

**LANDSCAPE AND SOCIAL PRACTICE:
THE PRODUCTION AND CONSUMPTION OF POTTERY
IN TENTH CENTURY LINCOLNSHIRE**

Volume I of II

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For my parents....

'... The practice of archaeology is itself a form of dwelling ... For both the archaeologist and the native dweller, the landscape tells - or rather is - a story. It enfolds the lives and times of predecessors who, over the generations, have moved around in it and played their part in its formation. To perceive the landscape is therefore to carry out an act of remembrance, and remembering is not so much matters of calling up an internal image, stored in the mind, as of engaging perceptually with an environment that is itself pregnant with the past' (Ingold 1993: 152)

ABSTRACT

This thesis is entitled 'Landscape and Social Practice: the production and consumption of pottery in tenth century Lincolnshire'. It explores the ways in which early historic communities structured their landscape. Landscapes are perceived and understood by people through social manipulation of material culture: the paving of roads; the planting of hedges; the issuing and checking of passports at borders. This thesis explores ways in which archaeologists can investigate past understandings of landscape through patterns of material culture. It focuses on the social practices of pottery production, trade and consumption in tenth century Lincolnshire in order to address three themes: the perception of place, the construction of territory and mobility through the landscape. It further investigates cognitive approaches to the analysis of material culture through the integration of Geographic Information Systems (GIS) and statistical techniques.

This thesis is divided into five chapters. Chapter I addresses current theoretical approaches to the study of landscapes, both in archaeology, and in the humanities and social sciences as a whole. It addresses past and present archaeological approaches to Anglo-Saxon landscapes. It further outlines the theoretical agenda and themes of the thesis. Chapter II establishes the historical and geographical context of the thesis. It explores the ways in which tenth century society understood the places and territories in which they lived. It also discusses travel in early historic and medieval England. Chapter III discusses the practices of pottery production and consumption in tenth century Lincolnshire. It introduces the pottery typology used in the analyses in Chapter IV. Chapter IV explores the ways in which archaeologists can research cognitive understandings of landscape in the past. It discusses limitations in the data to which the analysis must be adapted. Through the use of GIS and statistical methods, this chapter explores the themes of place, territory and mobility introduced in Chapter I. Chapter V provides a discussion of the previous four chapters, integrating the historical and analytical contexts of the research. It further offers suggestions for future research.

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LIST OF ACCOMPANYING MATERIAL

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File Directories:

/appndx2

/other

/coins.dbf
/manor.dbf

/pottery

/pottery.dbf
/places.dbf
/fensite.dbf
/norfen.dbf
/healeys.dbf
/stamford.dbf

/appndx3

/cluster

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/hcltowns.spo
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/kclvess.dbf
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AUTHOR'S DECLARATION

None of the results in this thesis have been previously published. However, preliminary investigation into the representation of movement along roads and rivers by displaying the amount of pottery travelling along them was presented and published for CAA '98 (Barcelona) (Symonds 1999). This outlined the approach using ARC/INFO NETWORK applications and routines using a hypothetical route model. This article is referred to in the thesis. Preliminary results from this model were presented to CAA '99 (Dublin) and GIRUK 99 (Southampton). These were not published. Additional pottery information was later integrated into the representation of mobility along the Roman roads and navigable rivers of Lincolnshire. The full results and presentation of the data is, therefore, only contained within the thesis.

CHAPTER I

THE GEOGRAPHY OF LANDSCAPE SOCIAL SPACE AND THE ANGLO-SAXONS

'Land is not land alone, something that simply is itself. Land partakes of what we breathe into it, it is touched by our moods and memories' (Naipaul 1987: 30).

'The landscape is the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them' (Ingold 1993: 156).

Landscape and Social Practice

Landscapes are structured spaces perceived by people as individuals, communities and societies. Interpretations of landscape can be highly symbolic, such as the visual impression of a minster, whether from the surrounding countryside, or from the interior iconography. But a hill may simply be understood as part of the onerous walk to work, to be trudged up in the winter amidst the ice and slush, not as the body of a celestial Dreamtime being. A stone may be a place to sit on for a hurried lunch, not part of a stone circle suggesting esoteric relations. Landscapes are both produced and consumed. Meanings are constructed and placed on buildings, artefacts, natural features and life forms. As Bender notes, 'people's experience of the land is based in large measure on the particularity of the social, political and economic relations within which they live out their lives, while at the same time their individual actions form part of the way in which these relations are constructed and changed' (Bender 1993: 246). Humans perceive the areas around them and through this perception reconstruct and alter their landscape.

