norse-period Faroese burial and as such is important. It also highlights the stark contrast between the pre-Christian Icelandic burials, where animal occurrence is frequent, and the Faroe Islands which are devoid of animal bones.

This absence of animals in burials could be due to poor bone preservation but it could also simply reflect the fact that animals were not present and burial in the Faroe Islands was different from that in Iceland. However it could also reflect the fact that the number of burials in the Faroe Islands is too small to do an adequate comparison with Iceland. However, the two Faroese burial sites could be compared. Given the date and alignment of the burials at Tjørnuvík it is likely that these were pre-Christians, however,

whether the burials at Sandur were Christian or not is still debated (Arge & Hartmann 1989-90, 20). This is due to their location in a grave yard still used by a church that has an extensive chronological sequence at the site, and the alignment of the graves, eastwest. However the construction of the graves from both sites share many similarities (Arge & Hartmann 1989-90, 9). Given the richness of the graves at Sandur, Arge (2014, 6) has argued that these reflect a high-status site in the area with good connections to the wider Norse world.

The situation in Greenland is not too dissimilar to the Faroe Islands in regard to Norse burial sites. In fact it could be considered worse as the no pre-Christian burial sites have been discovered as of yet. There is a particularly important grave yard from Herjolfsnes, excavated in 1921, which proved significant due to the number of textile garments well-preserved in the permafrost which at the time of the excavation was the greatest historical textile event in Europe (Østergård 2004). The lack of Norse pre-Christian burials in Greenland is attributed to the idea that the settlers were Christian when they arrived in Greenland, around AD 1000. From the first settlement the inhabitants may have built churches with grave yards attached to their home farms (Arneborg 2008, 593). Therefore, any death would have been subjected to Christian burial practices and there would not be evidence of pre-Christian beliefs displayed through burial. The lack of evidence for pre-Christian. It is therefore somewhat surprising that there is evidence for pre-Christian beliefs.



Figure 5.6 Þór's hammer carved on to a loomweight (Abrams 2009, fig.3).

A few artefacts that indicate pre-Christian beliefs have been found across Greenland and include one stone loomweight with a depiction of Þór's hammer [see fig. 5.6] and one rune stick possibly relating to Old Norse mythology (Keller 1989, 178). The rune stick was discovered at Ø17a (Narsaq), a medium sized *landnám* farm located in the eastern settlement, and can be dated to the 11th century (Imer 2009, 76). The Þór's hammer inscribed loom-weight was discovered in 1932 in the barn complex at Qassiarsuk (ruin 19, Ø29) (Abrams 2009, 55). The rune stick and loomweight appear to display links to Old Norse cosmology and have raised speculation over the religion of the early Greenlandic settlers. It has been suggested that the conversion to Christianity occurred quickly after settlement and those who had not been given a Christian burial were removed and reinterred (Abams 2009, 55). In *Eiríks saga rauða* the ghost of Porsteinn Eiríksson speaks to Guðríður Þorbjarnardóttir and asks for his body to be taken to the church and the bodies of those who have been buried in unconsecrated

ground near their farms to be moved to the church in Eiriksfjord. The reburial of bodies could indeed be a valid suggestion as to why there are no apparent pre-Christian burials in Greenland despite the early date of settlement. However, there are currently only two artefacts from Greenland that suggest an earlier belief system and therefore it is good to urge caution when utilising them as evidence. It is most likely that Greenlanders quickly adopted Christianity, if they had not already done so before they settled. This would be an adequate explanation for the lack of pre-Christian burials. However, it is certainly interesting to compare this situation with the Faroe Islands, where there is evidence of pre-Christian burials in the late 10th century, and in Iceland which also shows a continuing tradition. This therefore suggests a very different religious identity in Greenland than that in Iceland and the Faroe Islands.

Consumption Patterns

Traditionally zooarchaeological studies noted the various animal bones on site and therefore indicated what the human occupants were eating. Often the interpretation finished at that point although there may also have been some discussion with regard to the social status of the site and economy. However, the relationship between humans and animals reveals much more concerning social understanding and wider implications for society. The relationships between the two are multifaceted. Some animals have strong intimate interdependencies with humans, others are despised in human society and some are consumed. This is a strange paradox where some animals are chosen to live with humans inside a home, doted upon and regarded as a member of the family yet others are bred to be eaten. Which animals are chosen to be consumed and which are chosen to be an addition to a family really reveals the intimate details of human society. Cultural preference plays a part in this as the recent horsemeat scandal showed, with

vast media coverage reporting British consumers feeling physically sick with the knowledge that they may have consumed horseflesh whereas the Icelandic population reading about the British reaction were thoroughly confused as they tucked into their evening meal of foal steak. These strong cultural differences are not the only interesting understanding that can be derived from consumption patterns.

Various aspects of social identity are revealed through food preferences and restrictions, such as age, gender and economic class. Furthermore, in fact these food preferences reveal a lot about the belief systems of the society and individual. James Barrett has undertaken significant work on the utilisation of marine resources on Viking Age Orkney. He concluded that although consumption of marine resources increased from the start of the Viking Age, indicating a change in dietary preference as a reflection of cultural identity, the most significant increase was during the 11th-14th centuries revealing the impact of Christian eating regulations in Orkney (Barrett & Richards 2004). Spiritual beliefs not only reflect dietary preferences in terms of what animals, or which parts, are consumed but also the manner in which these living creatures are slaughtered. For example kosher meat must be slaughtered according to the laws in the Torah, the animal must be killed quickly but cannot be stunned prior to slaughter as is now the usual practice in countries such as the UK and Australia. Meat consumption is therefore closely interlinked with religious ideology. In fact food consumption and the way humans perceive consumption of animals may be a reflection of religious and spiritual taboos that have permeated into society over a long period of time. For example this could be the case when it comes to horseflesh, which will be discussed in detail later. Strictly enforced dietary preferences would have, over time, become a cultural norm if not, and as well as, a reflection of spiritual belief. Given that animal bones are present on the majority of Norse period archaeological sites in the North

Atlantic it would therefore be of interest to explore the geographic region for differences and similarities and conclude what this may reveal about spiritual belief.

However, most of the evidence of everyday meat consumption, or even consumption in general, from a living population on Norse period sites in the North Atlantic is derived from middens. Middens are essentially a rubbish heap for the household waste, although they can be structured with divisions between different phases in use for example. The animal remains found in the middens gives some indication to what the occupants were consuming which in turn reflects a number of social identities, including religious and spiritual. The middens would have contained the debris of the meals the inhabitants were consuming and important meals, such as feasts, would also be represented. For example at Hrísbrú the evidence suggests that the occupants consumed a much larger amount of cattle and sheep possibly indicating high status of the occupants given the economic value attributed to the keeping of cattle (McGovern 1980, 260).

Feasts have been argued to be key aspect of pre-Christian beliefs. Aside from having enormous political significance (Zori et al. 2013), strengthening kinship and allegiance through the provision of food and drink, these would have formed a key aspect of ritual devotion to the belief system (Sanmark 2005, 204). Pre-Christian belief required this as the gods were similar to, although more powerful than, humans and were flawed and these rituals acts of devotion helped the gods keep the chaos that was constantly threatening the human world at bay. As pre-Christian religion was part of everyday life, and not a separate institution, it would have been maintained by ordinary people and association rituals and acts of devotion were likely to take place within homes. In Norse Iceland and Faroe Islands a respected local chieftain (goði) would take on responsibility for undertaking the necessary tasks of public displays of devotion and

fidelity required in pre-Christian belief. In *Kjalnesinga Saga* it is mentioned that Þorgrímur inherits the title 'goði' as he is the eldest son and he then constructs a large temple and makes many sacrifices. In the *Fareyinga Saga* it is likely that Hafgrimr from Suðuroy was a goði as it mentions that he makes many sacrifices and lives at a place called 'Hofui', which can be translated in modern Iceland to mean 'temple'. This 'goðar/goði' title would have been a well-respected role and subsequently increased the individual's social standing. Byock (2001, 94) argues that the feasts held by these chieftains would have been political affairs with the chieftains competing with one another for the most successful feast and those attending making a public declaration of their relationship with that particular chieftain. In undertaking this role the chieftain was distinguishing themselves from other rich and respected chieftains in the area and thus elevating their social status within Norse society.

However, these interpretations are derived heavily from later textual sources, such as the Icelandic family sagas and as a consequence have been challenged. Significantly, the place name element 'hof' as directly meaning temple, and having a primary religious focus, has been challenged. In early 20th century antiquarian archaeology surveys 'hof' sites are noted to be 'temple ruins', as is the notable case with the famous archaeological site of Hofstaðir (Lucas 200, 1). However, as archaeology developed in the North Atlantic the use of the role of sagas in archaeology became a matter of significant discussion (see Friðriksson 1994). This had led to archaeologists questioning the validity of saga sources in archaeological interpretation. In regard to the debate over the place-name 'hof' and interpretations of archaeological sites it can be seen that some scholars have utilised the literature sources more in their interpretations (eg: Byock 2001), but others remain more critical. Notably Vésteinsson (2007b), has suggested that the principal focus of these places would have been socio-political

activities, and the religious connotations are a later development as a challenge to Christianity. He argues that the place names with the element 'hof' are secondary developments to the original settlement farms, designed to create power centres for already existing settlements. However, as Gunnell (2001, 18) notes that everyday life and belief were so intertwined that it is plausible to suggest that earlier high status farms could be seen as both high-status, or aspiring high-status, farms and have a spiritual aspect too. These places may not have been directly labelled as a 'temple', but that is not to say that the activities that took place there did not reflect religious, political and social understandings. Indeed, this would support the idea that pre-Christian belief permeated everyday life, and that it is impossible to separate certain activities. Certainly particular activities, such as feasting, can have very real spiritual, and ritual conations, as well political and social.

Extravagant feasts are mentioned often in the Old Norse Sagas, such as in Laxdala saga, and can be observed to be much more than a meal and are more similar to a public ritual activity centred on communal consumption (Zori et al. 2013). In Óláſs Saga Helga there is a brief description of a feasting ritual in Norway where cattle and horses were slaughtered and their blood collected and used to cover idols and toasts were made to the gods. The ceremony was full of symbolic actions ranging from where people sat to what they ate and drank. An important part of this ritual feasting would have been the animal sacrifice, usually a domestic animal. The wealth and prestige associated with feasting and animal sacrifice is demonstrated notably at the important site of Hofstaðir. At Hofstaðir a large number of cattle skulls have been found suggesting that the inhabitants were feasting on expensive beef. The skulls also show signs of trauma and specialists have concluded that these animals were have been slaughtered in a particularly violent manner in order to maximise blood loss which

could potentially indicate that their slaughter was part of a performance associated with sacrifice. The skulls also show evidence of being displayed which indicates that after these animals had been killed in a violent, bloody, manner they were then consumed and their heads displayed in the hall (Lucas & McGovern 2007). Although this is later in date, and was used to develop Vésteinsson's (2007b) theory for a later religious use, it is still an interesting case study for a very apparent connection between feasting and ritual activity. However, it could still be noted that this shows quite dramatic evidence for symbolic activity, it does not necessarily mean that feasting could not have been connected to pre-Christian beliefs in the earlier stages of settlement. In fact, this would support the idea that belief was heavily intermeshed with life in general. The evidence from Hofstaðir does, however, support the idea that actions became more dramatic and extravagant, possibly as a challenge to Christianity and political power.

Feasts could be observed to be an important part of pre-Christian life across the whole of the North Atlantic. However there are also other ways of examining consumption to consider religious and spiritual intentions. In later Norse society after the conversion to Christianity it is observable that there were food taboos and dietary restrictions. The Church doctrine contained extensive information in regard to dietary restrictions. During the early Christian period rulers and clergy across northern Europe introduced a number of rules in regards to food consumption which is particularly notable because at this time few other Christian practices were enforced by law (Sanmark 2005, 203). There were a number of wide ranging laws regarding dietary restrictions such as a ban on eating animals with that had died of natural causes and animals that had engaged in bestial intercourse with a human (Sanmark 2005, 212). This demonstrates the importance food and food related customs to spiritual belief, in particular to Christianity which during this period was attempting to replace an older

belief system that was inextricably integrated into society. Therefore some of these Christian dietary restrictions could be seen as an attempt to create a distance from pre-Christian religion and to influence and impact upon society significantly enough to define a new social identity and social order.

