

**LANDSCAPES OF LIFE AND DEATH: SOCIAL DIMENSIONS OF A
PERCEIVED LANDSCAPE IN VIKING AGE ICELAND**

by

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Chapter 3. Theory and Method/Method and Theory

“ For many positivists, theory is a definable set of propositions that can be set up and tested against data. For advocates of middle-range theory ... methods that enable us to test theory against data. For post-processualists ... all archaeology is theoretical, in very broad terms.”

(Johnson 1999)

For the most part, a good portion of the processes of the past cannot be observed, not only because they happened in the past and any interpretation must be inferred, but also because the time scale is often too large for direct monitoring to have been possible. (Binford 1983; Hodder and Hutson 2004; Johnson 1999; Schiffer 1988:461-2) In this project it was believed that the best course of action for creating an image of the socio-cultural dimensions of the Icelandic settlers in their new landscape was to place the data into a cognitive framework and apply gender, age, burial and landscape theories. It was also believed that incorporating the still undefined GIS theory into a more cognitive and interpretive framework would yield a more complete image of the past than using only one theoretical outline alone. (Rajala 2004)

Regardless of the chosen theoretical perspective, the goal of an archaeologist is to understand the behavior behind the material remains found in the archaeological record, by whatever means are necessary. Then, in a post-processual framework a further goal is to understand the meanings behind the actions. (Preucel and Bauer 2001:85) The data used in this project are somewhat biased due to their incompleteness. The total population of recorded burials were used and these burials were scattered all across Iceland. Based on the population size which was estimated using approximately 420

settlement farms in the Book of Settlement, the estimated population was not less than 10,000 and possibly as much as 50,000. (Karlsson 2000:15) For the period of study – approximately 130 years – the number of graves on record (at least 320) is but a fraction of this total (3.2%). However, the incomplete nature of the data is offset by the randomness as well as the duration of time over which they were collected. Most of the burial sites were discovered accidentally during field leveling, road and house construction and erosion over many years and mostly by amateurs from many – or more often no – disciplines and theoretical backgrounds. Despite all this, there is still patterning in the data; and even when data were collected within a specific theoretical framework, they are not necessarily only applicable to that theory as long as the framework is understood. Therefore, reuse is possible. (Hodder 171-2)

Although the randomness of the sample limits possible sampling bias on the part of this project, there are restraints in the data. The sample size leaves open the possibility that not all individuals were selected for the rite of burial. Although, Grágas clearly points out that during the Commonwealth period no one should have been left unburied and that it was a punishable offense (in Christian times) to pass a dead body without covering it (Dennis and Foote 2006:146), the fact remains that with such a small fraction of the population found in graves we cannot know who exactly was being selected for burial rites – or at least for burials that were able to survive until modern discoveries. Thus, while it is reasonable to assume that the wealthy were represented, we can only conjecture about the poor. Are the nearly empty graves indeed those of the poor, or do those graves reflect a differing religious or cultural group within the society under study? Were the poor permitted to hold burial rituals, or was that a privilege awarded only to

landowners and not tenants. These unknowns, of course, affect conclusions regarding the wealth of the individuals and their positions in society.

The data here have been drawn upon to reach an understanding of the meanings invested in burial sites in Viking period Iceland by using a broad range of ideas and methods usually associated with particular theoretical orientations. The goal of this research project was to understand the Icelanders within Viking society as well as in their own cultural setting by interpreting the symbolic meanings and group identities portrayed in the burials, graves and their surroundings. With a combination of theories and reuse of data, new interpretations were reached using established data collection procedures and consequently, illustrating the circularity of theory and method.

3.1. Cognitive View

Humans are more than the sum of their parts, or in this case, their material remains. Humans are made up of their past experiences, their senses, their surroundings and even their upbringing. (Flannery and Marcus 1998; Whitley 1998a) It is quite obvious that humans create a worldview based on these combined experiences which in turn guides their present and future. Humans that live together in a society will usually share a worldview which then becomes the basis for a group identity. Often those with shared worldviews intentionally form a group while others come together and then find that they have, in fact, the same worldview, which seems to have been the case in Iceland. (Flannery and Marcus 1998; Whitley 1998a)

Cognitive archaeology, in the broad sense, is defined as the study of past ways of thinking as inferred from the surviving material remains. However, in the modern framework, the goal is to develop methods by which we can learn how the minds of those

being studied worked and the manner in which their minds shaped their actions, that is, the cognitive forces behind the material culture. (Renfrew and Bahn 2005:41) The human mind is understood as one of the keys to the creation of the material remains; in fact, the mental processes of the past need to be understood in order to interpret the past. Although the human mind is not necessarily different today than it was during the time of this study, it is possible that there may be differences in the thought processes employed by modern humans and those of our human ancestors, particularly those from the pre-historic Viking period in Iceland. As Lévi-Strauss (1995:18) indicates, humans who do not use writing tend to use more of their sensory perceptions and have a higher capacity for observation than those with writing, creating a stronger bond with the symbolic meanings of artifacts, spaces and landscapes than contemporary humans have. Thus, the beliefs of the past are brought to light by cognitive archaeology and it becomes obvious that using present conditions to interpret or explain the past can be flawed, especially when dealing with a prehistoric society since we cannot impose our current worldview when we interpret past worldviews.