Landscape is interpreted through the social knowledge held by individuals and communities. This is expressed by Giddens when he asserts that 'all human action is carried out by knowledgeable agents who both construct the social world through their action, but yet whose action is also conditioned or constrained by the very world of their creation' (1981: 54; cf.

Barrett 1987: 8). The social practices which construct landscape are based on the individual actions which, through their repetition, become understood as patterns of social behaviour. These practices are further actions of inhabitation (Ingold 1993: 152, 154; Barrett 1999: 257). Thus, the landscape is understood through the situated perspective of the people who dwell within it, move through it and through their actions change and alter it.

The social construction of landscape was recently addressed by Ashmore and Knapp (1999). They structured their discussion around four themes (landscape as memory, landscape as identity, landscape as social order and landscape as transformation) (Ashmore and Knapp 1999: 13-9). These capture the ways in which landscape is constructed, interpreted, perceived and negotiated by individuals and their communities. Indeed, social knowledge of landscape is constructed by the memories of people whose identity is based in their understanding of their 'place' in the world. This knowledge is not static but changes as the actions of people produce the experiences which comprise that memory of past social practice.

Memory is integral to the understanding of landscapes. Indeed, 'landscape is often regarded as the materialization of memory, fixing social and individual histories in space' (Ashmore and Knapp 1999: 13). This is supported through cognitive research which 'suggests that human memory constructs rather than retrieves, and that the past thus originates from the elaboration of cultural memory, which is itself socially constituted (Holtorf 1997: 48-50)' (Ashmore and Knapp 1999: 13). As Barrett comments 'action draws initially upon, and is guided in anticipation by, the subject's memory of previous experience' (1987: 8; Giddens 1984: 377). Thus, the social structures which condition and constrain human action exist in the memories of their practitioners and can, therefore, be reproduced, altered and forgotten. Interpretation of landscape and social practice is based on past experiences: the knowledge of the estate boundary is held within the memories of the individuals who rode and re-rode the bounds, establishing and re-establishing a knowledge of landscape through their actions (Robertson 1986: 162-3).

Ashmore and Knapp link the importance of memory and landscape to the construction of social identity (1999: 14). Through the social practices structured by previous experiences, social identity is established within the landscape. Indeed, 'people recognize, inscribe, and collectively maintain certain places or regions ... conversely, these places create and express sociocultural identity' (Ashmore and Knapp 1999: 15). Social identity, in its guise as ethnicity or as community, structures the landscape, creating boundaries maintained through a variety of practices from regional differences in dialect to the construction of ditched enclosures.

While many archaeological studies have focussed on the use of monuments as signifiers of social identity (Taçon 1999; Barnes 1999; Barrett 1999), others have used material culture (Jones 1997) or a cultural association with a particular compass direction (*e.g.* north) (Shields 1991) to study social identity. Landscape is understood by its inhabitants through their own understanding of their place within it. Thus, 'landscape provides a focus by which people engage with the world and create and sustain a sense of their social identity' (Ashmore and Knapp 1999: 15).

Social practices are not only held within the memory of their practitioners, they are encouraged by the collective acknowledgement of the social structures and conditions which enable the continuation of those practices. This is demonstrated in a charter for the property at Inkberrow, Worcester where following a dispute between the bishop of Hereford and a Wulfstan and his son over land boundaries, the shire court 'appointed a day for going to the estate' and declared that 'the same people who had traced the boundaries for him [should do so again], and if the boundaries were the same as when they were first traced, the bishop was the rightful owner of the estate' (Robertson 1986: 162-3). The act of re-riding the bounds of the property by the original witnesses re-establishes the authority behind both the witnesses and the act of granting land itself. These structures of practice, Bourdieu's *habitus*, produce a social understanding of thought and action supported and reinvented through individual and corporate activities. Thus, '*habitus*, a product of history, produces individual and collective practices - more history-in accordance with the schemes generated by history a present past that tends to perpetuate itself into the future by reactivation in similarly structured practices' (Bourdieu 1990: 54). Walking the bounds reasserts the structures of authority which enable the witnesses - individually and collectively - to determine the division of landscape, the production of *locale*, the creation of spaces and boundaries. Social practice is reproduced through an acknowledgement of the authority and power of individuals and institutions. Indeed, 'it is through the capacity of incorporation, which exploits the body's readiness to take seriously the performative magic of the social, that the king, the banker or the priest are hereditary monarchy, financial capitalism or the Church made flesh' (Bourdieu 1990: 57).