Notably the conversion to Christianity is often perceived as top down change where the higher ranked members of society, such as rulers, utilised the religion to establish and strengthen their rule and authority (Slupecki 2007, 379). The conversion marked a significant change in the structure of society with centralised states forming in Northern Europe and a more ranked society developing. It is therefore plausible to draw the conclusion that the conversion marked a significant developmental shift within society and in order to emphasise this change it was crucial to reinforce significant differences which would impact upon social identity. Consumption was a key aspect as it was considered a crucial part of religious identity which, in turn, was inextricably interlinked with social identity and worldviews. The new rules regarding dietary restrictions demonstrate the importance that was placed upon belief, social identity and food.

Notably, and most often discussed, are the restrictions against the consumption of horseflesh. This practice was strongly condemned by the Christian Church. In AD 732 Pope Gregory III stated that the consumption of horse meat was a filthy and abominable practice and he prohibited it (Sanmark 2005, 209). It is likely that the consumption of horse flesh was regarded as a particularly pre-Christian custom (Loumand 2006, 131). In fact it is thought that horses were particularly important in pre-Christian beliefs with their regular appearance in burials, especially in Iceland, and their strong presence in Norse mythology. It is plausible that the Christian Church saw

the consumption of horse flesh as a particularly pre-Christian ritual and therefore determined to eradicate the practice, and the belief system with it (Jennbert 2011, 148).

Given this strong opposition by the Church towards the consumption of horse flesh, it is interesting that *Íslendingabók* notes that whilst Porgeirr proclaims that Icelanders should be baptised and become Christian, he explicitly states that the old rules regarding the exposure of children and consumption of horse meat should remain. It is extraordinary that whilst the Christian Church denounces the consumption, the practice is still legally allowed to occur in Iceland. However, despite the explicit proclamation in *Íslendingabók*, there is little evidence of horse consumption occurring in Iceland, Greenland or the Faroe Islands with only a few sites, such as Hofstaðir and Granastaðir, showing butchery marks on horse bones in their faunal assemblage. Furthermore even after the later rules and laws introduced by the Christian church there is still evidence to suggest that the consumption of horse flesh continued. This would suggest that the laws were not that strictly enforced or that food preferences were not regarded as that crucial to general society in the new Christian religion. It could also indicate possible lingering remains of pre-Christian belief and tradition within society.

Animals that have also been argued to have been consumed prior to the conversion to Christianity are cats and dogs (Jennbert 2011, 147). It has been suggested that, along with horses, cats and dogs were important in Old Norse mythology and sometimes sacrificed as part of pre-Christian rituals (Sanmark 2005, 216). Whilst these animals are seen to perform an important role in Norse mythology there is little evidence of them being consumed, or even little evidence of them at all, on Norse sites in the North Atlantic. There is evidence of dogs being present at several sites as visible teeth marks can be observed on bones from Hrísheimar, Vatnsfjörður, Granastaðir and Hofstaðir. This is also the case with cats although there is evidence of cat skinning

taking place at Hofstaðir (McGovern 2009, 221) and there is the presence of cat in a deposit from Ingiríðarstaðir (Roberts 2012, 3). There is no indication that cats and dogs were consumed by the Norse population in the North Atlantic apart from three sites in Greenland where the skeletons of several Norse hunting dogs were discovered in the final floor layers of the abandoned sites of Sandnes, Tummeralik and Nipaatsoq (Buckland *et al.* 1995, 94). However it is likely that these are the remains of a desperate fight for survival by the Norse in an increasingly hostile environment rather than a particular food preference.

Presumably there were also food taboos in pre-Christian societies just as there were in the Christian later centuries. It is notable that there is little evidence for the consumption of cats and dogs. Whilst this may be a reflection of their useful purpose within society, to hunt, and maybe a reflection of their scarcity, the lack of cat evidence could indicate their rarity, it could also be explained by a spiritual taboo against consuming them. Unfortunately it is difficult to draw any firm conclusions about this with regards to exact explanations and definitions. Jennbert (2011, 145) argues that the osteological evidence does not allow us to draw any conclusions with regards to pre-Christian food taboos. However I would say that it allows one to make a reasonable interpretation. As has been observed, despite there being official food restrictions imposed by the Christian Church, these rules were not always followed as can be observed in the zooarchaeological evidence, for example horse meat continued to be consumed. So although scholars may have some understanding of the official stance of the Church it is shown that these weren't necessarily a reflection of practice and belief in society.

In the pre-Christian Norse North Atlantic it can be observed that horse was consumed. However, the zooarchaeological data reveals that this was not a high level of

consumption when compared to the other domesticates that were also eaten. This however reflects the situation in Saxon England, where horse consumption is notably low (Poole 2013). Poole (2013, 330) suggests that because horse was infrequently eaten that this could reflect a highly symbolic act, associated with belief. This, alongside the fact that the horse held a prominent role in pre-Christian beliefs, is a plausible reason for the disapproval from the Church towards horse consumption.

There have also been a number of other suggestions as to why there was an aversion to horse meat. It has been suggested that it may be a reflection of the close intimate relationship between horse and human (Jennbert 2011, 149). This seems unlikely however as that relationship appears to be most intense and visible in the pre-Christian period where horses and horse equipment appears buried with their masters and where horses can be seen to have a strong symbolic and mythological role within society. More likely is the suggestion that this aversion could be due to social status and whilst this was a period of significant religious change it was also, as mentioned, a period of substantial social change. Collections of canon law and manuscripts dating to the 10th century indicate a link between status and the consumption of horse flesh with those on the margins of society and those without property consuming it which could have led to a social stigma associated with this dietary preference (Jennbert 2011, 149).

It is stated in the Anglo-Saxon Chronicle that when the Vikings in England suffered a food-shortage that they consumed many of their horses. Page (1985, 12-19) notes in his study of the 893 (894) entry that when describing the Vikings consuming horse *fretan* rather than *etan* was used for 'to eat'. Fretan was normally used for beasts, animals and monsters. In Mid-Saxon England it has been noted that the poorer settlement sites display the most evidence for horse consumption (Poole 2013, 329). This has been suggested by Poole to demonstrate either a need to consume horse, for

example famine, or it could also suggest that a religious significance of horse consumption was held on to longer by lower status individuals. It is not inconceivable that a religious or spiritual significance bestowed upon horse consumption could have lingered in certain sectors of society. This practice and association would reflect the critical response from the Church to horse consumption. Thus it can therefore been concluded that the Anglo-Saxons would have viewed the consumption of horse as incompatible with Christianity (Sanmark 2005, 209).

It is likely that there were dietary restrictions in pre-Christian Norse society just as there were in Christian Norse society. However, the written records for Christian dietary practices are extensive, thus revealing the importance of food restrictions to the Church at the time. It is likely that food preferences in Pre-Christian society were also interlinked with social identity, economics and politics which is also the case in Christian society too. This further demonstrates how deeply belief was interwoven into Norse life and the difficulties there are in trying to draw direct parallels between religion and food consumption, if that can be done at all. However it can be observed that horse flesh could be perceived to be a particularly pre-Christian dietary preference. Given the proliferation of the horse in burials and the importance in Norse mythology it could be concluded that the consumption of horse in the pre-Christian period was of key importance. However, there is no direct evidence for the special importance of eating horsemeat in pre-Christian practices in the North Atlantic, although there is suggestive evidence from other areas which could also reflect attitudes in the North Atlantic. It is also likely that cats and dogs were avoided although it is not completely apparent whether this was for spiritual reasons. It is likely that at important feasts could be undertaken as rituals in which domestic animals were consumed. Considering the evidence from North Atlantic sites, such as Hofstaðir, it can be concluded that it would

have been preferable to consume an animal of certain economic importance such as cattle to highlight the importance of the rite and devotion.

Animal Imagery and Symbolism

The use of animals in artwork and ornamentation is seen through human history. There are famous rock carvings in the Côa Valley, northeastern Portugal, and cave paintings from Lascaux caves in the Dordogne that date back to the Paleolithic. Therefore it is not surprising that animals feature in a number of Norse and Germanic artistic styles. Furthermore animals are frequently depicted in Norse iconography. This animal artwork is particularly prevalent in Scandinavia and also appears frequently in the British Isles. It is interesting to note that there is an obvious distinction between the types of animals depicted. Despite domestic animals being prominent in the archaeology of the period it is wild and fantasy animals that feature almost exclusively in the ornamentation, although horses are also often depicted (Jennbert 2006, 137). Given the role of domestic animals in everyday life it is therefore interesting that these do not feature prominently in artistic works. Over the period the artistic styles developed possibly due to expanding contacts and external influence but also due to a natural development of the style. Urnes styles was not influenced by external developments whereas the Ringerike style drew extensively upon Western European artistic conventions (Graham-Campbell 2013, 116). Norse animal ornamentation developed over the late Iron Age and Early Middle Ages to become so complex that the zoomorphic motifs became illegible (Jennbert 2011, 170). By the 7th century Style II was formed by intricate, interlaced, ribbon-like animal patters and was difficult to decipher by the untrained eye (Graham-Campbell 2013, 26). This would have meant that only those familiar with the design would have been able to understand the context and

symbolic meaning of the style. As a result these designs would have been exclusive to a particular group who understood the shared meaning behind them.

The tradition of Germanic animal ornamentation appears to have originated in Denmark in the late 5th century according to Graham-Campbell (2013, 25) or during the 4th century according to Wilson and Klindt-Jensen (1966, 27). Throughout the period it can be observed that several distinct styles emerged characterised by zoomorphic elements starting with what has been labelled as Style I in the 5th century. Some of the styles appear to have been popular across a wide Germanic geographic area, such as Style II, whereas others appear to be restricted to particular geographic areas with little external influence, such as the Urnes Style. The styles characterised by zoomorphic motifs appear to develop chronologically throughout the Norse Period. From Style I to Style III in the 8th century the animal motifs get progressively more abstract. The 'Great Beast' ornamentation was then introduced in the mid-tenth century as a key motif in the Mammen Style and continued to be utilised in the Ringerike and Urnes Styles during the 11th century (Graham-Campbell 2013, 116). Throughout this development zoomorphic, animal, styles were extensively used by elites to define and display high status through material culture (Hedeager 2011, 61). The animal styles arguably reflect Old Norse cosmology yet continue to flourish through the widespread adoption of Christianity in Europe. Earlier styles from the 8th century incorporated insular elements such as plant motifs yet as the zoomorphic elements continued in popularity throughout this period the plant based motifs diminished in importance and it is not until the Mammen Style in 10th century where plant and zoomorphic elements are successfully combined together (Graham-Campbell 2013, 70; Hedeager 2011, 65; Wilson & Klindt-Jensen 1966, 28). It appears as though it was utilised as a means of cultural continuity and as a way of distinguishing secular high status from religious high status. This use of zoomorphic

motifs continues until the Urnes Style in the 11th century when it ceases to develop but it later reappears on Christian iconography. This suggests a continued popularity of animal styles and shared understanding of the motifs that although developed during this period transcended religious changes and continued to be utilised as a means of social expression.