Three cognitive concerns are brought up in this project: the worldview or cosmology, the religion and the cultural ideology of Viking age Icelanders. (Flannery and Marcus 1998) As has been already explained in Chapter 2, the worldview and religion of the Viking society distinguished them from many of the other societies with which they came into contact. This is quite evident in the writings about the raids on various monasteries in the British Isles where the Vikings were seen as 'vile' heathens wreaking lamentable havoc on God's church. (Cavill 2001; *The Anglo-Saxon Chronicle*, trans by Ingram 1996:28; Page 1986) The Vikings did not share the same religion or view

of the universe and their choices for raids were made to accumulate the most wealth with the least amount of effort – a tactical strategy, not one based on religion. Unfortunately for the Christians in the monasteries, this meant that they were sitting unarmed atop a treasure chest. (Graham-Campbell 1994; Haywood 1995, 2000; McGovern, et al. 2007; Page 1986; Roesdahl 1987; Sawyer 1962; Wilson 1989) Thus, the long-standing image of the Vikings, created by non-Vikings in the Viking Age, was one-sided and prejudiced.

During the last century or so, researchers, studying this period gained a new respect for the Vikings – one which views them not only as raiders, but traders, farmers, settlers and explorers. It is in this new-found respect that a more complete image of the Vikings and Norse has emerged, focused not only on their mythology and religion, but also on politics, farming strategies, seafaring and ship-building skills, as well as their reasons for going on a *viking*. Religion has also been the focus of much research so it is no longer studied within the category of mythology. The position of the gods and their influence on Viking society have been better explained from the point of view of the Vikings who worshipped them, rather than by those outsider-Christians without respect or regard for the meanings in Viking religion. (Anderson 1888; DuBois 1999; Faraday 1906; Graham-Campbell 1989; Olsen 1928; Sawyer 1962)

This new understanding of Viking cosmology and religion enables us to study the Icelandic culture by focusing on social and political ideals. According to *The Book of Settlement*, many of the Icelandic settlers traveled to Iceland to get away from their places of origin – Norway and the British and Irish Isles, for the most part. (Jónsson 1986; Karlsson 2000; Pálsson and Edwards 1972) One of the major forces in relocation was the loss of individual political power in those home-lands. (Karlsson 2000:15) The

settlement of Iceland had one commonality: the majority of the settlers came from various parts of the Viking world. Although there may have been individuals from other backgrounds, such as Irish, it is generally accepted that those other individuals had little influence on the development of the society as the language and culture are clearly Norse. (Karlsson 2000:14) The Icelandic people gathered during the settlement period, and had the opportunity to create living conditions according to their perceived ideal in a vast, uninhabited landscape.

In trying to understand the social ideology of the settlers, landscape and burial data are combined here and reviewed for their similarities and differences as well as being placed in a GIS to review the connections between various aspects of the burials and graves and the landscape features. In this approach, the ways in which the mind chose the placement of the burial for each type of grave in the burial record can be better understood, which will inevitably add to the picture that we have now of the perception of spaces during the Viking period. The symbolic nature of burial data as well as landscape associations shed light on class divisions and their resultant burial rites. Combining these, it can be seen how social facts (which are those facts about which groups share an understanding), can be brought to light. (Whitley 1998a:10-11)

It is clear that many societies use symbols to structure their lives. By understanding the meanings of these various types of symbols and groups of symbols, we gain a better understanding of the people under study and their interactions with the material remains they left behind. (Flannery and Marcus 1998) Since burials play an integral role in this project and hold the key to understanding the society and their perceived spaces, the next section focuses on burial and mortuary theory in this project.

3.2. Burial and Mortuary Theory

Burial practices are ideal sources of information about society, not only to discern relationships between the living and the dead but also to provide insight into the relationships and connections amongst the living, as such practices very often reflect, either directly or indirectly, the wishes, desires, gendered aspects, and the reality of the society burying the dead. Not only are they a source for understanding material culture, but they also provide a doorway into the structure of cultures and societies themselves. Often, burials are used to understand the more conceptual aspects of a culture such as rank, status, division of labor, age and gender identities. Burials reflect the normative lifestyle of a society and provide a glimpse into the past by providing information regarding ritual, adornment, styles of dress, beliefs and social status. Spatially, burials reveal culturally understood connections between the living and the dead and among the dead themselves. (Arnold and Wicker 2001; Chapman and Randsborg 1981a; Davies 1999; Diinhoff 1997; Goldstein 1981; Härke 1997c; Nielsen 1997b; Parker Pearson 1991, 2001, 2002; Theuws 1999) These can be broken-down into three categories: (i) the relationship between the living and dead; (ii) the relationship between the living and living; and (iii) the relationship between the living and the past. (Parker Pearson 1982:110) Burials can also mark boundaries or they can stake claims to land through the strategic placement of the burials on the land to indicate ancestry.

Burial theory reminds us that burials are an indirect reflection of society, not simply mirrors of the life of the dead person, nor mirrors of the society or family of the dead person. Always present in our analysis is the question of whether the funeral was for the benefit of the living or the dead. Burials can be distorted to suit the living, as in

an example from the year 1463 C.E. of a funeral run by the College of Heralds, "...the heraldic funeral was concerned with the legitimate transfer of status and property from the dead to the living. The whole performance therefore revolved around the living, with the dead person playing little part." (Daniel 1998:206) Also, there are always possibilities that the funeral desired by the deceased was not carried out by the heirs or relatives responsible for the ritual and in lieu of the deceased's wishes, a completely different funerary ceremony was held. Such could have been due to the difficulty of the deceased's wishes, to save the high costs of the funeral, to over-emphasize the wealth of the deceased to gain social status, or any number of other very individual reasons. (Daniel 1998:88) With this in mind, one can still pursue mortuary analysis as both a direct and indirect measure of the individual and the society's belief system and organization based on differences in gender roles and age; however, we must move forward with caution when pursuing answers regarding prestige and wealth in the mortuary record.