Landscape is structured through a situated knowledge of space and place held by people interacting within their communities. As that knowledge changes through social action, so the landscape changes and alters from the desolate murky fen of Guthlac's retreat to the heavenly glory of the Abbey of Crowland (Colgrave 1965: 89; Darby 1974: 54). The transformation of landscape (Ashmore and Knapp 1999) is bound up with issues of memory, identity and social order. Changes in social practice mean that former practices and interpretations of landscape

are not necessarily sustained by the individual or the community. These re-definitions of landscape can be extremely visible such as with the re-writing of territorial boundaries, the destruction of national monuments or the construction of new sacred monuments on culturally virgin ground (Ashmore and Knapp 1999: 19; Richards 1999:98). However, as Barrett notes in his discussion of Bronze and Iron Age monuments:

'the earlier remains were no longer absent from the later period for the simple reasons that the Iron Age was actually an inhabitation of Bronze Age residues. Indeed we might go further and recognize that the Iron Age could only have arisen in the way that it did as an interpretation or as a reading of the physical manifestation of its own landscape heritage' (Barrett 1999: 258).

Renegotiations of landscape through changes in social practice - signified today through a change in cultural nomenclature: Bronze versus Iron; Late versus Early - do not completely eradicate what went before. Instead, societies restructure and inhabit previous landscapes, constructing their own landscapes and social practices through their use (or non-use) of past arenas of social action.

Social practice is enacted through discourse. It is expressed through 'all the ways in which we communicate with one another ... that vast network of signs, symbols and practices through which we make our world(s) meaningful to ourselves and to others' (Gregory 1994: 11). It is embodied through the interaction of people across the landscape, through their day-to-day routines and encounters. Social discourse is structured through the manipulation of material culture, through the exchange of coin in a market place which recognises a designated trading *locale* or the building of a wall which signals the political and cultural separation of a people. Landscapes are produced through social discourse, through 'human conversation over space and time ... [which creates] landscapes through metaphors and comparisons whose outcome is the building of roads, towns, and cultures' (Folch-Serra 1990: 255-6). Furthermore, landscape:

'acts as a storage of cultural resources, including architectural forms of spaces and boundaries and the temporal cycles of day/night and seasonality in which people pass through, and are held in place by, this architecture. The material world therefore acts as a complex series of *locales* within which meaningful and authoritative forms of discourse can be sustained' (Barrett 1987: 8).

The manipulation of space and material culture constructs landscape through the

communication of social practice. In turn, practices are held within the memory of the individuals and communities which enacted them, allowing landscape - its places and spaces - to be meaningfully understood and to influence future social practice. Thus, the building of a stone church evokes the power of the Church, creating a ritual landscape in which certain acts, certain mysteries, are performed and communicated, re-establishing the structures of ecclesiastical authority which suffuses the space created through the construction of that church.

Through investigating the patterns of material culture, the day-to-day routines and actions which constructed these patterns can be recovered. As Barrett notes, archaeology is concerned with 'the surviving fragments of those recursive media through which the practices of social discourse were constructed' (1987: 9). Societies are structured through material social practices, through the lifting of a glass of wine in celebration or the smashing of that glass for good luck. Material culture is invested with meaning, the knowledge of which is understood by the people using it in the practices of daily life. This use of material culture in social practice is, thus, spatially meaningful whether it is used across a region or within a building. Indeed, 'space is constituted through social relations and material social practices' (Massey 1994: 145). The distribution of material culture across the landscape is influenced by how that landscape is understood and negotiated by its inhabitants.

Recent archaeological studies of landscape have stressed the importance of social practice in the construction of landscape. This is a reaction against seeing landscape either as a passive backdrop against which cultures migrate and diffuse, or as a determiner of culture against which societies have no independent recourse of action. Thomas, in his critique of Aston (1985), remarks that ecological and systemic analyses of landscape:

'detail the titanic forces which surround these individuals - population levels, climate, land use patterns, technology, settlement patterns and the organisation of focal places ... [as a] huge Heath-Robinson apparatus, within which human beings have the metaphysical status of the ghosts in the machine' (1993: 26).

Indeed, the aim of processual archaeology was not the individual but the system which operated behind the society. As Hodder notes, 'in the New Archaeology, the individual was avoided, argued out of social theory' (Hodder 1986: 6). Processual approaches were interested in explaining how the landscape impacted on the economic, political and social aspects of human culture.

Conversely, current approaches emphasise the importance of individuals and communities, whose social practices structure landscape and whose actions are, in turn, structured by their knowledge and memory of landscape and social practice. Instead of seeing monuments and artefacts as a way of categorizing time periods, landscape archaeologists are now interested in how people interact with their landscape, how they structure and appropriate it through constructing buildings and roads or through the definition of territory and *locale* (Barrett 1999; Scull 1993).