It has been argued that the Norse animal motif designs would indicate a particular social identity as the designs were so complex it would have been almost impossible to understand without a shared understanding of the social context. As a result Jennbert (2011, 171) has argued that these designs would have contained much information about social identity and their perception of the world. Furthermore, these would have also revealed information about those who could understand the symbolic meaning of the imagery and could suggest a shared understanding and worldviews by those who could 'read' the decoration. Whether these meanings would have been exclusive and only understood by a limited group with a shared social identity, such as status, or a wider community with a broader communal perspective is unclear. Hedeager (2011, 60) has argued that the warrior elite would have been especially connected with these zoomorphic designs and that it would have been an inseparable part of their material identity. It is likely that these could have had multiple meanings being connected to one defined group but also, in another way, to a large community. However, it is clear that these were more than pretty pictures and were designed to communicate information about individuals and wider society. However, as Jennbert (2011, 173) notes 'the pictures themselves did not contain any information or message; they had to be contextualised'. This makes understanding the meaning being communicated in the depictions difficult, if not impossible, when viewed by an individual without this shared, or understanding of, worldview and identity.

A common interpretation of these zoomorphic images is that these convey religious and spiritual beliefs. Given the importance of animals within Norse society and in pre-Christian beliefs it does seem plausible that this would be a suitable way in which to display their significance, especially as pre-Christian beliefs were so integrated within everyday life and so animals would have been of great importance within Norse society. Many scholars, such as Hedeager, associate Old Norse mythology with zoomorphic ornamentation. However, the Old Norse mythologies were written down in the twelfth century and the early animal artwork appears in the fifth century. Therefore the Old Norse myths would have had to stay relatively the same throughout this time span for these to have any consequence upon the artwork. However, the later styles are likely to reflect pre-Christian beliefs. In fact Hedeager (2011, 60) notes that this is the case in the later centuries when Christianity is firmly established and a clear link can be observed between Christian myths and iconography. She therefore, plausibly, suggests that one can assume that pre-Christian iconography functioned in much the same way. This is indeed likely to be the case although caution must be taken when utilising written sources, written several centuries after the official conversion to Christianity, to interpret pre-Christian beliefs and symbolism. It is likely that these written versions of the myths were not too corrupted and that later iconography is likely to have a significant connection with the early beliefs. Although Høilund Nielsen (2012, 630) argues against this, noting that the animal art does change during the period in question and that the pre-Christian myths would have also changed. She also notes the parallels between religion, specifically Christianity, and iconography but states that it is the later artwork, parallel with Christian imagery, which clearly has a foundation in the Old Norse myths from the written sources, not the earlier artwork. This is a more plausible argument given the various associated criticisms with the later written sources. However, it is likely that although there would have been developments in Norse

mythology there would have been some significant continuation in the core beliefs. Animals can be seen to have a significant role in pre-Christian beliefs prior and their depiction in the earlier ornamentation merely highlights their role in a belief system that permeated all aspects of life. However, as Høilund Nielsen suggests drawing direct comparisons with the Old Norse written sources is problematic and not necessarily helpful.



Figure 5. 7 Belt buckle from a grave on Sandoy (photo: S. Arge).

It can be seen that animal symbolism and imagery was abundant and appeared frequently in the Old Norse world and was important in Norse society. However, despite animals appearing frequently in Norse period artwork and stone imagery in Scandinavia and the United Kingdom it does not appear as common in the North Atlantic. In fact there are very few items of material culture that overtly feature animal imagery. There is a belt buckle with the remains of a leather strap still attached that was recovered from a late 9th or early 10th century grave on the island of Sandoy in the Faroe Islands (Arge & Hartmann 1989-90, 11). The belt buckle appears to feature an animal with the ears, nose and mouth present [see fig. 5.7]. This belt has been suggested to have originated from the insular British geographical area, which is the case for many items recovered in the Faroe Islands such as the famous bronze Hiberno-Norse Ring Headed Pin from a grave at Tjørnuvík. A metal circular brooch was also recovered from the Faroe Islands at the Viking Age farm site of Toftanes [see fig. 5.8]. It is decorated

with three animal heads in the Borre Style and is likely to be dated to pre-AD 900 and similar items have been recovered from a wide geographical area including Britain, Scandinavia, Germany and Russia (Stummann Hansen 2013, 85-6). There is also a mask on a piece of whalebone from a highly disturbed burial at Ljótsstaðir, Iceland, dated to the Settlement Period (Graham-Campbell 2013, 110). And there is an extremely interesting, and rather infamous, stray find without context from the south of Iceland of a cast silver pendant in the form of a cross with a fanged animal head from Foss (Graham-Campbell 2013, 23).



Figure 5.8 Metal, circular brooch from Toftanes. Scale 1:1 (Stummann Hansen 2013, fig. 79).

Arguably the lack of material culture that overtly features animal imagery contrasts quite significantly with what we know especially from Iceland where animals appear to have had an extremely important role in pre-Christian beliefs with the highest relative incidence of horse burials in the Norse world suggesting their crucial importance in this significant part of belief. It is likely the people of the North Atlantic

chose to display their beliefs in different ways, relying instead on the physical deposition of domestic animals rather than imagery. It is also possible that domestic animals were of more importance in their beliefs than wild or fantasy animals that are often the subject of art. Although it is difficult to say why there are these significant differences between geographic areas in the Norse world it does serve to highlight that pre-Christian belief was not necessarily homogeneous across the whole of the Norse world and therefore applying ideas about Norse belief in Scandinavia to the North Atlantic is not necessarily helpful or accurate. This further strengthens the assertion that more work on this area needs to be carried out with a focus on the North Atlantic and that although there has been work on Norse mythology in Scandinavia there is still much more to be understood with regard to other areas of the Norse world.

Special Deposits

There are several instances of what could be labelled as 'special deposits' in the Norse North Atlantic. An exact definition of what defines a special deposits is problematical. However, a significant study has been undertaken in this area of special deposits from settlement sites in the Early and Middle Anglo-Saxon period in England by Clifford Sofield. Despite the differences in chronology and geography his description of these placed or special deposits can also be applied to those found in the Norse North Atlantic. He argues that discrete deposits appear to have been consciously selected and deliberately placed in the ground and were designed to exert an effect on the settlement and its living community (Sofield 2012; 2015). Whilst Sofield was looking at all special deposits, including material culture, in this chapter the focus will be on animal special or placed deposits within human settlement. These differ from midden deposits as these are located in extraordinary or unusual locations. For example, it might be expected to

find remains of animals consumed at settlement sites in middens located in close proximity to the farm or even stray bones scattered close to the hearth or food preparation area. However animal remains, especially those that don't show evidence of butchery, that are observed to be have been deliberately deposited with purpose or intent in unusual places. This could include, but is not limited to, foundation deposits and inclusions within wall cavities where the deposit appears to have no structural significance to the building. This could indeed encompass certain burial deposits however this section is focused upon deposits within or close to the household as burials have already been discussed extensively earlier in this chapter.

Special deposits of animal bones within human households have an extensive history. Deposition of sheep bones in house foundations date back as far as the Stone Age (Jennbert 2011, 89). These special deposits are a particularly known phenomenon of the Germanic Iron Age and Migration period, 4th-7th centuries, in the North Sea region (Hamerow 2006, 1). However, similar depositions in other periods have received little attention. Helena Hamerow (2006) has drawn attention to these foundation deposits and their ritual role, highlighting how often Anglo-Saxon settlements are considered only in terms of economy, layout and function. Thus in doing so she highlights the complex nature of households and this further emphasises the interconnectivity between belief and society. These deposits reveal how those who constructed the building and the occupants perceived, understood and related to the buildings. Whether the deposit was visibly displayed or hidden deep in the foundations of the structure also provides meaning. If the deposit was sealed during the construction process then its presence may only be known to a select group of individuals. However if it visible then it could convey a message or meaning to a wider community. The purpose of these deposits is therefore variable and extensive. Whilst

these could have formed a symbolic protective function their meanings could have been much more diverse.

There is very little evidence for special deposits on Norse archaeological sites in the North Atlantic. Aðalstræti 16 is probably the most well known as its ruins are on display to the public through an innovative museum exhibit. Furthermore the deposits are visible and can be seen quite clearly. There are two deposits located in the western wall of the skáli 'hall'. At the base of the doorway in the south western corner of the wall there is the deposit of a walrus scapula [see fig. 5.9] (McGovern 2010, 7) and roughly four meters away on the same wall in the north direction is an exposed series of vertebrae [see fig. 5.1] (McGovern 2010, 8). Given these locations at the bottom of the wall it can be concluded that these were foundation deposits placed when the skáli was being constructed around the start of the 10th century. McGovern (2010, 9) has suggested that their high visibility may serve to advertise the walrus hunting and ivory preparation skills of the occupants at Aðalstræti. He has also noted that these large bones may serve to indicate that walrus hunting sites were located close by allowing the occupants to bring back large chunks of walrus. He notes this as important as Norse sites in Greenland were located far away from walrus hunting grounds and so this further suggests a very different landscape between the two areas. The placing of these bones would have been a very deliberate act with thought given to the construction of the skáli. As these are visible then the placement was obviously designed to be seen by those who came to the skáli. As McGovern suggests these could serve as some symbolic display of the occupants' hunting skills. However, these are placed at the base of the skáli and may not be that obviously visible to those who were not aware of these presence. The faunal remains from Aðalstræti 16 are poorly preserved, although three walrus tusks were uncovered; however another site in close proximity, Tjarnargata 4,

has revealed walrus ribs of young animals from its Viking Age faunal collections which suggests walrus-hunting in the area. It could therefore be thought that the symbolic deposition of the walrus bones at Aðalstræti 16 are symbolic of the hunting in the area and were maybe placed there for future walrus hunting success.



Figure 5.9 Walrus scapula embedded in the wall of the long house at Aðalstræti 16 (photo: L. Hogg. Reproduced with kind permission of the Reykjavík City Museum).

Another interesting site is Þjótandi við Þjórsá where the partial articulated cattle skeleton was discovered under the floor of the byre (Pálsdóttir 2011, 5). This could possibly be seen a protective foundation deposit especially given that it is a cattle skeleton underneath an area that would usual house domestic animals including cattle. However the excavators have also suggested that maybe the constructors were unaware of its presence when they built the byre over the remains (Pálsdóttir 2011, 15). Although this is of course plausible it does seem a little unlikely or rather that the

coincidence of this happening seems doubtful. Given that this deposit would not have been visible, knowledge of its presence would have been limited. Whilst one cannot draw definite conclusions, given the type of animal it is and the location beneath a byre it would seem entirely plausible to argue that it indeed served a purpose to protect the animals housed within the structure.

Although this next example is not taken from a settlement building it is still of significance. Ingiriðarstaðir is a pre-Christian grave field in the north of Iceland and has a turf wall associated with it. Cut into this L-shaped turf wall were three pits; two were empty whilst the central pit contained a special deposit. These depositions would have occurred sometime after the construction of the wall and so is not a foundation deposit and is in fact arguably a burial of sorts. The turf wall was constructed on top of the settlement tephra layer which dates to around AD 871^{±2}. The pit was cut into the turf wall sometime after it was constructed and therefore is likely to date to the 10th century. Into the pit was placed the skull of a female less than 35 years in age which showed signs of blunt force trauma, several parts of cattle and sheep/goat that have been interpreted as food offerings and several cat bones (Roberts 2012, 3). Despite being of a similar date, this deposit contrasts quite significantly with the deposits at Aðalstræti 16 and Þjótandi við Þjórsá and given the context and location is obviously a very different type of special deposit. As yet the purpose of this deposit at Ingiriðarstaðir is still unclear. It was probably a later addition to the original construction of the grave field. It could maybe have been placed to indicate a more defined boundary and to further distinguish the area of the dead from the area of the living. Given the evidence of blunt force trauma to the skull it could maybe be concluded that this was a sacrifice although with what purpose remains unclear.