In order to understand the relationships between the living and the dead there are two aspects to study in this project. The first is the position of the burial area in the landscape and its placement in relationship to the settlement. This includes the distance, direction or elevation of the burials from the farm, the actual placement of the burial on the farm whether on a rise or hill, on the boundary, or in the homefield/outfield, and the position of the burial in the landscape, that is, its place of prominence, and its visibility to land or sea. The second aspect to study concerns the meaning being conveyed by the burial site or grave regarding the image of the deceased as well as the various relationships between the living and the dead. (Chapman and Randsborg 1981a, 1981b;

Parker Pearson 1982, 2002; Saxe 1971) In Iceland, graves are considered relatively poor when compared to those of their Scandinavian contemporaries (Ambrosiani 1985; Arwidsson 1985; Eldjárn 1984; Myhre 1992; Sjøvold 1985). However, measuring Iceland independently reveals a more complex society with variations in wealth and status, reflected not only by artifact inclusions, but also by the variation in burial style.

The pre-Christian Icelandic Viking age burials provide contemporaneous data in a bounded island setting, creating an excellent dataset for analysis. (Jensen and Nielsen 1997a:34-36) Comparisons between pre-Christian burials from Viking Age Scandinavia and other parts of the Viking world have provided the ground-work for an understanding of the varieties in fashion and style which were part of dress and everyday life, and variables of function, those items which were deliberately placed to convey a message. (Jensen and Nielsen 1997a) In combining a local analysis with the broader, regional interpretations and using both the fashion and function variables, we are left with a more complete picture of the Icelandic society. When further combined with landscape characteristics, we hope to understand the intentional meanings conveyed in the burial ritual. (Arge and Hartmann 1992; Batey 1993; Bertasius and Daugnora 2001; Eldjárn 1984; Ewing 2006; Gräslund 2001; Härke 1997c; Nielsen 1997b; Pedersen 1997; Randsborg 1981; Ringtved 1997; Sørensen 1997; Stalsberg 2001; Zachrisson 1985)

Understanding the relationships among the living is achieved by understanding the relationships among the burials. The first aspect to review are the identities reflected in the ritual burials. In this regard, by better understanding the placement of function-related items, the economic roles such as fisherman, farmer, weaver, warrior or trader may be determined. Material culture, particularly adornment, plays a strong role in this

aspect of the research, as it reflects the perceived image of the individual and family members within society, and the perceived or bolstered wealth and social position of individuals and typical gender roles. (Arnold 2006; Brumfiel 2006; Jensen and Nielsen 1997a) Once this is understood, the next avenue is to see if any social group is left out or under-represented in any way, particularly females as opposed to males or children and/or infants as opposed to adults. In this way, the social organization of the community is drawn from the data. (Arnold and Wicker 2001; Boric and Stefanovic 2004; Gero and Conkey 1991; Gilchrist 1999; Hays-Gilpin and Whitely 1998; Stoodley 2000)

The final relationship to be considered from the burials is what connection the living have to the past. This is especially interesting in a place such as Iceland where the Vikings were the first to settle the island. Since the land had not been claimed or altered prior to their occupation, the Vikings moved to Iceland and set up their settlements in the manner to which they were accustomed, at first using the techniques that had worked in their places of origin. However, the placement of buildings and burials were not determined by previous inhabitants. These sites were chosen based on the topography of the area and, more than likely, personal preference and choice. Under these circumstances, it is not unreasonable to assume that the burials would probably be placed strategically to reflect the wishes, desires, and social organization of the community. However, after some time, what happened to the older monuments? Were these monuments reused, altered in any way or kept as they were? One example of reuse in the Icelandic record is at the site of Vatnsdalur (BR No. 54) interpreted as a female boat burial, with at least six individuals added later. The wealth found in the burial cannot be attributed to any one individual as the associations are unclear although, when originally

excavated, the majority of artifacts within this burial site were all considered to be associated with the female. (Friðriksson 2000:118, 364) There are also a number of pre-Christian cemeteries in Viking Iceland where the individuals were more than likely interred at different times. For example there is the site of Surtsstaðir where a male was originally buried and later a female was added (Gr. nos. 268 and 269, respectively).

In the pursuit of the Viking belief system and social stratification based on such differences, this project follows the suggestion by Härke in separating the data. He notes (1997c:24), burials provide two very separate types of data that contribute to their interpretation. The first is what he calls “intentional” data, the other is “functional” data. Intentional data seems to comprise almost all archaeological data as they are chosen by the community for each individual burial and reflect the religion and customs of the community to which the individual belonged. Intentional data consists of the actual burial type and construction as well as the inclusions in the grave including jewelry, clothing, tools, weapons, religious icons and whole or partial animals. Such intentional data creates the image that the community would like to reflect. (Härke 1997a, 1997b, 1997c:24; Jensen and Nielsen 1997a, 1997b; Parker Pearson 1982, 1991, 2001, 2002; Tarlow 1999) Functional data, on the other hand, cannot be distorted to reflect ideology. Functional data consist of the biological sex, age, health, stature, nutrition, diet, etc. that are learned through skeletal analysis. (Gestsdóttir and Price 2003; Härke 1997a; Parker Pearson 2001) Together, the symbolic nature of the intentional data along with the physical evidence of the functional data can lead to an interpretation that is less distorted than the image created by the burials. In better understanding these combined data, feminist and gendered approaches will now be considered.