Much of the archaeological literature on landscape focusses on ritual and monumental landscapes. While there has been some attempt to broaden the discussion of ideological landscapes through words such as 'ideational' (Ashmore and Knapp 1999: 12), landscape archaeology is still dominated by the study of built heritage rather than artefact distributions (Barrett 1999; Buikstra and Charles 1999; Tilley 1994). It is ironic that by seeking to redress the concentration on politico-economic systems and settlement analysis adhered to by functionalist studies, landscape archaeologists have excluded the social practices which formed the settlements, which structured the political and economic interactions. The landscape portrayed is full of tombs and mounds, 'symbolic meeting points on paths of movement' (Tilley 1994: 109), and absent of the places in which people lived and interacted, in which the social structures which produced those tombs were negotiated. Archaeological investigation must be directed towards particular questions of social discourse and patterns of material culture, such as the use of monumental sites. However, it is important to draw discussion of these particulars into a wider framework, to contextualise them within a broader understanding of past social practice.

It is important to conceptualise landscape as a structured space which is not necessarily inhabited but forms part of the knowledge of the people who move through it and negotiate it. Archaeologists have often concentrated on those areas of high material consumption, the towns or the graves where large quantities of artefacts have been deposited (Biddle 1976; Carver 1998). This has meant that the peripheral areas which form the majority of the landscape have been ignored and are often left as blank spaces on distribution maps. They become archaeologically uninhabited and ignored. Approaching landscape through social practice, while still often focussing on areas of high consumption, recognises that landscape, in its entirety - from towns to tundra - needs to be socially understood and acknowledged.

Archaeology is unable to recover the 'ideas in people's heads', as Hodder aspires to do (1984: 25; Barrett 1987: 8). While individual action can be seen through the thumb impressions along

a ceramic vessel rim, the thoughts which passed through the potter's mind as he shaped the clay, and the conversation he had with the pig, the impression of whose hooves were found in the kiln floor (Barley 1982: 275), are lost. Thus, individuals occasionally can be recognised but it is repeated individual action, the action of the community which can be discerned. Archaeology can interpret patterns of social behaviour, but individual thought must remain supposition even with the aid of history. While history is an immense aid to the reconstruction of past social practice, historical records only represent a fragment of society and must still be filtered through centuries of change in social knowledge and perspective. Indeed, it is this discourse between individual and communal action which archaeology investigates: the coin dropped by the merchant participating in the communal restriction of trade to the town.

This discussion has emphasised the importance of landscape and social practice to the study of past societies. It has established that acknowledgment of the social construction of space and place is a foundation for archaeological research. However, research into social space was developed primarily in late historic and twentieth century studies (Gregory and Urry 1985). These time periods have a wealth of information which is absent for the early historic or prehistoric practitioner. Social theory works best with data-rich research where multiple identities and constructions of space, place and landscape can be explored. The archaeological landscape is, by its nature, fragmented, and often archaeologists must struggle to find expression of *an* identity, much less a multiplicity of identities. The acknowledgment of the problems of applying social theory in research agendas is noted by Gregory, who despite his avid promotion of social theory maintains that 'social theory is not a Noah's Ark that can magically save human geography (or any other discipline) from its flood waters. Or at any rate, if it is, then its hull is so riddled with woodworm that major reconstruction is necessary to keep it afloat' (1993: 275). However, Gregory goes on to state that engaging with these difficulties is an important reason to employ social theory - 'because it *needs* so much work' (1993: 275).

The use of social theory in archaeology has been criticised on the grounds that it attempts too much and cannot support its claims. Part of this discrepancy between social theory and data is the lack of analytical techniques used by social theorists to explore concepts of social practice and landscape (Yoffee and Sherratt 1993a: 5; Bradley 1993: 131). Processual archaeology found much of its appeal in statistical and other mathematical techniques of analysis (Clarke 1972) and the subsequent use of these techniques within social theory has been slow to be adopted due to this association with processual theory (Whiteley 1998: 12). While there has been confusion between scientific procedures and hypothetico-deductive methodologies 'the use of scientific means of analysis, whether involving the use of statistics,

quantification, chemical or physical studies, is equally relevant with a hermeneutic approach' (Hodder 1986: 185). Analysis is important in elucidating patterns of social practice which then need to be interpreted within a social theoretical framework. As Bourdieu notes 'theory without empirical research is empty, empirical research without theory is blind' (Bourdieu 1988: 773-787; cf. Jenkins 1992: 10). The use of social theory in archaeology requires the analysis of data in order to explore social practice and the construction of landscape.