It is clear that evidence for special deposits from Norse North Atlantic sites is extremely rare. It is possible that potential special deposits have been overlooked or misidentified but it can be concluded that these were unlikely to be a common phenomenon. Similar to Hamerow's (2006, 28) conclusion of Anglo-Saxon special deposits, these were not common and their meaning(s) are unlikely to be understood by archaeology alone. Given the complexity of belief and its intermeshed nature within daily life it is not surprising that these are difficult to understand and interpret from a modern perspective, especially from one form of evidence. Wilson (1999, 297) drew upon evidence from a wide variety of sources, including ethnographic data, to suggest that at least some Iron Age special deposits could be indicative of renewal and fertility. Hamerow (2006, 28) has also suggested that these might be connected to a fertility ideology given that the deposits are often found in connection with grain storage areas. Sofield (2012) has suggested that placed deposits could serve multiple purposes, such as mediating relationships and structuring the settlement. Furthermore these deposits could simply act as trophies. These multiple purposes highlight the difficulty in interpreting the past behaviour and actions of those who intentionally placed these deposits. Given the circumstances of the Aðalstræti site, walrus bones at a potential walrus hunting area, and Þjótandi við Þjórsá, a cattle skeleton underneath a byre, it could be suggested that these were also connected to a fertility ideology with success in walrus hunting and animal husbandry. Although care must be taken when making these conclusions given our lack of understanding of pre-Christian belief, as demonstrated by the peculiar deposit at Ingiriðarstaðir. These deposits, however, make extremely interesting studies of which much more must be done to research them thoroughly to gain a deeper understand of their meaning(s).

Cult Sites and Buildings

Whether pre-Christian beliefs were practised in designated buildings designed solely for worship and ritual activities is a matter of some debate and uncertainty. Given the nature of these beliefs, fluid and likely not institutionalised, then it would seem plausible that symbolic activities relating to these beliefs could be untaken in equally fluid locations rather than specifically fixed within physical structures. The written sources, although arguably revealing much about Norse mythology, do not provide much information with regard to pre-Christian public ritual. This could be the result of the composition of the documentary sources several centuries after the conversion to Christianity because whilst stories of mythology may have lingered, knowledge of public rituals could have insufficient as this would have been something that would have been rapidly eliminated when Christianity was introduced (Hultgård 2008, 215). It is also plausible to suggest that there was no conformity when it came to making a display of one's spiritual and religious beliefs. This could have been undertaken by individuals where they felt most connected to their spiritual ideologies. These could therefore have been places not constructed by humans or even specifically for human symbolic actions. These could have included, but not limited to, many natural spaces such as mountains and hills, groves and meadows, arable fields, islands, lakes, rivers and spring (Hultgård 2008, 217). However it is likely that some forms of devotion were practised indoors, especially communal acts such as feasting. These were probably undertaken in farm houses or chieftains' halls (Hultgård 2008, 217). As previously mentioned this was likely to be the case in Norse Iceland and the Faroe Islands where a local chieftain would have taken on the responsibility for undertaking the necessary public displays of devotion and fidelity. There is very weak evidence from the documentary sources to support the view of an exclusive religious specialist or 'priest' performing rituals

(Sundqvist 2008, 225) and so it is more likely that it was indeed undertaken by members of the community.

However, in the Old Norse sources there are several references to physical structures designed for worship and ritual activity. These are referred to as *blóthús*, *hof*, and *horgr*. These places are associated with ritual sacrifice but unfortunately the textual sources provide no physical description of these buildings. Furthermore defining what is meant by *blóthús*, *hof*, and *horgr* is difficult, if not entirely impossible. Hultgård (2008, 217) has argued that if these specific cult houses were built then they would have been fairly small and would have been likely to have served as a shrine. There have been a few archaeological investigations of potential sites that could fit the understanding of a cult building. These include the excavations at Tissø in Denmark; Uppåkra, Järrestad, Borg and Lunda in Sweden; Mære in Norway (Hultgård 2008, 217). Excavations of these sites tend to reveal large volumes of animal bones, often considered prestige animals, which could be associated with ritual sacrifice and feasting. For example the excavation at Uppåkra revealed a large amount of animal bone which included many horse bones (Jennbert 2011, 96).

Early research in Iceland in the late 19th century identified a number of perceived temple or cult sites, in fact the number of identified sites was so great that it dwarfed other categories of ancient monuments (Friðriksson 1994, 48-78). However this was primarily based upon place-name evidence, folklore and topography and all the alleged temple sites have since been refuted - except for Hofstaðir (Friðriksson & Lucas 2009, 2-5). As of yet there is little archaeological evidence of these types of buildings in the North Atlantic and these seem mainly confined to the Scandinavian mainland. This could be due to our not understanding the function of these, or a reflection of the fact that these could be utilised in many different ways. Whilst not serving only as a place of

worship these were buildings which could otherwise be occupied on a daily basis and only serving as a religious places at certain times, such as during different seasons, or when the conditions were right, potentially limited to when a certain demographic was present. In the North Atlantic there is currently only one structure that has received much debate regarding its potential religious function and that is Hofstaðir in the north of Iceland. However, there have been other debates regarding religious buildings in the North Atlantic, including discussion regarding the use of *jarðhýsi* (pit houses) and their function.

Bjarni F. Einarsson carried out excavations near Höfn in south east Iceland in the late 1990's in the area surrounding a known burial in attempt to locate the associated farmhouse. Whilst he did discover the archaeological remains of a farmhouse located around 250m away from the burial he also discovered a semi-subterranean building in close proximity to the grave (Einarsson 2008, 145). These semi-subterranean buildings are referred to interchangeably in the Icelandic literature as jarðhús, used in the singular, or jarðhýsi, used in the singular and the plural. Jarðhús and jarðhýsi both directly translate to mean earth or pit house. These are similar in style to the sunken feature buildings (SFB) or graubenhäuser seen in Britain and continental Europe. Archaeological excavations of the Icelandic pit houses reveal that there is some variation in their features and form but that commonly these are small rectangular structures with a stone hearth or oven against a wall furthermore it is likely that most 9th-11th century farms in Iceland were associated with one (Milek 2012, 85 & 93). These are not merely smaller or temporary versions of the main residential building as their internal organisation differs considerably (Milek 2012, 89). As with other similar contemporary, or slightly earlier, structures in Europe the function of pit houses in Iceland has been much discussed. Unfortunately it is likely that many pit houses remain

undiscovered and unexcavated. Although many Norse farmhouses have been excavated in the North Atlantic these excavations have not been open area. Milek (2012, 93) notes that the recently discovered pit houses at Vatnsfjörður, Sveigakot and Hrísheimar were infilled and thus invisible on the surface and only open-area excavation revealed their presence. This has only increased their mystique as their function and use is continually debated.

Bjarni F. Einarsson (2008, 145) argues passionately that the pit house he excavated connected to the farm at Hólmur served the purpose of a private cult house. Close to the burial site there were a number of different artefacts and charcoal which Einarsson interprets as traces of activity connecting the burial with the pit house, ritual building. It is the artefacts and context rather than the building construction or design that Einarsson (2008, 154) argues reveals the ritual and religious function(s) of the site. He bases his interpretation heavily upon Old Norse written references to blóthus, hof, and horgr; however these sources do not describe the physical features of the potential ritual buildings and there is no mentioned of blóthús being subterranean. Einarrson therefore relies on other evidence to support his conclusion. Animal bones have been recovered from the site, including the usual domestic animals and several avian and marine species. Furthermore the pit house is located in close proximity to the burial site and there was a significant number of fire-cracked stones which Bjarni F. Einarsson interprets as indicating a religious initiation (2008, 158). Whilst Einarsson makes a good point in regard to Iceland society and pre-Christian belief throughout his article he often draws similarities with Sweden, and Scandinavia as a whole, despite the fact that the early settlers of Iceland did not all originate from the Scandinavian mainland as modern DNA studies have shown (Helgason et al. 2000; Helgason et al. 2001; Goodacre et al. 2005). It is therefore not of particular benefit to rely solely on archaeological

evidence obtained from this area and directly compare it to the situation in the North Atlantic where society was arguably much more diverse. Given this diversity and the fluid nature of pre-Christian beliefs it is difficult to, and caution should be taken, when drawing direct comparisons.

Milek (2012) has discussed the use of pit houses at length and has championed the integration of Old Norse sources, geochemistry, micromorphology and archaeology. In her interpretation of their function she notes that the building at Hólmur is very similar to other excavated pit houses in Iceland. Importantly she notes that the building is actually stratigraphically below the deposits that Einarsson associated with ritual activity and the deposits that he used to support his theory of the building being a cult house. It therefore extremely unlikely that this pit house served as a *blóthus*. That is not to say that what could be deemed as 'ritual activity' did not take place there but that there are no physical descriptions in the written sources that would support the idea that this is a *blóthus* and the archaeological deposits are of a different date. However, it is not entirely unlikely that these buildings in Iceland were not connected in some way with pre-Christian beliefs.

Milek (2012, 119-20) argues that pit houses were strongly gendered spaces in which textile production was undertaken. Similar subterranean buildings have been discovered elsewhere in Europe and are also suggested to be utilised for textile manufacture. Jess Tipper (2004, 164) has undertaken extensive research into 'grubenhäuser' in Anglo-Saxon England and has suggested that the sunken pits covered with turf would have created an increased humidity level that would have been favourable to weaving. In Iceland the pit houses would have also been constructed in a similar way creating a comparable environment and archaeological evidence further supports the theory that these would have been utilised for textile production as a

number of loom weights have been discovered in these buildings. The pit house at Hofstaðir in northern Iceland provided evidence for textile manufacture as a number of loom weights were recovered, shallow indentations in the floor indicated where a warp-weighted loom may have stood, and there appeared to be designated spaces for each stage of the textile manufacturing process (Milek 2012, 122). Archaeological evidence, textile tools in female graves, and literature evidence all support the idea that it was primarily women who undertook textile production in Norse Iceland.

The abandonment of these pit house buildings after the 11th century may reveal more in regard to their utilisation and perception. Textile production is moved from these pit houses into the main house which could be a reflection of the changing attitudes towards textile manufacture as it became more economically significant and less symbolic. This reflects a similar change across the rest of Northern Europe where textile manufacture becomes increasingly specialised and becomes associated with men rather than being the sole preserve of women (Faith 2012, 14). The abandonment of the pit houses occurs with the conversion to Christianity alongside wider social and economic changes within Norse society. Milek (2012, 120) suggests that 'the lack of a good functional reason for the semi-subterranean character of pit houses may related to a more symbolic significance of the building form, one that related to pagan religious beliefs and women's magic'. This is entirely plausible given that these spaces have shown evidence of textile production and that in the Old Norse mythological sources normir, female beings, are often mentioned determining the fate of men in battle upon warp-weighted looms and spinning fate on a spindle whorl.

Often, once abandoned, pit houses were used as dumping grounds for household waste, and the infill is often filled with miscellaneous associated deposits (Milek 2012, 121). However, the pit house at Vatnsfjörður is an interesting and unique

case as it appears that when the building was infilled it was done so in a very symbolic way. Two large flagstones were placed over the corner oven and ten cakes around 35kg of refined iron bloom, a very valuable commodity, were laid as foundation deposits. Then an animal building was constructed over the remains (Milek 2010, 57-60). This could be interpreted as some sort of ritual purification of the building as if it was associated with pagan activities and needed to be cleansed for the Christian occupants of the site. It is likely that pit houses, through their connection with spinning and weaving, were highly gendered spaces. Spinning and weaving can be seen as symbolic spiritual acts and thus the space could also be regarded as having lingering remainders of the pre-Christian past. However, it must be noted that the site of Hofstaðir shows increased cult activity, extension of the feasting hall and ritual slaughter of cattle, around the time that the pit house at the site was abandoned which contrasts quite significantly with the idea that there may have been a direct correlation between the conversion to Christianity and the abandonment of the pit houses in Iceland (Milek 2012, 121). This suggests that there may have been a variety of religious, economic and social reasons for the abandonment of the pit houses.