3.3. Feminism and the Gendered Approach to Archaeology

Feminist theory in archaeology seeks to shed light on inequalities between the sexes in a particular society. It can focus on the unequal distribution of power, gendered politics and the lack of visibility of women's work, interests and issues in the archaeological record. Feminist theory in archaeology today is a direct descendant of the more radical political feminist movement of the early 1970's, which is why some gender researchers have tried to distance themselves from feminist archaeology over the years. (Sørensen 2000; Wylie 2007a) Gender research focuses mostly on studies of class, ethnicity and sexuality, leaving politics to feminist research. (Engelstad 2007; Wylie 2007a) Gender research usually focuses on gender as a social construct with socially defined masculine and feminine identities and not on biological traits. When Hays-Gilpin argued that all gender archaeology is feminist in nature or is influenced by feminism (Hays-Gilpin 2000:90-93), she made it very clear that whether or not politics are part of a study or are being avoided, gendered research would not be at the level it is today without feminism. (Brumfiel 2006; Conkey 2003; Engelstad 2007; Hays-Gilpin 2000; Wylie 2007a, 2007b)

The social construction of gender within a culture can be studied by understanding differences in the archaeological record. Once the record is interpreted, the opportunity to shed light on family, age and religious groups is available. By including a gendered perspective in all current research, a more precise image of a society can be portrayed.

Prior to beginning gendered research, it is important to understand what gender is and why it is a necessary aspect of all research. First and foremost, it should be clear that

gender is not sex. The term *sex* is used to convey the biological differences between males and females. On the other hand, the term *gender* is used with regard to the social construct of masculine and feminine roles in a society and the various processes by which gender identity is communicated to others. (Arnold and Wicker 2001; Gero and Conkey 1991; Gilchrist 1999; Nelson 1997) “Gender is politically, socially, culturally and symbolically constituted rather than biologically given. Thus, gender is not predictable, stable or static.” (Sørensen 2000:10)

Gender studies are also concerned with the roles that each gender plays in a society. These roles define the division of labor, designate the manner of dress and adornment, and the accessories related to labor. To the archaeologist these are as much indications of wealth and status, as are prestige items. The main reason for including gender in this study is not simply to find it in Viking period Iceland, as this research already assumes the presence of males and females of all ages with certain roles, but to understand how gender differentiation affected the social spheres, dynamics, roles, positions and dimensions of the people who made up the Icelandic landscape during the early stages of Icelandic history. In doing so, a holistic image of the society emerges which includes women, men and children of all ages, classes and origins.

The sagas present an image of the gender roles of the Norse settlers in and outside of Iceland. However, it must be reiterated that the sagas were written a few hundred years after the events taking place and that they too are artifacts and part of the data. Although the sagas imply that there was a strong cultural constraint on dress and adornment as well as on division of labor during the Viking Age, the archaeological record may show that there are also contradictions to those assumed roles suggesting that

certain aspects of gender identities that were previously considered black or white, may indeed actually fall into areas of gray. (Dommasnes 1998; Jacobsen 1978; Jochens 1995, 1996; Maher 2007; Smith 2004; Stalsberg 1991)

The two-gender system seems to be the societal *norm* and individuals within the society were expected to follow rules regarding dress. In particular, we see Gudrun tricking her husband Thorvaldur into wearing female clothing so that she would have further grounds for divorcing him. (Kellogg and Smiley 1997:332) Thus, we see that a male did not have to dress all the time as a female to be considered at fault and provide good cause for a legal divorce; the so-called offense had to take place only once before a witness. Apparently, this worked both ways: “If women go about dressed as men, they invite the same treatment as do men who wear shirts cut so low that the nipples of their breasts can be seen – both are grounds for divorce.” (Kellogg and Smiley 1997:333) There is no indication from these examples that they were common occurrences. However, it does indicate that the society had strong opinions and culturally constructed rules for the standard dress of both males and females. The fact that such a topic was addressed in the sagas and considered a legal justification for divorce, however, indicates that this was not as uncommon as may once have been thought. According to Gragas, the Icelandic Law Book such grounds for divorce in the sagas, however, were not legitimate causes for an automatic divorce. (Dennis and Foote 1990:53-95) These sagas and their indication of cultural norms for dress and adornment help to explain why in the past many grave goods were assigned to the sexes without any room for crossover between them. Thus not only has the sex of individuals in the Icelandic graves been determined by contemporary views about grave goods, but the determination of sex was influenced

by the sagas which were written hundreds of years later by Christians, who possibly held views of male and female roles in society that differed from those of their pre-Christian predecessors. (Jacobsen 1978; Jochens 1995, 1996)

Archaeologists expect sex and gender to be revealed by the archaeological burial record because of the wealth of information that they can provide. Age, like gender, can also provide a wealth of information about the society, particularly between burials and between the living and the dead and are varied based on gender identity. The construction of the grave, grave goods, adornment, offerings, tools and other items all provide a window into the burial rites practiced by peoples of differing wealth, rank, status and gender. (Arnold and Wicker 2001; Dommasnes 1998; Gilchrist 1999; Gräslund 2001; Hays-Gilpin and Whitely 1998; Knapp 1998; Smith 2004; Stalsberg 2001; Weglian 2001) Age has a similar function as it brings to light not only questions of childhood, but also an understanding of rites of passage and incorporation of individuals into the society. This will be further detailed in the next section.