This thesis is interested in exploring techniques which can be used to investigate the social production of landscapes in the past. The use of social theory can be problematic in landscape archaeology due to the difficulties of exploring concepts which do not always have the data or analytical techniques to support them. Early historic landscapes have the added complication of documentary knowledge of the period which supplements the archaeology. Historical agendas do not always coincide with archaeological interpretations - not because of a discrepancy of understanding, but because of two very different sets of data. Hodder recognises this when he notes that 'there are distinct differences between material culture and spoken or written language... in contrast to the majority of words, many material culture signs are iconic' (1986: 191). The use of historical comprehension of the past is vital in the study of early historic landscapes in order to provide a further depth of social understanding of the societies which inhabited those landscapes. The integration of archaeological evidence with the historical can be problematic when the archaeological data-set is not sufficient to support the historical agendas. Therefore, techniques of analysis need to be developed which incorporate both historical and archaeological evidence.

The focus of this thesis is the development of an approach to early historic landscapes which links social theory with the analysis of landscape through the practices of production and consumption of material culture. This is based on the ways in which the analysis of artefact distributions (in this case, pottery) can contribute to further understanding the ways in which people negotiated and understood their landscape - the way in which they moved through the landscape; the places they travelled to and from; and the way in which these movements structured their understanding of territory, place and social identity. This involves the contextualisation of pottery production and consumption within the historical and archaeological understanding of the tenth century landscape of Lincolnshire. It further includes the analysis of pottery distributions and assemblages in order to discern patterns of social practice which can then be interpreted within a social understanding of landscape. This is accomplished through the use of GIS and statistical methods which are aimed at investigating the social perception and construction of landscape. Finally, a critique of these methods will

be offered to discuss the success of this approach and the ways in which future research agendas could add to our knowledge of early historic landscapes.

Virtual Landscapes

Patterns of material culture are produced through social practice. The pot, deposited in a pit, was produced, traded, distributed, used and discarded. While the most visible of these processes is that of deposition and subsequent disturbances, the social practices which led to that deposition can be discerned. Much of the symbolism inherent in social practice is lost to the archaeologist. The gestures which accompanied trade, the actions which ensured a good harvest, the bribery of witnesses can rarely be recovered through archaeology. However, the communal movement through territory, structured by social identity and mobility, is visible in the distribution patterns of artefacts. The way places and *locales* were perceived can be recognized through the distribution of artefacts. The social practices associated with the production and consumption of artefacts are held within their distribution: the tolls levied on the salt cart travelling to the town from the coast, the restrictions on trade within towns, the traders' interaction with the settlements along the salt road or their avoidance of the ferry into another territory. Concepts of territory and place, the perception of mobility and social orientation are enacted through the everyday use of artefacts, through the practices associated with the production and consumption of material culture.

Social perception of place is understood through the practices which occur there. Communication between places also articulates the ways in which places are understood by their inhabitants. As Ingold notes 'there can be no places without paths, along which people arrive and depart; and no paths without places, that constitute their destinations and points of departure' (1993: 167). Production, exchange and consumption of material culture is thus involved in the social construction of place and impacts on the communication and mobility of agents within and around that place. Human mobility is further structured through territorial identity and boundary interaction. Indeed, the movement of people through the landscape participates in the construction of territorial identity. Restrictions of movement across boundary structures serve to reinforce an identification with that territory, encouraging movement within it rather than across it. Through the exploration of the analysis of the patterns

of pottery production and consumption within tenth century Lincolnshire, social perception of territory, place and mobility in Anglo-Scandinavian society can be addressed.

Such patterns can be discerned through visual and mathematical analysis. Through the interpolation of visual mapping and spatial trends, the social construction of space can be addressed (Green 1990: 4-5). While Thomas maintains that archaeological landscapes 'cannot be understood entirely from plans and distribution maps, but [require] a consideration of the positioning of persons in relation to the monuments' (Thomas 1993: 30), the distribution map can be a powerful analytical tool. Indeed, distribution maps do provide perspective from an interactive three dimensional representation of a monumental landscape (Yorston 1999; van Leusen 1999) to the two dimensional display of artefacts across the landscape (Richards 1997). The distribution map allows archaeologists to visualise patterns of social practice enabling the discussion of social positioning which Thomas advocates. The distribution map situates artefacts and other forms of material culture in its geographic position, permitting spatial patterns to be recognised and interpreted.