Hofstaðir is a particularly interesting case in Iceland Norse archaeology. Despite there being little evidence for *blóthus*, pit house or otherwise, in Iceland this is a significant site that has attracted a lot of attention for its interesting archaeological assemblage. It is particularly famous in Icelandic literature for the ongoing discussion concerning whether it is a pagan temple. Pagan temples in Iceland are mentioned in the Icelandic Sagas for example in *Kjalnesinga Saga* the temple building can be observed to be crucial to the story. After refusing to make sacrifices or participate in worship the main character, Bui, sneaks into the temple whilst Þorsteinn, his adversary, is worshiping Þór and kills him and sets fire to the temple. This results in a feud between

the families. Interestingly it is noted that the temple was constructed from wood which the characters are at great pains to retrieve from the fire. This highlights the importance and scarcity on wood to early Icelanders and the importance and significance that would have been given to temples if they had been constructed from this material.

Debate over locating and identifying temple sites in Iceland and the North Atlantic has been ongoing for over a century. Earlier interpretations, such as Bruun (1928), were heavily influenced by vocabulary as hof can be directly translated in modern Icelandic to mean 'temple'. Olsen (1965) re-excavated the farm in 1965 and redefined it as a temple farm, a farm where the chieftain also took responsibility of religious rituals. Since then the function of Hofstaðir has been redefined a number of times. The most recent following the excavations lead by Gavin Lucas have led to the suggestion that Hofstaðir was a place where mass gatherings involving feasting and sacrifice took place mostly during the spring and summer months whilst the rest of the time it served for a smaller scale occupation (Lucas & McGovern 2007, 22). This is due to the contrasting archaeological evidence which showed large scale feasting but not necessarily the high status goods that one would expect to discover at a site of this significance and the design of the main building with a remarkably small and narrow hearth. It suggests that it was occupied continuously but there were seasonal changes with more people being present and more interesting activity taking place during the warmer months.

The site of Hofstaðir is well known for its remarkable faunal assemblage. There is a minimum of 23 individual cattle skulls on the site that show signs of trauma and display (Lucas & McGovern 2007, 7) and there is one skull of a sheep (McGovern, 2009, 245). Unlike the cattle skulls it is thought that the sheep skull would not have been displayed and belonged to a partially articulated skeleton discovered close by which was killed, not consumed, and deposited in the ruins at the time of the

demolition of the hall (McGovern, 2009, 245-6). The weathering on the cattle skulls suggests that at some stage these would have been displayed outside on exposed and more visible locations of the building (Lucas & McGovern 2007, 16). This indicates that these would have been a highly symbolic feature of the building demonstrating the nature of the activities that took place there. The injuries to the cattle reveal that the killing would have been a highly dramatic affair involving at least two people. One individual would have struck the animal between the eyes to stun it whilst the other swung a fairly broad-bladed axe at the neck or the base of the skull. If the timing was successful this would have created a very spectacular visual of a blood fountain, as the blood would still be propelled through the arteries by the still beating heart (Lucas & McGovern 2007, 23). The blood would have been highly prized if the animal had been dedicated to a particular Norse god prior to being sacrificed. The significance of dedicating blood to a particular god and collecting it is mentioned in several of the written sources. In Kjalnesinga saga it is mentioned that in the temple built by Porgrimur a large copper bowl was placed upon the altar to collect the sacrificial blood given to Pór. The killing and then consumption of animals during the subsequent feast would have been a significant aspect of pre-Christian beliefs but it would have also served a political significance. Lucas and McGovern (2007, 17) note that animal sacrifice would not just have been limited to religious events but also served a purpose during any significant events such as funerals and assembles. The faunal remains at Hofstaðir may indeed reflect pre-Christian sacrifice but these would have also served as a function to gather the community and to establish and strengthen political ties and allegiances and secure solidarity within the community.

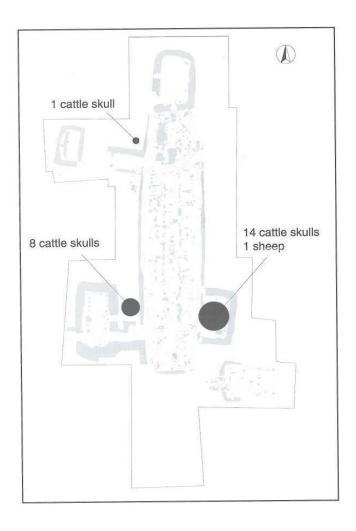


Figure 5.10 Plan of Hofstaðir showing where the cattle skulls were discovered (McGovern 2009, fig. 4.48).

The feasting hall at Hofstaðir was abandoned in the middle of the 11th century, around which time a church was built in close proximity. Unfortunately the main farm mound has not been excavated fully so, as yet, it cannot be determined if its foundation is contemporary with the abandonment of the hall (Lucas & McGovern 2007, 25). If the farm mound is contemporary with the abandonment of the hall this could suggest a need by the occupants to distance themselves from the previous activities on the sites (Lucas 2009b, 407). Such as the inhabitants at Vatnsfjörður seemingly wished to distance themselves from the pit house on the site. Similarly to Vatnsfjörður, there does appear to be some element of non-Christian ritual when abandoning the site. At Hofstaðir the skulls of the animals slaughtered were not destroyed but collected and

then concealed (Lucas 2009b, 407). As Lucas (2009b, 408) suggests the abandonment is probably a reflection of the wider changes within society at the time; social, economic, political and religious. This would fit with the idea that Hofstaðir was a central place where people came to gather and in doing so reaffirmed their spiritual, political, social and economic ties with the wider community. By the 12th century large gatherings with a similar intent would have been relocated to more specialised assembly sites (Lucas & McGovern 2007, 25). As such, the status of Hofstaðir would have dramatically changed as it went from being the heart of the community to being a relic of the past. This further highlights that although there were ritual activities taking place on the site the site was unlikely to just serve that sole function. As pre-Christian beliefs permeated everyday life this is revealed through the site at Hofstaðir where the activities can be observed to have interwoven motives. Pre-Christian beliefs in the North Atlantic did not require specialised centres for ritual activity, although some locations may allowed for a closer spiritual location, these did not necessarily need to be permanent structures. Indeed the very nature of these beliefs indicates that there would not have been permanent structures. This is further indicated through the archaeology of the North Atlantic and the absence of any obvious dedicated structures.

The Faroe Islands and Greenland have been notably absent from the review above. This is a reflection of the fact that so far there is no archaeological evidence to suggest that cult sites or religious buildings existed there. Indeed Greenland has Norse church buildings that are still visible in the landscape. Given the date of settlement in 11th century, and lack of any artefacts linked to pre-Christian belief, it is unlikely that anything that could be considered a pre-Christian cult house will be discovered. As Milek (2012) noted, open-area excavation has led to the discovery of many outbuildings and outside activity areas. These may simply be absent in the Faroe Islands due to

excavation techniques and difficulties where excavations are often carried out within modern communities. There is no archaeological evidence in the North Atlantic islands to suggest that there existed cult or ritual buildings. Most of interpretations that suggest there were, are based upon scant and lacking mentions in Old Norse sources and place names. It is likely that our modern perceptions of what constitutes a ritual or act of worship is very different to those of pre-Christian beliefs. As demonstrated, buildings could still be highly symbolic and communicate religious connotations but that does not mean that these were solely built and used for that purpose. Within these buildings animals performed an important role in the activities; from their by-products being transformed, to their dramatic demise, consumption and display. However, pit houses and the hall at Hofstaðir can be shown to be multidimensional places that, whilst sometimes have overt spiritual and ritual connotations, are also connected to wider social issues as can be interpreted from their demise at a time of great change within Icelandic society.

The role of animals in belief

Animals played a crucial role in pre-Christian beliefs and this can be observed in the written sources as well as through the archaeological evidence. There are various ways in which the role and importance of animals in those beliefs can be seen and through these the nature of Norse beliefs can be observed. It can also be noted that there is some geographical variation in the way in which activities are undertaken and differences can be observed across the North Atlantic islands. This is likely to reflect the fluidity and multi-dimensional nature of these beliefs. The divine and the other world(s) interconnected with the physical world to such an extent that these beliefs cannot fully be separated from everyday activities. This is why it is arguably more

appropriate to refer to pre-Christian beliefs rather than religion. This is especially so because religion suggests a formal and fixed set of beliefs that are practiced in a uniform way. As has been shown, this was not the case with pre-Christian beliefs. Belief allows one to be more fluid in approach to a similar set of shared ideals, worldviews and understandings but importantly acknowledges regional, chronological and other differences or variations. Given the variation between geographic areas and fluidity in the way that belief was expressed it is probably more appropriate to refer to these in the plural and thus use the more encompassing term pre-Christian beliefs rather than religion, Norse religion, pre-Christian religion or other similar terms.

Although it is difficult to identify and isolate pre-Christian beliefs in Norse society this chapter has looked at a number of animal related activities that can be associated with or could reflect pre-Christian belief systems. The role of animals in these activities was crucial to revealing the nature of these beliefs. An approach has been taken to cover a variety of key animal activities, although given the interconnected nature of pre-Christian belief and Norse society these could have encompassed an endless list. One isolated activity would not reveal the nature of pre-Christian beliefs. A variety of evidence was also utilised when exploring the role of animals in pre-Christian beliefs of the Norse North Atlantic. This was to allow for the full complexity of pre-Christian beliefs to be appreciated. Furthermore, combining a variety of evidence is more likely to give a credible idea of whether or not an activity is associated with religious beliefs. Pre-Christian beliefs would not have been limited to a few visible specific symbolic rituals as it was far from static and was in fact highly dynamic with regional and chronological variation.

Much of the previous studies in relation to pre-Christian beliefs have been based upon literary sources. These sources even dictated the direction of archaeological

research and identification archaeological evidence as has been observed through studies, especially in Iceland, focussed upon locating physical sites of worship, ritual and cult. Unfortunately these written sources are flawed in several ways. These are written some considerable time after the events they describe, and were composed by Christian writers or monks who focussed primarily on differentiating it from Christianity. Thus it is likely that these focussed on the differences between the belief systems and would have not fully covered the diversity and fluidity of the beliefs. However, this stresses the point of utilising an interdisciplinary approach when studying these beliefs, especially given the complex multi-dimensional nature of them. In particular exploring the role of animals in Norse pre-Christian belief is especially important. These human-animal relationships in relation to belief reveal significant information about worldviews, identity and society. Studying belief, religion and ritual in general has the potential to reveal a much greater understanding of past societies as it provides information on thought, perception and understanding. However, animals were key to pre-Christian beliefs and therefore it is essential to study these interactions and relationships in relation to belief.

Differences between the perception of animals in Norse pre-Christian and Christian societies is observable. It is particularly notable in regard to consumption practices. Dietary restrictions were introduced soon after the conversion to Christianity. Notably, the consumption of horse flesh was a practice strongly condemned by the Christian Church. It is likely that the consumption of horse flesh was regarded as a particularly pre-Christian custom. In fact it is thought that horses were particularly important in pre-Christian beliefs with their regular appearance in burials, especially in Iceland, and their strong presence in Norse mythology. It is likely that there were dietary restrictions in pre-Christian Norse society just as there were in Christian Norse

society. However, the written records for Christian dietary practices are extensive, thus revealing the importance of food restrictions to the Church at the time. However, it is likely that food preferences in Pre-Christian society were also interlinked with social identity, economics and politics which is also the case in Christian society too. This demonstrates how deeply belief was interwoven into Norse life and the difficulties there are if trying to draw direct parallels between religion and food consumption. However, pre-Christian meat consumption can be seen to be particularly important in relation to feasting. Feasting can be seen to be associated with and reflect beliefs. Often feasting is connected with animal sacrifice of which there are many references to in the *Íslendingasögur*. This can also be seen at sites such as Hofstaðir in Iceland which reveal copious amounts of evidence for feasting and animal sacrifice. Consumption in pre-Christian society, just as in Christian society, was extremely important. It was also connected to wider political and economic motives and ideologies further revealing the complexity when attempting to understand pre-Christian beliefs.