3.4. Childhood as a Meaningful Category

Within archaeology the study of age or childhood is nearly nonexistent as gender studies once were. (Lamb and Hwang 1996) During the last few decades, women were forcefully made visible in the archaeological record, despite the androcentric research dynamics and politics within the discipline itself. Still, the idea of children and childhood in archaeology is muted, perhaps because it seems to be too difficult to pursue such an avenue of study due to lack of data or that data on childhood are too similar to those about adulthood to be separated. (Kamp 2001:2) In other cases the lack of attention to the archaeology of childhood stems from the long-standing (mostly) western ideal that

children should be seen and not heard; and long-held traditions of infanticide in various societies over the centuries has also supported their subordinate position. (Finlay 2000; Joyce 1999; Kamp 2001; Scott 2001; Stoodley 2000)

Age and Sex are similar in that they are both biologically determined; however, gender categories and age categories are societal constructs. (Kamp 2001:2) Contrary to modern perceptions, age-scales and the definition of childhood have changed over time and various cultures have differing views on the issue of how children should be treated.

Only one hundred years ago in the United States, children worked and contributed, if only minimally, to family income. (Kamp 2001:3-4) Today at least 250 million children between the ages of 5 and 14 still work for a living in developing countries, nearly half of them full time. (UNICEF 2001) Although today child rights are supported and exploitation of those rights is considered intolerable to the international community as a whole, it is necessary to understand that this was not the norm in pre-industrial societies and during the Viking period life was not so different. Childhood was shorter, and children worked and were expected to take on adult roles much earlier than they do in modern society.

In Iceland during the Commonwealth period and probably earlier, age was divided into three categories, each with a different status: Youth, Adulthood and Old Age. Youth seems to have been from birth to the age of twelve – much shorter than the childhood of contemporary society. “At twelve, boys were considered able to prosecute at courts or sit in courts as judges. Sons of chieftains could even take over their own chieftaincies at that age, with their followers’ permission. At sixteen boys were to receive their inheritance and choose their domicile. ... Also at sixteen, he is the man with

the right to give his mother in betrothal” (Dennis and Foote 1990:7-8, 53; Karlsson 2000:56) A girl, on the other hand, could not be responsible for her own domicile until the age of 20. (Dennis and Foote 1990:8) At the other end, on reaching eighty, one lost the right to marry or sell one’s property without the permission of one’s heirs. (Dennis and Foote 1990:7; Karlsson 2000:56)

For this research, the goal was to understand exactly what meanings differentiation in burial rites by age held for the society as a whole and whether or not such archaeological evidence aligned with the sagas and law book. With such a small number of individuals under the age of 18 in the analyzed human skeletal remains dataset, only commonalities can be addressed, however, it is expected that the work in this area will continue and there will be greater focus on the subject. Having explained the various aspects of analyses focusing on the internal characteristics of the burials, the next section will discuss the theoretical basis for placing the burials into the landscape.

3.5. Landscape Perceptions

“... [T]hat what was once theorized as a passive backdrop or forcible determinant of culture is now seen as an active and far more complex entity in relation to human lives.”

(Knapp and Ashmore 1999:2)

Landscapes defy concepts of time and space because of their apparent permanence despite the fact that they change with time and in personal perceptions of spaces. Landscapes bring together past, present and future both by remaining unchanged and by changing with each new society. Landscapes are also places in which individuals live – they become a part of the human decision-making process and are part of the self-

sustaining bond between humans and their surroundings, where one defines the other at all times. (Gillings 1999; Ingold 2000; Lynch 1960; Maschner 1996; Roberts 1996; Tilley 1994; Widgren 1999; Witcher 1999)

Landscape archaeology studies peoples of the past in a wider context by incorporating the relationship between archaeological data and the natural environment. The natural environment has limitless boundaries therefore this approach is no longer bound by a specific site, but is able to investigate areas far beyond. The extent is determined by the archaeologist. It could be based on regional or natural boundaries, the extent of visibility or any scale that the researcher chooses to consider. Potentially, this will both limit and bias the results though the selection of a boundary only limits the choice of data for analysis, not for collection.

The landscape is a perceived environment. As Lynch notes, the perceived landscape consists of identity, structure and meaning. In reality, these merge to create a response: recognition of the object, distinguishing it from other objects, awareness of their physical relationship to each other and to the observer and finally, the recognition of objects as meaningful. Only then can the environment hold any value for the group and it is also in this way that the image of the environment orients the living space of the groups. (1960:8)

The way in which an individual or a society views the landscape will undoubtedly differ from person-to-person or culture-to-culture because each has brought a different symbology to the organization of the same material of the sensory experience. (Ingold 2000:160) Each individual may have his or her own image of the landscape, but there also seems to be a general agreement about the image among members of the same

group. (Lynch 1960:7) This general agreement can be seen in modern societies when discussing their surroundings or by locating objects that hold significance for the group. “The named environment furnishes material for common memories and symbols which bind a group together and allow them to communicate.” (Lynch 1960:126) An obvious example of such a connection can be found in modern day New York City where, on most days, people move about with their own agenda and mental map for their current route. If someone were to ask directions to a particular location in the City, there might be more than one route given, ultimately with the same results. Most of the time, there are many images of the City being held at one time. However, the mere mention of ‘the Twin Towers’ not only provides a mental map of the City itself, but stirs up images of the city prior to their collapse as well as images of 9/11, which changed this society. It also promotes a sense of loss among many, fear in others, and in still others a sense of unity with the City’s inhabitants. Whether in a modern society or one of the past, landscapes create group histories and reflect group ideals.