Mathematical patterning of the relations between material culture is equally useful. The ability to isolate factors such as distance and artefact quantities from their geographic context allows the relationship between these elements to be discerned. Furthermore, the mathematical mapping of assemblages based on degrees of similarity and difference is important in characterising the places from which they were recovered. Statistical analysis explores patterns in the data not readily visible from the distribution map.

Both methods of visualising spatial data, the geographic and the mathematical, allow social patterns and relationships to be discerned and explored. The integration of statistics and mapping technologies through such tools as statistics packages and GIS are invaluable to landscape research. Indeed, 'the combination of landscape archaeology and GIS is one of the most profound and stimulating combinations in archaeological theory and method in the twentieth century' (Green 1990: 5). Through the use of GIS, archaeologists are able to manipulate the large data-sets needed to approach landscape and the social practices which constructed it.

Indeed, the development of cognitive GIS has been a topic of much discussion (Gaffney *et al.* 1995; Green 1990; Boaz and Uleberg 1995). Debate has focussed on the extent to which GIS research is environmentally deterministic (Gaffney and van Leusen 1995; Wheatley 1993). This discussion has its roots in a dissatisfaction held by archaeologists using GIS of the limited

use of theory by many of their colleagues. The use of GIS to expound its virtues rather than to contribute to archaeological knowledge has meant that many studies have lacked the theoretical structures needed to take archaeological arguments beyond the results produced using GIS applications (Gaffney and van Leusen 1995: 372). The use of theory-led, rather than application-led` analysis in GIS has increasingly demonstrated the benefits of using GIS to research cognitive landscapes (Llobera 1996; Boaz and Uleberg 1995; van Leusen 1999). The ability of GIS to combine environmental and cultural phenomena has allowed archaeologists to critically address the social construction of landscape (Gaffney *et al.* 1995: 212-3; Boaz and Uleberg 1995: 251-3; van Leusen 1999: 219-20; Llobera 1996: 622). The spatial representation and manipulation of artefact distributions along with other cultural and natural features is important to the interpretation of past social practice through patterns of material culture.

The use of GIS to contextualise patterns of pottery distribution within the landscape is invaluable. Nevertheless, many of the uses of GIS to approach cognitive landscapes have been through viewshed analyses (Llobera 1996; Wheatley 1995; Boaz and Uleberg 1995) rather than artefact distributions. Viewshed analysis directly interacts with the physical landscape and is able to visually situate the archaeologist within it. In order to address the social construction of landscape through the production and consumption of artefacts, traditional methods of quantification (such as cluster and regression analyses) in conjunction with GIS applications have been used in this thesis to elucidate patterns of social practice. Indeed, this thesis is interested in addressing the ways in which the analysis of pottery distribution patterns can contribute to discourse on social practice and landscape.

The Landscape in Anglo-Saxon Archaeology

Theoretical agendas have rarely been explicitly raised in Anglo-Saxon archaeology. Arnold suggests that:

‘the principal reasons for that state of affairs [occurs because] scholars with museum backgrounds laid the foundations for an artefact-based subject in the first half of the twentieth century [which was] heavily influenced and directed by the written sources ... [Indeed] it is only in the 1990's that it has been possible to see the more widespread adoption of contemporary archaeological

thinking' (Arnold 1997: 13).

Anglo-Saxon archaeology spans the gap between the theoretically driven prehistoric period and the text-based historical period. As students of a proto-historic era, Anglo-Saxon archaeologists have not felt comfortable in either camp and have chosen to adopt the general trends of the day without specific reference to the theoretical arguments that have been and are being explicitly explored in other periods of archaeology.

The image of the Anglo-Saxon landscape, which arose from pre-twentieth century scholarship, was one based in early and middle Anglo-Saxon England, with its urns and barrows which tempted Antiquarians through the possibility of riches. It was structured by topography, by the mounds, ridges and depressions which originally led excavators to put spade to soil. From the antiquarian inquest into the legendary British past arose the beginnings of seriation and typological techniques which were important for the subsequent rise of cultural historicism. The Anglo-Saxon landscape discovered by the antiquarians was being structured into an understanding of cultural development from prehistoric to medieval times. It was a landscape of treasure, based on the excavation of artefacts rather than the reconstruction of cultures, social systems or social practice. The fragmentary remains of the Anglo-Saxons were being recovered through an archaeology of death and burial more concerned with riches than with the people buried within the urns and beneath the barrows.