By exploring the role of human-animal relationships through a variety of activities and actions one can observe the extent to which these vary across the North Atlantic region. This emphasises the need for caution when making general assertions on pre-Christian belief especially when it can be observed to be very dynamic and variable. Unfortunately it is likely that pre-Christian belief was unlikely to be consistent or systematically organised by those who practised it. However parallels can be drawn and overarching themes and ideologies observed. This has allowed us to observe the differences between Norse societies in Greenland, Iceland and the Faroe Islands. It is likely that the Norse Greenlanders adopted Christianity early in the settlement of the country and therefore not much evidence for these beliefs can be seen here. However, at the same time there is evidence in the Faroe Islands and Iceland to suggest that these

societies were still practising pre-Christian beliefs, although maybe not as extensively as before the conversion. Differences can also be observed between the Faroe Islands and Iceland. For example, there is a high density of horse burials in Iceland yet none in the Faroe Islands and no evidence for pre-Christian burials in Greenland. This therefore suggests a very different religious identity in Greenland than that in Iceland and the Faroe Islands. It also suggests that there was a different religious identity between the Faroe Islands and Iceland. This reflects a society which chose to express and practice their beliefs in a different way.

The differences observable in burial practices also may be a reflection of a difference in population size and perhaps also economic complexities in Iceland where leadership roles were often connected with pre-Christian symbolic activities. This can be observed most notably at the site of Hofstaðir where the abandonment of this large high status site with evidence of ritual and symbolic activity appears to be connected with social, economic and political changes after the conversion to Christianity.

However, it is important to note that this variety may also be a reflection of modern archaeological practices. In Iceland pre-Christian burials have been the subject of extensive research and this is much less in the Faroe Islands. However from the burials that have been discovered it is notable that animals do not feature in Faroese burials yet are, especially horse, dominant in Icelandic burial practices. This can also be further observed in research on special deposits and foundation deposits which have been observed in Iceland, Aðalstræti and Þjótandi við Þjórsá, but not in the Faroe Islands or Greenland.

Interestingly this prominence of animals in activities associated with belief is not reflected everywhere. In contrast to Britain and Scandinavia there is a notable lack of material culture that overtly features animal imagery. This contrasts quite significantly

with what we know from the North Atlantic where animals appear to have had an extremely important role, especially in Iceland which has the highest population density of horse burials in the Norse world. Given the evidence provided it can be observed that animals played a much stronger role in the archaeological evidence for belief in Icelandic Norse society in comparison with Greenland and the Faroe Islands.

Furthermore, given that Iceland has more horse burials per capita than anywhere else in the Norse world it might even be possible to conclude that domestic animals were more important in Norse Iceland in pre-Christian beliefs than anywhere else in the Norse world. This prevalence of animals in pre-Christian belief suggests a society that was connected strongly with the animal world and who perceived the animals as being strongly interlinked with their beliefs and wider worldviews and social understandings.

By exploring the role and use of animals and their by-products in Norse North Atlantic pre-Christian societies it is immediately apparent that animals were key to the beliefs of the time. However, it highlights differences between the islands which further indicates differences in the wider Norse world supporting the idea that pre-Christian belief was not static and cannot be easily defined. This therefore provides a caution to those who would use evidence for Norse pre-Christian belief in Scandinavia and apply it directly to the Norse societies of the North Atlantic Islands. It further indicates the complexities and variation between the Norse societies of the North Atlantic highlighting that they should not be viewed as a homogeneous group although they may share similarities.

CHAPTER SIX

Conclusions: Animals and Humans in the Norse North Atlantic

his thesis has examined human-animal interdependencies to explore the social identities and structure of society in the Norse North Atlantic c. AD 850-1100. This could be considered part of the Viking Age, a period when those of Scandinavian descent became particularly active in Europe. Benefitting from recent research advances in animal studies and the ever increasing volume of archaeological reports from Norse period archaeological excavations in the North Atlantic this thesis was able to build upon previous research to examine society in the Norse North Atlantic. It has shown how human-animal relationships are crucial to understanding Norse human society and how it can provide new and interesting information on Norse societies and social identities. It also provides a revealing insight into the position of the North Atlantic islands within the wider geographic region of Northern Europe during this period. From the archaeological data it was possible to see which animals were present and where. This revealed human perception of animals, which they chose to eat and which they treated differently, for example cats and dogs are not found in the food waste. From activities relating to animals, such as milking, textile production and butchery, it was possible to observe how associations could reveal differences in social identities such as gender and social status. Finally the role of animals in belief revealed the pivotal role they played in human understanding of the world and consequently perception of identity.

It has already been highlighted in this thesis that this was a period of significant economic, religious and social change in society across Northern Europe. The mass movement of people, notably to settle and colonise, allowed for some social mobility

and cultural diffusion. Individuals and communities increasingly sought ways in which to define, and display their social identities. Therefore it is of crucial importance to examine and appreciate complex social identities that were created, maintained and transformed during this period. In northern Europe the emergence of urban centres can be observed, however the North Atlantic islands remain largely rural. There are a number of differences that can be observed in this closely connected area. Therefore it is crucial to consider these northern societies in details and not to draw broad, generalised conclusions. This could be achieved by focusing on the human-animal relationships relating to localised farming practises, and economy, but also considering wider perspectives and other diverse interactions between humans and animals to gain a more nuanced insight. The thesis demonstrated that by exploring human-animal relationships in the Norse North Atlantic one could gain a greater understanding of human social identities as well as society as a whole, which will greatly improve our understanding and knowledge of this complex era of history.

This thesis examined the North Atlantic region and in particular focused on Iceland, the Faroe Islands and Greenland. However, the thesis also considered the wider geographical area in order to draw comparisons and broader conclusions. This was intentional as it provided the opportunity for a more detailed study to investigate an area which is often referred to in such a way as to make it sound like a homogeneous region whereas, in fact, this study has shown that it was quite socially diverse across the islands. Even the area is quite diverse, with different terrains and natural phenomena across the islands which the early settlers would have had to adapt to and interact with. Not only would the region been quite environmentally diverse in the North Atlantic, but it would have also provided landscapes and seascapes that were different, although sometimes similar, to the rest of northern Europe. It could therefore be observed that

particular farming practices became more dominant in the different areas and that social identities were created and defined through these practices.

This was a period that was particularly characterised by movement, and therefore to understand the social identities within the North Atlantic it was important to consider the wider historical and geographical framework. The thesis showed how wider changes in northern Europe were reflected in society and social identities in the North Atlantic. The thesis achieved this by examining the complex relationships between humans and animals in the region by utilising published research and considering the data from a different perspective. Due to the movement of people, there was a possibility for social improvement, and new social identities emerged. In the North Atlantic, as is seen in northern Europe, it can be observed that throughout the period of this study, increasingly elites sort to distinguish their social standing through a variety of means. In the North Atlantic this is particularly apparent through the use of textile goods, both to be consumed domestically as well as internationally, and through the activity of feasting, especially in relation to consumption of domestic animals such as cattle.

The thesis took an integrated approach to the role of animals in Norse society. It also benefitted from the considerable volume of archaeological data now available from the islands and was able to combine a significant volume of data to efficiently examine the wider geographical area to effectively answer important questions. It was also able to utilise various forms of evidence alongside the archaeological data to more effectively appreciate the wider implications of social identity and what it comprises. It drew attention to the importance of animals in Norse human society and the further potential for the study of human-animal relationships in the Norse period.

An overview of the chapters

The second chapter of this thesis explored terminology and definitions of Norse social identities, previous research into the area and issues that may arise when undertaking research into this aspect of the Viking Age. It demonstrated that the way in which scholars view Norse social identities and structure of society was changing as it was becoming more apparent that these are multifaceted and difficult to define. Early scholarship was often heavily influenced by nationalism and utilised to define ethnic and national Scandinavian identities but these ideologies were challenged. Now it is widely appreciated that the Viking Age and Norse society was extremely diverse and complex. The application of new theoretical approaches has resulted in a significant shift in how the terminology of 'Viking' and 'Norse' are considered. These are now considered less as ethnic or national signifiers and are usually applied as a means to broadly define a group of people who shared similar traits, such as a common language, similar cultural traits and practices. It is now largely recognised that there are significant differences between the societies that have often been classed as 'Viking' or 'Norse' as the geographical area where these are based is large, with different terrain, climate, and sometimes a native population, as well as other additional factors. The full complexity of the nature of society is beginning to be comprehended by scholars and care is now taken when drawing parallels between regions such as the Scandinavian Peninsula and the North Atlantic islands. Notably a key difference between these two regions is that in Iceland and Greenland the social structure of society was dependent upon kinship whereas in Scandinavia power and authority was becoming more centralised and based on kingship.

It was firmly acknowledged in Chapter Two that Viking Age and Norse social identities and society are complex amalgamations of various interlinking aspects. Due to

this there is a significant amount that scholars still do not know about this area and further examination of this area has great potential to reveal substantial insights into the Norse period. Given their multifaceted nature it is important to consider various forms of evidence to fully understand the multifaceted social identities which form Viking Age and Norse society. Material culture is not a direct reflection of society and equally saga evidence does not reveal an accurate representation of all society, therefore evidence must be utilised together and not in isolation. This chapter pressed the importance of not only relying on one discipline to draw conclusions and highlighted the potential for the application of human-animal studies to this area. It noted the potential of studying human-animal relationships in the Norse period as these relationships are increasingly recognised as providing an insight into the complex and diverse ways in which humans identified. Often the role of animals in human social relationships has been significantly overlooked in archaeology. However, there is much evidence for animals in the archaeological data from the North Atlantic, including zooarchaeological assemblages, activities and settlements, and there is significant mention of animals in Norse mythology and sagas. This data is therefore available and if applied to the examination of human-animal relationships in the Norse period will reveal aspects of social identities that have not been appreciated or recognised before. Domestic animals were key in human society, shaping and creating human social identities through their very physical presence, their products and their associated connotations. This chapter demonstrated that although a lot of previous scholarship had been undertaken on Viking Age and social identities this had merely highlighted how much there is still to understand about this complex and dynamic period. This chapter pointed out the potential for examining the role of animals in human society to advance our understanding and challenge and develop previous notions and theories. Chapter two laid the foundations for the subsequent chapters to explore the role of animals in Norse society, to consider how

and why these interactions may reveal significant changes within Norse North Atlantic societies, and northern Europe.

Chapter three drew on the background presented in chapter two and provided the background of data available from the North Atlantic islands. It provided a thorough overview and comparison of the key sites, and more, from the Faroe Islands, Iceland, Greenland and Canada. The chapter focussed mainly upon the archaeology of the settlement sites in the region and then went further to consider how humans and animals would have interacted within this space. As a result the data derived largely reflects localised farming practices and economy, and therefore considers human-animal interactions based on this. The chapter discussed the problems and issues that one may encounter when utilising archaeological data from North Atlantic sites. These issues appeared to be comparable across the North Atlantic region likely owing to similar environmental issues and history of archaeological excavation. However, there are some differences. Notably preservation conditions can range quite dramatically across the region concerned and, furthermore, whilst the number of sites excavated in Iceland has dramatically increased in recent years this is not the case everywhere. However, the volume of archaeological data available from Iceland should encourage and support future archaeological research on the other North Atlantic islands. The success of large international projects in Iceland have also dramatically improved our knowledge of the region but also highlight the work that still needs to be undertaken in this area to fully appreciate the whole North Atlantic, which at this time would have been well connected with communication links and trade routes.

Despite this discrepancy between the islands in the region the available assemblages do provide an insight into the domestic animals present in human

from midden concentrations, which could reflect consumption patterns. However, from the assemblages it can be seen that the main domesticates, cattle, sheep/goat and pig, are generally represented in similar volumes on the sites. The presence of horses does vary across the region and at the different sites, with horses being numerous on some sites but completely absent at others. Cats and dogs are also known to be present at sites although they are not numerous and sometimes completely absent from the assemblages. Although dogs are often not present in the assemblages we know that they are present on the site because of teeth marks on the bones from other animals. Therefore the assemblages are more likely to reflect what the occupants were consuming rather than necessarily reflecting the animals they were living in close proximity to. It is therefore important to consider other interactions between humans and animals to garner a more thorough understanding of the full complexity of social identities.