Because the same landscape is seen differently by different people and over time, scholars studying a culture or a people can be confused. Due to temporal changes, one culture that evolves from an earlier one, may indeed view the surrounding landscape differently. (Ingold 2000; Lynch 1960; Tilley 1994)

Finally, the perceived landscape is mobile. Individuals carry their perceived landscapes with them. In other words, as an individual walks across a large area, the field-of-view changes, thus creating a new perception of the environment. This is also the case temporally as the perceived landscape changes with the light during different hours in the day, or during different seasons of the year. Therefore, attempting to

understand the perceived prehistoric landscape is a complex matter. (Ingold 2000; Lynch 1960; Tilley 1994)

As Tilley discusses, populations tend to become bound to the landscape and become emotionally attached to various aspects of it including symbology, patterning and design. This attachment is what creates the personal image of surroundings. (Tilley 1994) This is true for Viking period Iceland, as evidenced by various sagas. For instance, in *Egil's Saga* one of the earliest tasks Skallagrim accomplished when he arrived in Iceland was to name his surroundings, connecting ownership and identity. Skallagrim named his farm Borg and the fjord on which it was situated he called Borgarfjord. The place where he came upon a small creek cutting into the coast and saw many ducks he named Andakil (duck channel). When he came to a small headland where people caught swans, he named it Alftanes (Swans Ness). In this way as he staked his claim he developed his perception of his landscape and influenced the perception of others by providing his image of significant landscape features to them so that they too would view and identify with the landscape in his way. (Pálsson and Edwards 1976:73-75) In *Laxdæla Saga* this process can be seen once again as Unnur crossed Breidafjord and stopped for breakfast on a promontory which is now known as Dagverdarnes (Morning Meal Ness); along the way Unnur lost a comb and that place is called Kambsnes (Combs Ness). Later she proceeded to free her slaves and provide them with land after which each share of land was named according to the personal name of each freed slave. Thus, to Vifil she gave Vifilsdal and to Sokkolfur she gave Sokkolfsdal. (Kellogg and Smiley 1997:279-280) In *Hrafnkel's Saga* we are reminded of the place on Hallfred's land where a foreign farm woman by the name of Arndrud died. This place is now known as

Arndrudarstadir (Arndrud's stead). (Pálsson 1971:35) Finally, in *Eyrbyggja Saga* we are introduced to Thorolf's land. He placed his farm at Hofsvog (Temple Creek), the place where he anchored his ship. The name of his farm was Hofstadir (Temple farm), and he placed a large temple there. The name he gave the region, Thorsnes (Thor's Ness), came from the fact that this was the place where the pillars he had cast off the ship at Thor's Temple had come ashore. (Pálsson and Edwards 1989:28-30)

The sagas provide examples of the human need to identify one's surroundings and to create a personal space. The naming is sometimes arbitrary, as in the case of the naming of "Kambanes" because a comb was lost somewhere in that area, but other names indicate strong religious beliefs. All naming is a method of staking claims as well as a method of creating familiarity with the topography. By naming features in the landscape they created the first history for Iceland which was passed along by word of mouth, until they were written down centuries later. For example, this woman died in this location and it had an affect on these people and now she and her story had become part of the perceived landscape. This created history is so strong that it has survived in the Icelandic culture 1100 years later, to this day. Although the societal perception of the landscape has changed drastically, the Icelandic society has chosen to remember and memorialize many aspects of the past landscape by keeping the sagas alive and by retelling local folklore in the modern landscape. There are many more examples that could be used here, but these amply make the important connection between humans and their perceived landscape.

By describing his surroundings, naming them and using them to label his new lands, Skallagrim was indicating boundary markers. Thus ownership was being

conveyed. We see Unnur marking her route towards her new home as well as designating land to loyal companions. In this way she was first claiming ownership of her region, then by granting her companions their freedom and providing them with land she created bonds of obligation with her clients. In Hrafnkel's Saga we see that place names also memorialize people and even mark specific events, in this case, the death of a person who was not even Icelandic. In the final example, we see the strong connection between the perceived landscape and the pagan religious ideals of the Vikings. Not only did Thorolf stake his claim to the land by naming it, he also designated some areas as sacred and off limits, like the mountain Helgafjall. He was showing his commitment to his religious beliefs and connecting the land to his belief system.

Each of these examples not only provides a geographic setting for the reader, but develops various types of connections between the characters in the sagas to his or her perceived landscape. These connections do not run one way, they are circular, in constant motion, entwining *Man, the landscape and the place name*. In the process of becoming bound by the landscape and emotionally attached, eventually there is no beginning or end to the connection, they become one. (Chadwick 2004)

Thus, understanding the perceived landscape of the Viking world provides a better understanding of its inhabitants. This is especially the case in Iceland where the sagas were originally penned. The early peoples of Iceland had a strong connection to their landscape, be it religious, political, economical, or otherwise, and this connection is invaluable for understanding the society that dwelled in this landscape. In order to add landscape perception to this study, GIS was used as both a science in its own right and as a methodological tool. The final theoretical section explains the use of GIS more fully.