This landscape of discovery changed with the advent of culture historic research. It became a backdrop of geographic boundaries defined by diagnostic burial deposits against which the politics of history were enacted. Tribes, defined and delineated by their brooches (Leeds 1946: 81-2) or pottery (Hurst 1956; 1957), dug ditches and dykes to establish the limit of their territorial control. Inter-tribal communication was primarily militant, one culture suppressing the other. The culture historic landscape was one of cemeteries (communities of death), one where settlements (communities of life) had little voice. The broad tribal brush strokes of the culture historians were primarily focussed on the early and middle Saxon periods from which most of their material came. It was only with the development of settlement archaeology in the mid-twentieth century that the late Saxon period came into its own.

During the mid-twentieth century, a 'new' archaeology emerged based on scientific analysis and systemic reasoning. This processualist debate for many Anglo-Saxon archaeologists 'passed by like a skirmishing army on a distant ridge' (Arnold 1997: 14). Despite the lack of explicit theoretical agendas, processualist techniques and approaches were incorporated within

Anglo-Saxon archaeology. Much of this literature was engaged with the function and development of the town in late Anglo-Saxon society. Nevertheless, archaeologists continued to be interested in the territorial dynamics of Anglo-Saxon England. Early Anglo-Saxon settlement expansion was explained through site catchment analysis and the Principle of Least Effort (Ellison and Harriss 1972). Boundaries were further investigated by Arnold (1976) who was interested in the articulation between settlements and burial sites on the Isle of Wight. Through the application of Thiessen polygons, Arnold proposed that he could chart the development of territorial divisions from numerous small kingdoms to larger territorial agglomerations. He further suggested that originally territories were delineated by natural boundaries and that as territories became subsumed into larger divisions, artificial markers such as dyke systems were employed (Arnold 1988: 123). In these examples of territorial development, the influence of environmental determinism and of information theory can be observed. Society was directly linked to resources and its ability to expand was based on the amount of energy it could command. These models also demonstrate the increasing amount of cross-disciplinary study which characterised processualism. Environmental evidence, geographical, historical and place name studies were brought to bear on archaeological scholarship.

These studies continued to stress early and middle Saxon territorial development and expansion. With the intercession of Alfred the Great, interest turned to urban development and proto-state models for the late Saxon period. This dichotomy between cemetery/early and town/late is extremely apparent. Environmental deterministic models accounted for much of the early and middle Saxon scholarship. During this time, the landscape determined the locations of settlements and cemeteries while being responsible for the extents of regional territories. Research into the landscape of late Saxon England, dominated by Systems Theory and state models, focussed almost exclusively on urban archaeology. Rural excavations were rare, concentrating on large, politically important sites such as Cheddar (Rahtz 1979). Indeed, the landscape of late Anglo-Saxon England became a series of points (towns) linked together by a network of roads and rivers down which the information of the English state was disseminated.

During the 1980's, there was a reaction against modernity throughout the social sciences and humanities. There was a growing dissatisfaction with the hypothetico-deductive methodologies of the mid-twentieth century. Emphasis changed from artefact and individual being 'passive reflections of the socio-cultural system' (Hodder 1986: 7) to an agenda which stressed the importance of individual and collective agency (Barrett 1987; Hodder 1986). Through this

emphasis on the individual, academics began to explore the multiplicity of social meaning and interaction. *Locale* was recognised as important to social practice. Material culture became a text to be read by the archaeologist through symbology inscribed on the artefact itself or through its context (Carver 1998; Hodder 1986). A certain amount of knowledge is needed to construct these cultural narratives, to express the multiple individual interpretations of life. It is with this in mind that Arnold comments that 'it has taken the better part of a century to reach the stage where such studies are possible, during which time the evidence has been described and ordered' (1997: 15). The importance of data to the post-modern movement can easily be overlooked with its tendency to shun quantitative analysis and focus on an imaginative expression of social action. Yet the areas of its most extreme expression are those situated in the present or the recent past where information comes readily to hand (Haraway 1991; 1997; Gregory 1994).

Post-processualism has not had the impact on Anglo-Saxon archaeology that it has had on prehistoric archaeology. Where post-processualism has been embraced, it has often been implicitly, without specific reference to theoretical arguments. Indeed, Anglo-Saxon archaeology, the archaeology of the proto-historic, is in many ways proto-theoretical. Despite this outwardly ambiguous stance, there have been changes of approach, alterations in the way Anglo-Saxon archaeologists are writing about their period. There is a concern to situate the individual, both the Anglo-Saxon and the twentieth century reader, within the past. Ideology and symbology are seen as important mediums of social expression. There is more emphasis on 'horizontal' regional studies rather than on the 'vertical' typological studies which characterised Anglo-Saxon archaeology earlier this century (Arnold 1997: 14).