This chapter considered the issues that may impact upon archaeological research in the North Atlantic. It focused primarily on zooarchaeological assemblages, but it highlighted the need to explore archaeological data other than zooarchaeological assemblages. It also noted the importance of utilising evidence from different disciplines when researching animals in this period. This chapter was significant as it provided a unique overview and comparison of fieldwork results from North Atlantic sites. In doing so it was able to clearly demonstrate the difficulties encountered when compiling such a large volume of results, such as different methodologies and techniques at different sites and accessibility to site reports including limited availability and language variability. However, by considering such an array of sites this chapter could demonstrate how different the North Atlantic islands are in regard to the Norse

archaeological approaches. It highlighted how the types of animals brought with the settlers to these islands was fairly uniform, although as time goes by differences in consumption and farming practices can be observed in the zooarchaeological evidence. Notably, pigs decline during this period of study and the numbers of sheep increases possibly reflecting the growing demand for wool in Europe. Cattle also appear to decline in number in Iceland, yet in Greenland appear on archaeological sites in similar numbers to sheep/goat. This difference could reflect the growing importance of sheep in Iceland, yet reveal the continuing reliance on a bovine economy in Greenland contrasting with the rest of Europe during this period. Further, it noted the high percentage of wild animals, compared with domestic animals, at *Undir Junkarins latti*. It noted that this was significant as other sites in the north Faroese islands do not show this difference. This chapter provided a strong foundation from which the following chapters could expand upon to fully explore the diverse role of animals within human society.

Chapter four followed on from the background in archaeological research and detailed zooarchaeological discussion provided in chapter three. This chapter went further to consider the importance of domestic animals in human society, in shaping and creating human social identities through their very physical presence, their products and their associated connotations. This chapter considered the archaeological data alongside evidence from various other sources and disciplines to explore evidence for Norse North Atlantic human-animal relationships. It considered how animals helped to facilitate human interaction, how they shaped human perception of and interaction with the landscape, how they formed human worldviews and perception of self and identity.

For example, through riding horses humans were able to cross vast expanses of land and hostile terrain. Human lifestyles were dictated through activities such as seasonal transhumance of livestock, whereby humans were removed from the relative safety of their home farms to what could be seen as a more hostile environment and exposed them to experiences that would have otherwise not been encountered. Through the increased demand for wool, and subsequent growing caprine economy, the seasonal movement of animals would have increased and thus defined social identities as a consequence. From these interactions humans created new identities, shaped by their new experiences and interaction with the animals.

The chapter further explored the ways in which human interaction with animals shaped their social identities through the various associated activities. It was further demonstrated that associations with, and perceptions of, particular animals not only defined individual social identity but also the identity of society as a whole. Examples given included examples of cats and chickens that rarely appear in texts or in the archaeological record and when briefly mentioned seem to be associated with elite identity and magic. One can also observe these strong connotations with sheep, where wool processing and textile production is associated with women. This association between women and weaving is particularly noteworthy as whereas in northern Europe it can be observed that weaving becomes associated with males yet it retains this association with females in the North Atlantic. Given the increasing importance of and demand for textiles during this period, it is therefore of significance to note that women remain the main producers of textiles in the North Atlantic, highlighting their crucial economic role in society. As demand would have increased, so would the economic significance of this activity, in turn reflecting the important role of those undertaking the task. However, from northern Europe it can be seen that elites were becoming

increasingly removed from production, reflecting a group of consumers rather than producers. This cannot be seen to the same extent on the North Atlantic islands, further reflecting the differences between the northern region and the areas with urban centres.

Through the evidence presented in this chapter it was shown how social identities were created and defined through human interaction with animals and their products. In particular, identities relating to gender and status became notably apparent through examination of human-animal interactions in this chapter, and it was shown that these gender associated activities remained constant in contrast to the changes in the rest of northern Europe. It was shown that although the North Atlantic communities were, in the majority of cases, quite homogeneous there were still marked differences. This chapter was particularly useful for the study of Norse society in the North Atlantic by revealing various complex interwoven social identities and thus indicating the ways in which human identities were displayed, interpreted and created. This reflects the period which is particularly characterised by the fluid nature of society, as enabled by the mass movement of people but yet some uniformity is retained presumably to create some stability in the new colonies of the North Atlantic. Stability within society could partly explain why some activities retained their gender associations, despite changes in northern Europe. By exploring the role of animals through everyday human activities one was able to obtain a more nuanced understanding of Norse society and the complexities within it.

To conclude the thesis the last main thematic chapter, Chapter Five, considered the roles of animals in belief. It was noted that animals were a crucial part of the pre-Christian beliefs in the Norse North Atlantic. This chapter was an important part of the study as examining belief, religion, and ritual, in general has the potential to reveal a much greater understanding of past societies as it provides information on thought, perception, and understanding. This was a particularly enlightening chapter and, just as animals were shown to have an important role in human everyday life, animals were revealed to be significantly important in the construction and portrayal of human belief. Thus their role in belief revealed much in regard to pre-Christian beliefs and consequently Norse perceptions and understandings of identity and society.

The chapter discussed in detail terminology surrounding this aspect of human social identity and it was noted that in this instance belief rather than religion or paganism was a more appropriate term. Belief allows one to be more fluid in approach to a similar set of shared ideals, worldviews and understandings but importantly acknowledges regional, chronological and other differences or variations. The chapter noted how animals played a crucial role in pre-Christian beliefs, observed in the written sources as well as through the archaeological evidence. The role of animals in belief was examined through burial evidence, consumption patterns, animal imagery and symbolism, special deposits, and cult sites and buildings. This provided the a significant volume of evidence to conclude that there was some geographical variation in the way in which activities relating to belief are undertaken, and differences can be observed across the North Atlantic Islands. Certain animals can be observed to be held in higher regard within the pre-Christian belief system but these are not necessarily animals that are demonstrated to have significant economic and social importance through animalrelated everyday activities, notably sheep. This signifies a difference in perception of animals when considering their spiritual significance. Particular animals can be observed to take on specific roles in pre-Christian beliefs, for example the horse can be seen to be especially important in understandings of death and the afterlife notably appearing

frequently in Icelandic pre-Christian burials. This is likely to reflect the fluidity and multi-dimensional nature of these beliefs and perceptions of the roles of animals in them.

The chapter noted the difficulties encountered when examining this aspect of human social identities. Notably human-animal relationships within pre-Christian Norse society are complex and difficult to isolate and identify. However, as shown in the chapter, these can reveal much about beliefs and about wider human society. It was noted that there were significant evident differences across the region. It is likely that the Norse Greenlanders adopted Christianity early in the settlement of the country and therefore not much evidence for these beliefs can be seen here. However, at the same time there is evidence in the Faroe Islands and Iceland to suggest that these societies were still practising pre-Christian beliefs, although maybe not as extensively as before the conversion. This suggests a very different society in Greenland from that in Iceland and the Faroe Islands. It could also suggest a wider influence on Greenland from countries such as Scotland and Ireland where Christianity was more established than it was in Greenland's closer neighbours, Iceland and the Faroe Islands.

The absence of animal burials in the Faroe Islands is also a stark contrast to the proliferation of horse burials in Iceland. This further highlights a differences in attitudes in belief towards what is often considered a homogeneous cultural area. The difference in animal burials across the region could suggest a different understanding and perception of animals and the way in which these are displayed. It could also suggest different social identities between the two societies and the ways in which they chose to display their social identity in the afterlife. It could also reflect a lack of abundant resources whereby domestic animals were not available to be used in the burial rite. However, given the evidence provided it can be observed that animals played a much

stronger role in the archaeological evidence for belief in Icelandic Norse society in comparison with Greenland and the Faroe Islands. Through the examination of human-animal relationships in belief the differences between the islands in the North Atlantic were highlighted which supports the idea that pre-Christian belief was not static and cannot be easily defined. This cautions against generalising about belief in the Norse world. It therefore further highlights the complexities and variation between the Norse societies of the North Atlantic. It reveals the importance of examining the role of animals in human society to understand more about the Norse in the North Atlantic. This aspect was particularly useful to this study as it revealed more about the societies that inhabited the islands than previously was known by demonstrated significant differences that were not appreciated before.

Overall conclusions of the research

The thesis provided a unique and comprehensive overview of the Norse archaeological sites across the North Atlantic islands. The thematic chapters revealed that there was some considerable variability between the Norse societies of the North Atlantic region. This need not be surprising as social identities are complex and variation should be expected within a community as well as between different, although connected, communities. However, the North Atlantic region is often referred to as a homogeneous unit with little intricate details provided about the communities. Not only this, but there is a tendency to assume the societies replicated Norse societies in the Norse homelands in Scandinavia. Generalisations are easily drawn to describe many aspects of social life in the Norse period and this can be extremely problematic as it leads to simplistic or misleading conclusions. This does not mean however that there were not similarities between these societies, indeed there were many, but it serves as a

cautionary warning to not assume that one community can be a direct reflection of another, although they may share many parallels. These societies in the Norse North Atlantic were far from static and were instead in a constant state of flux varying across the landscape, shaped, and created by individuals with their own experiences and perspectives.

Social identities were dynamic and multifaceted and are therefore revealed in a variety of ways. Until this point there had not been a study which looked in detail at the area concerned with such an array of evidence, especially the rather recently collected archaeological data which had been agglomerated in this study. This combining of data from across the region revealed much, and in particular generalisations and assumptions about the region were shown to be not fully accurate. For example when discussing the domestic package brought by the settlers to the region, scholars often mention chickens. Whilst there are a few vague references to chickens or chicken products in the documentary sources (eg: Granlendinga saga) there is little direct archaeological evidence. Furthermore it became immediately apparent from the zooarchaeological data that different communities were consuming a different diet and farming with different domestic animals. This study therefore benefitted substantially from the significant volume of archaeological research that had been undertaken in recent years. Although it was noted that a remarkable amount of the archaeological data had come from a significant increase in archaeological excavations in Iceland over the past two decades. This was recognised as both an advantage to the research and as a potential problem as it provided more data for Iceland in comparison to the rest of the region. This however further promotes the continuation of research in the region to further explore in more detail and depth the societies of the Norse North Atlantic. It is likely that further work,

especially in the Faroe Islands, will add more to this study and advance further the authors understanding of the social dimensions at play in this region.

This thesis benefitted greatly from the recent, ever increasing, archaeological data from the region. Significantly there has been great advances in the collection of zooarchaeological data from the region. However until this point the great advances that have been made in recent years in animal studies and applied to some areas in archaeology had not been applied to the study of this region during the Viking Age. This approach was therefore unique to this study and proved to reveal a significant insight in the Norse social identities of the region. In particular, this study focussed on the relationships between humans and animals. As shown, these relationships reveal much about human social identities as, like social identities, these relationships are complex and multifaceted manifestations of human identity. Given that this was a unique approach to examining this subject area this research therefore provided an innovative insight into the Norse societies of the North Atlantic.

The research showed that the perceived boundaries between human and animal were not necessarily distinct in the Viking Age. It is likely that there was some fluidity in what it meant to be human and what it meant to be animal. In some ways this is not surprising as many of these perceived distinctions are modern constructions which were likely introduced and slowly developed by the Christian church as discussed in chapter five. The change in belief system would have impacted not only on understandings of self, human, and animal but also altered the way in which societies perceived and interacted with animals. This can be seen most apparently in Greenland, where there are no pre-Christian burials, and none of the burials contain animals or any animal symbolism. The practice of horse burials also does not continue in Christian Iceland, demonstrating a clear change in the role of animals in beliefs. The Christian church

separated humans from animals, and indeed specifically defined this in doctrine. This blurred boundary between human and animal is one of the main instances where it is apparent that social norms in contemporary society are not necessarily the same in past societies. This distinction is particularly useful in this study as animals were more of an integral part of social identity and would therefore provide an especially useful insight into Norse societies. Indeed it was shown how many identities were constructed in relation to interactions with domestic animals.