3.6. GIS Theory and Practice

The question of whether or not there is such a thing as GIS theory, archaeological or otherwise, has been brought up in numerous articles over the years, and remains unresolved to this day. (See, for example, Gaffney 1996; Gillings and Goodrick 1996; Rajala 2004; Wheatley and Gillings 2002). If one were to see GIS as a purely processual tool, then one could claim that GIS is a middle-level theory bridging the gap between data and interpretation as Middle Range Theory calls for. (Binford 1977, 1983; Gillings and Goodrick 1996; Kvamme; Trigger 1989; Wheatley and Gillings 2002; Witcher 1999) However, if, as post-processualists tend to believe, theory and practice cannot be separated, as all method is conducted within theory, then there is indeed theory in GIS; and since GIS is here being applied to archaeological data, it is apparent that archaeological theory should guide GIS procedures. (Rajala 2004:7.2; Wheatley and Gillings 2002; Whitley 2004)

The initial practice of GIS is performed with theory in mind and the interpretation of the results is definitely theory-driven, thus the use of GIS here takes a cognitive/postprocessual approach, with a more processual data-collection undertone, similar to the work of (Maschner 1996; Whitley 2004) where cognition is measured by way of various GIS applications such as viewshed, visibility, distance measuring, interpolation, querying and quantification analyses. (Wheatley and Gillings 2002:234)

The landscape featured greatly in this research project and when attempting to understand the perception of spaces, it became the basic unit in which all attributes were recorded. The intentional and functional attributes of each grave were recorded within the surrounding landscape; thus a good portion of the interpretation was based on the

connection between the symbolic nature of the intentional and functional attributes to the cultural features which included farm houses as central places and natural landmarks such as cliffs, water routes, and mountains. (Wheatley and Gillings 2002:166-168) By focusing on an archaeology of past spaces and places, past values can be interpreted.

Attempting to interpret individual or communal cognition with only one type of spatial proxy would leave too many holes in the end results. Here it was believed that the only way to form a better understanding of the cognitive behaviors of the past individuals and community was to include several spatial proxies in combination in order to recreate their choice-making processes. (Whitley 2002, 2003, 2004:4.0) Distance can be used to indirectly represent landscape familiarity. Use of this variable was based on the presumption that people are very familiar with their own surroundings and as they travel further from home, they become less familiar. This can be seen in Van Hove's (2004) use of diachronic land-use maps where an intensity of use measure was created. The measurement was based on accumulated human action as seen by surface remains across the study area. The map analysis indicated areas of varying intensity, believed to be potentially linked to different perceptions of space. The zone of highest intensity was thought to have formed the most important part of the social structure of the group under study because of the detailed and intimate knowledge that the group had acquired about this zone. These zones were more than likely central for the society on both materialistic and symbolic levels. Some zones were assigned community values or had no value to the society at all. In these latter zones, Van Hove points out that violence often occurred. Though this suggestion of violence is not true for Iceland, we do find some burials in these unvalued zones. (Van Hove 2004:4.0) Usually, however, we find the burial sites in

high familiarity ranges from the residences in Iceland. As mentioned, distance is a proxy indicator of landscape familiarity and although this project measures distance, the settlers were cognitively assessing spatial familiarity, in a new land, very far from their original home.

Viewshed analyses were also used here to comprehend the social meanings placed on burial site location during the Viking period whether as a means of indicating control over resources, land tenure and/or social relations. (Gaffney, et al. 1996; Wheatley and Gillings 2002) Visibility analysis based on maximum affordances (without vegetation coverages factored into the equation) were used to ascertain that the physical characteristics of a place and its surroundings define the possibilities of perception. (Rajala 2004; Wheatley and Gillings 2002) Using variable distance measuring has created connections between the burial sites and their settings, indicating social ties to the natural environment. Interpolation has created a landscape, within which this society lived, with views of the natural monuments and with connections to their ancestors. Querying the data reveals patterns among and between groups across the region which indicate possible social, economic and political ties. Quantifying the data allows us to understand the differences and similarities among those in the society. The environment was included to get at the value placed on land and to enhance the picture of the typical burial sites in Iceland. Understandably, burials are rarely placed in environments which are important for agriculture and overall survival. The estimated Viking period environment consisted of areas of birch forest, grasslands, wetlands, erosion and areas near various types of water, for example rivers, lakes and the sea. Features on or near which burial sites were located were also recorded to shed light on the landscape

associations preferred for the burial monument.

In a post-processual framework, it is assumed that while individuals make decisions for the group, the group identities with which each individual associates him or herself affects overall perceptions. Thus, the landscape may be perceived by an individual, but gender, age, family and cultural associations have a profound influence on how it was perceived. (Whitley 2004:2.1)

Clearly, GIS has the ability to explore the data in ways far beyond the quantitative and computational tools of the past. Acknowledging that archaeology can be studied using GIS methods which can aid in the explanation of archaeological phenomena when used in an archaeologically theoretical framework creates a circular argument of the unity of theory and practice. Thus, there is no theoretical choice involved as theory is a means of choosing methods which in turn prove theory.

The remainder of this chapter explains the pre-Christian Icelandic burial sites and how the individual graves at each site on record were chosen and used in this research project.