This research project covered the North Atlantic region rather than individual countries defined by modern boundaries this was largely due to the fact that these islands should not be considered in isolation, rather the research should be transnational to reflect the fact that this area was dynamic with constant movement and well connected within large-scale trade and communication networks. This international movement of people was a key characteristic of the Viking Age, either for trade, settlement or colonisation. It is also largely recognised as a significant contributing factor to the large scale changes that occurred across northern Europe at this time. By exploring social identities through examination of human-animal relationships in thematic and interlinked chapters the social complexities of this region were recognised.

While there are some very obvious similarities between the islands in the North Atlantic there are also some very clear and significant differences. A notable example is the importance of sheep in the North Atlantic is seen most abundantly in the Faroe Islands and Iceland. Significant numbers of sheep/goat are found in the zooarchaeological assemblages from both of these from various types of sites. Of course, the Faroe Islands (*Føroyar*) are said to be translated to mean sheep islands (Matras 1959) which highlights the significance of this particular domesticate to the islands in the Viking Age, although their prominence in the landscape stresses the

longevity of their significance in Faroese agriculture. This importance is also displayed, quite literally, through the utilisation of their by-product, wool. In fact, with all the changes within Norse society in this period elites were increasingly seeking ways in which to define their high social status and one of the ways to achieve this was to reflect visually their wealth and status by wearing coloured clothes but not of natural colours, such as brown, black, grey and white (Byock 2001, 45). Aside from the increasing demand for luxury clothing, wool was also fundamental in the cold North Atlantic to protect the inhabitants from the harsh elements as well as being used to make sails for the ships that were of crucial importance to maintain connections with the wider world. This very practical need for warm clothing could explain the longevity and importance of sheep farming in the North Atlantic. Further, given the nature of the landscape and climate it could be concluded that sheep farming was a very practical choice for farming. This was a practice that can be seen to have developed during the course of this period of study as farming can be observed to slowly become more focussed on sheep in Iceland and the Faroes, as other animals such as pigs declined in the region.

With increasing international demand, and practical domestic use, the production of wool was of crucial importance to the inhabitants of the North Atlantic islands. Associated equipment used in the textile process can be seen from various sites across the region. This activity further shaped human social identities by the roles it created. Chapter four discussed this is some detail and it could be observed that in Iceland and especially the Faroese northern islands lifestyles were shaped and dictated by this crucial activity, particularly in relation to shielings and the seasonal movement of sheep to summer pastures. However, the importance of wool can also be seen to not only remove people from their homes but also to restrict them to the main domestic dwelling. Weaving was a prominent activity in the everyday existence of the occupants

but it could also indicate that the weavers needed to be close to the dwelling to undertake other activities in the vicinity. Women are associated with weaving, on a warp-weighted loom, during this period and given the proximity of the main production of textiles to the farm this further suggests that gender played a role in this particular process. Sheep and wool can be seen to reveal human social identities across the region during this period. From the rearing of the animals, to the processing of the by-products, to the consuming of the goods. Different identities were created at different stages of the process which changed during the period as the importance of woollen goods grew. Although important across the region evidence for this is most abundant in Iceland and the Faroe Islands.

Whilst sheep were arguably key to the inhabitants of the North Atlantic it is notable that one animal from the main domestic settlement package appears to be less favourable. Evidence for pig farming in the North Atlantic is scant. However, pigs could be extremely useful in clearing large areas of land to make it suitable for farming, and their skin could be utilised for vellum. Vellum was crucial in the making of manuscripts of which medieval Iceland is now so famous for. However, there is little direct evidence for pigs in the region, although place-names from both Iceland and the Faroe Islands indicate their presence. There is a little zooarchaeological evidence available from Iceland to suggest that pigs were present however it is in the Faroe Islands where interestingly modern excavations have revealed that there was evidence for pig economy but that it completely disappears by the Middle Ages. It is during this later period that significant differences in the zooarchaeological assemblages become more apparent. Icelandic animal bone assemblages become increasingly dominated by fish bones from the 14th century onwards, while the Greenlandic bone assemblages remain dominated by seals and caribou. Furthermore Greenland starts to become

increasingly isolated whereas Iceland starts to form stronger links with English and continental merchants in the 15th century. Therefore it could be seen that the choices that the islanders make with regard to agriculture and animal interactions impact significantly on their international communications and subsequent success as a community. Both Iceland and the Faroe Islands develop a focus on sheep in their agriculture, whereas Greenland focuses on a bovine pastoral economy and trade in luxury exotic goods such as walrus. Low value staples, such as wool and later dried fish, provide Iceland and the Faroe Islands with the international trade required to remain connected to the wider world.

One can also observe further differences in belief across the North Atlantic.

Often regarded as one of the unifying aspects of this region it was shown how much more complex and diverse these were although there are some core aspects that are shared. Notably it can most obviously be observed through the burial evidence, such as the significant number of horse burials in Iceland and the dearth of animal burials in the Faroe Islands revealing a difference within the societies in their approach to recognising and acting upon death. These differences were discussed in considerable detail in chapter five and it was shown how through the role of animals in belief social identities were revealed. Those in charge of ceremonial feasting were often regarded as high status members of the community, who could afford to provide food for feasting.

Furthermore, despite the official conversion to Christianity, pre-Christian practices are still observable in Iceland and the Faroe Islands, yet Greenland which was settled around the time of the conversion has very little evidence for pre-Christian activities. Chapter five was especially notable as it in particular revealed significant differences in the role of animals in belief in North Atlantic societies. This was particularly significant

as this has often been regarded as an aspect that was shared across the islands and could be used to define and unify the region.

A particular variable between the North Atlantic Islands was notably apparent to the author. That was the variation in animal husbandry practices within the Faroe Islands. The northern islands do appear to be more reliant on domestic animals than the southern islands where there was a notable consumption of wild fowl observable in the archaeological midden deposits. There have been significant excavations of shieling sites and excavated examples include Pálstóftir in Iceland, Argisbrekka in the Faroe Islands and Mountain Farm in Greenland. Shielings were argued in this thesis to be particularly important in the creation of social identities. It is likely that these structures were used primarily by women, as the sagas imply that it was usually women who were present and working at the shieling sites. This is further supported from oral testimonies from nineteenth and early twentieth century Iceland where shielings were commonly the domain of women due to the nature of shieling activities which focused on milking and dairying. Furthermore from Argisbrekka, Faroe Islands, a unique find of a toy boat was discovered (Mahler 2007, 97) hinting that children were also present at shieling sites, most likely being looked after by their mothers. However, there is evidence for activities, such as iron working, often associated with males which would suggest that men could also be present. It would therefore be feasible and understandable to conclude that the prevalent gender identity at shielings was female, although men could also be present. However, activities may not necessarily be so gender defined, especially at shieling sites located away from the farm. This suggests the possibility of new and different identities created and formed at these sites.

Shieling sites would have meant that a number of people lived away from the home farm at particular times of the year thus having different experiences of the

landscape than those who were restricted to the immediate surroundings of the main domestic dwelling. It is therefore interesting that it looks as though this was a more dominant activity in the northern islands of the Faroe Islands than the southern islands. It suggests that different social identities would have been created within this space that is quite closely geographically located. Therefore this indicates that if such significant differences can exist in such a small geographical area then it is not inconceivable that the societies over the large region of the North Atlantic were not equally diverse and fluid in their definitions and identity.

Through a variety of evidence explored in this thesis the importance of animals within the Norse mind-set has been highlighted. Through their very presence animals shaped human social identities. Animal interactions with humans were a part of everyday life, from work to recreation. These interactions determined how humans worked, where they went, what they are and how they are it, what they wore and how they spent their free time. Previous studies have often concentrated on discrete geographical entities, defined by modern country boundaries. By taking an approach to cover the wider region this thesis was able to fully appreciate the wide-ranging transformations in society occurring at this time. As this was a period of significant social, political and economic change across Europe social identities were in a state of flux and the dynamics of these, and the fluidity and complexity of defining them, has been shown in this thesis. It can be argued that in some ways the social identities present in the North Atlantic are similar to those in northern Europe, although one can observe very noticeable differences such as the continued association between females and weaving throughout this period in the Norse North Atlantic. Further, although there are no urban centres on the North Atlantic islands that show the distinct craft specialisation areas, it can be argued that the increasing importance of sheep husbandry

is a reflection of the growing international demand for and trade in wool and low value staples. Therefore, the inhabitants in Iceland and the Faroe Islands were increasingly becoming producers of woollen textiles that could be traded. There were a number of distinct phases involved with this process, including transhumance and textile production. The different activities and stages of the process would have created new identities as the demand for production increased and the process became more specialised.

This thesis was able to utilise the substantial research undertaken in recent decades, notably by archaeologists in Iceland, and synthesise this to gain an in depth understanding of the Norse societies in the region. It could then develop this research further by looking at the active role of animals in Iceland, the Faroe Islands and Greenland to fully explore how human-animal relationships reveal how social identities were created, transformed and perceived. It was able to provide a unique perspective and innovative insight into the Norse North Atlantic.

What questions does this thesis raise, what has been learned and is there potential for future research?

There was only ever so much that could be covered in approximately 80,000 words and as this thesis has progressed and revealed so much about the complex dynamics of social identities in the Norse North Atlantic, shown through human-animal interactions, it has become apparent there is still so much information that can be gained from further exploration of the role of animals in human society in the Norse North Atlantic. It was demonstrated that society was much more complex and fluid than previously appreciated and this suggests that there is much more to still reveal about Norse social

Viking Age as a whole, and the wider transformations occurring across northern

Europe at this time. It will further our understanding of how and why societies
developed during this period, and challenge our current understanding of the period.

The potential for this type of research has been revealed in this thesis but the full
potential is far from reached. As archaeological research progresses this will provide
further data that will mean this area of research will continually develop. Only recently,
in August 2015, a Settlement Period turf long house has been uncovered in Reykjavík.

This site is close, and probably connected, to the other contemporary sites in the area,
including Alþingisreiturinn and Aðalstræti 16. As many more excavations are now
planned in North Atlantic for the next few years the wealth of data will further
dramatically increase.

The already vast corpus of data, including zooarchaeological and archaeological, highlighted in this thesis reveals the significance and magnitude of this research area. The topics concentrated on in the thesis revealed that the data selected for the research were relevant as these provided the appropriate attention and focus required for research in this major aspect of cultural history. It is clear from the research presented that an all-encompassing approach must be taken to adequately cover the region, geographically and chronologically. The topics covered also revealed the imperative need for consistent recording in archaeology across the North Atlantic region to enable future research to efficiently and adequately assess the North Atlantic region as a whole; which was shown in this thesis to be crucial to fully understanding the nature of Norse society in the North Atlantic. The thesis further highlighted the importance of zooarchaeological data to all research in this region. This signifies the need for a more integrated approach of academic disciplines to the study of the Norse North Atlantic in

future research. This further highlights the importance of future international and interdisciplinary collaboration to fully and effectively further our knowledge and understanding of the Norse North Atlantic. It is through accessible and consistent recording, and articles, and fruitful dialogue that this major aspect of early medieval history can be fully afforded commensurate attention in future research.

This thesis will serve as a basis for more research into human-animal relationships and social identities in the North Atlantic. In particular it would be interesting to explore the relationships and interdependencies from other perspectives by examining different activities. As Chapter Five proved to be particularly fruitful it would be beneficial to explore the role of animals within belief in more detail as this is an aspect that has so much potential for us to fully appreciate the complex dynamics of Norse identities. In future it would prove interesting to explore the roles of wild animals alongside domestic animals, as it was not possible to cover this adequately in this thesis. It is likely that this will prove to be extremely insightful, especially with an in depth analysis of the roles of different animals in human society. This research will continually develop and, as presented in this thesis, our knowledge and understanding of Norse society through interactions with animals will only increase. As shown this thesis has raised many issues and questions, however these have defined and evidenced the directions for future research.

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