3.7. Choosing The Icelandic pre-Christian Burials

3.7.1. Burial Sites

The burial data was broken down into variables that, when studied both separately and together, provided an overall image of the Viking burial ritual and the significance of variations particular to Iceland. The burials provided not only information regarding wealth, status and gender, but a glimpse into regional differences and similarities that elucidate the power dynamics during the Viking age. The use of a well-defined burial dataset combined with the analyzed human skeletal remains, set the groundwork for the differences found between the sexes and age groups, allowing a gendered perspective to

be incorporated. Analysis of the grave goods, both artifact and animal remains, revealed the specific roles played by people in the rituals and in society. Chapter 5 will further explore this idea by placing these humans, and their relationships, into their cognitive landscape.

The main source of the burial information is based on Kristján Eldjarn's catalogue and the additions Adolf Friðriksson made recently. Information regarding the more recent burials, those discovered and investigated after the 2000 publication, have also been added to the project database. However, provenience and lack of information precludes some from being a part of this study.

At the time of this writing, there were 168 burial sites on record which contain at least 343 individual graves. It was necessary to revisit the descriptions of each burial site recorded and devise a rating system to determine the viability of each for this project. See Appendix A: Icelandic Pre-Christian Burial Sites for a complete list of the burial sites considered for this project, their associated farm names and individual ratings. The ratings are based on a number of characteristics that need to be present in order to perform various types of analyses on the data. Such characteristics include, but are not limited to, the presence of the following:

- (i) human skeletal remains found at the site, with or without artifacts/grave goods
- (ii) evidence of intentional internment where there is no skeleton
- (iii) artifacts/grave goods where there is no skeleton
- (iv) depression left behind (indicative of burial) where there is no skeleton
- (v) site appearance (indicative of burial) with or without a skeleton
 - mound
 - stone setting serving as marker
 - cairn

(vi) burial characteristics with or without a skeleton

- orientation
- animal association

Once each burial site had been reviewed, it was given a rating from 1-3. If there were a human skeleton or human remains (sufficient to prove burial and meet the needs of this project), then a rating of 1 is given. If, however, there were only human bone fragments or no human remains at all, other factors needed to be included in the determination to see if those burial sites provided enough information to be used in the project and this is when the above evidence numbered i-vi are used. A rating of “2” was applied when there was probably enough data to use in some of the various analyses and a “3” was used when there was not sufficient data for the burial site to be included in this project, regardless of the artifacts reported.

The system can be simply explained in the following manner:

- Rating 1. Burial sites with this rating have the characteristics necessary to be included in the pre-Christian burial sites of this study.
- Rating 2. Burial sites with this rating have some characteristics necessary for inclusion with the pre-Christian burial sites of this study, but may not be able to be used in much of the analyses.
- Rating 3. Burial sites with this rating lack sufficient information and cannot be included in the pre-Christian burial sites of this study.

After applying the rating system, 81.5% of the burial sites were Rated 1, 7.7% were Rated 2 and 10.8% were Rated 3. Therefore, 89.2% of the burial sites were eligible for inclusion in the analyses conducted (see Map 5). Although eligible, not all of the burial sites were used in the various analyses. As mentioned earlier, this was the first step in distinguishing the burial sites that could be used. Only those with analyzed skeletal remains were used in the gender portion of the research and only those with viable locational data were used for the cognitive portion of the research. Once Burial

Sites were chosen, it was necessary to determine which graves within each Burial Site were viable for this study.

3.7.2. *The Graves*

Many of the burial sites mentioned above contained more than one individual grave. It was necessary to sort through the information and number each grave individually. A unique identifier was then assigned to each. However, along lines similar to the burial sites, not all graves could be considered in the analyses. Therefore, although a particular burial site was rated as having enough qualities to be used for analysis, individual graves at this location may not have been included. The main grounds for elimination were similar to those used for rating the burial sites. First, if a burial site was eliminated, it followed that the individual graves belonging to that site were also eliminated. Also, any grave that was investigated, but lacked substantial information to confirm its designation, was also eliminated. This included a site with multiple graves where one or more of those so-called graves either were unsubstantiated or turned out to be a horse-burial associated with another grave. Those grave numbers were eliminated as well.

As Friðriksson noted, “the determining characteristic for pre-Christian burials (in Iceland) is the inclusion of grave goods.” (Friðriksson 2000:550) Grave goods include not only artifacts but also animals, and the majority of the remaining burials had one or both of these categories. Final determination of a grave’s inclusion in this project often fell under 'guilt by association' as a grave may not have had any grave goods but may be part of a group of other graves at a particular burial site with grave goods, thus the grave remained part of the project. In the case of recently discovered burial sites where sufficient information regarding position and provenience cannot yet be confirmed, those

burials are also listed. However, they may be designated as having undetermined qualities or lack information altogether. (For the complete list of graves used in this project, see Appendix B: Icelandic Pre-Christian Graves Used in Project.)

Various techniques were utilized to measure the Burial Sites and Graves both quantitatively and qualitatively resulting in ways to evaluate status, wealth, prestige and social position between the sexes, within the sexes, between age groups and even social groups as the next section outlines.

3.8. Concluding Remarks on Theory and Method

As the various theories and methods work together to analyze and interpret the data, what became clearer with each analysis was that by connecting the internal and external parts of the burial and landscape data and using a combination of processual and post-processual theory and method this project was able to place the data into a broader social context in order to better understand the gender roles and identities, age divisions and cosmology of the pre-Christian Icelandic settlers of Iceland. Chapter 4 takes the project into the internal characteristics of the burials through a more quantitative analytical approach to the data and especially explores hierarchies within and between the sexes and age groups.