Recent Anglo-Saxon archaeology has focussed on studying individuals and communities within the landscape. This is demonstrated through Carver's work both in urban archaeology (1993) and in his excavations at Sutton Hoo (1992; 1998). Carver is interested in ideology and symbolic transmission. He appropriates the textual metaphors so commonly incorporated throughout the post-modernist movement. Carver comments that 'in short, the [Sutton Hoo Mound I] burial is itself a poem, full of references that are interlaced with each other: references to life in the hall, to how a ship is stowed, to the status of the dead person, in reality or aspiration, and at a more personal level to the foibles and achievements of the individual' (1998: 129). Here, the multiple expressions of social discourse are flagged and explored. Carver is concerned with the individual and how that individual negotiated the landscape. In a fanciful allusion to an eighth century inhabitant of Suffolk as he gives directions to Sutton Hoo, Carver writes:

'There are six main reaches from the sea, until the river narrows enough to be fordable; just before the ford, look up to the east; on the terrace above the river there you will see a number of burial mounds. They say the pagan kings of East Anglia are buried there. Beach your boat beneath them, but pull it well up because the tides still run high at this point. Then walk along the path you will find climbing the scarp; our farm lies in the hollow. It has a hall and seven outbuildings ...' (1998: x).

By situating the eighth century traveller in his landscape, Carver is able to insert the reader into the past, commenting on the social memory of the East Anglian kings, the seasonal change of the tides, the description of the farm. He is not concerned solely with the limits of excavation but with the scope of life within the region of Sutton Hoo.

This concern with visualizing the landscape is something which Blair has also incorporated into his studies of ecclesiastical and urban archaeology. Here, the vehicle for visualizing the landscape comes from a fictional Mercian herdsman travelling to Oxford in 1050:

'The wide road ahead may have been clustered with the stalls of market traders. The frontages on either side would have been a dense, almost unbroken huddle of small timber buildings: shops selling clothes, shoes and other consumer goods, butchers and victuallers stalls, workshops of weavers, smiths and brasiers ... If the herdsman happened to come between 10 and 16 of July, he would have to steer his flock through the crowds converging on the annual fair. Beyond the South Gate, even the boggy ground along the approach to the ford would already be lined with suburban dwellings' (Blair 1994: 146).

Blair uses similar techniques to Carver: seasonality, individual activity, description of the environment and structural development. Through these, he is able to orientate the reader within eleventh century Oxford. The underlying foundation to these insights into the past, however, are the lists of artefacts, the masses of data accumulated through the century, which have been collated and interpreted to reconstruct this landscape.

Hadley (1996) addresses ethnicity within the Anglo-Saxon landscape. Through her research in the East Midlands, she demonstrates the existence of an Anglo-Scandinavian identity. She criticises the traditional 'correlation between numbers, impact and the ethnicity or identity of

the Scandinavian settlers' as being 'too simplistic to be useful' (Hadley 1996: 83). Instead of seeing the Scandinavians and the English inhabitants of the Danelaw as two separate cultures, Hadley argues for the development of an Anglo-Scandinavian 'community bound together primarily by a shared and subjective sense of common interests *vis-à-vis* others' (1996: 83-4). Hadley suggests that the distinctive nature of material culture, place-names and linguistic characteristics of the Danelaw do not indicate either a large influx of Scandinavians into the area or an aristocratic takeover, rather they were social strategies in 'a period when two groups of peoples with different belief-systems worked out a common means of existence' (1996: 94). Hadley is not interested in proving or disproving the impact of the Scandinavian settlement during the late Saxon period. Instead, she concentrates on the social practices in which the population of the Danelaw engaged.

The last few decades have also seen a return to typological studies. However, the concern is not with dating or style developments as much as the symbolism being transmitted through the designs. This stresses the horizontal relationships rather than the vertical, placing emphasis on regional understandings rather than historical developments. Richards (1988; 1992) discusses the signalling of identity through design. In one of the more explicitly theoretical studies, he suggests that 'symbolic systems operate to categorise information as an aid to the regulation and direction of appropriate behaviour. Language is just one means by which the world is classified and made understandable and controllable. Artefacts are also tools for thinking about the world' (Richards 1992: 133). Richards goes on to explore the symbolism embedded in Anglo-Saxon material culture, noting totemic association of animals and status in mortuary contexts, the transmission of age, sex and status through inscription on cremation urns and the associated imagery on metalwork (1992: 137-147).

These examples demonstrate the growing concern to illustrate social understanding and interaction within Anglo-Saxon archaeology. Scholars are interested in individual communication through material culture and landscape construction: the folk-memory of the East Anglian kings situated in the burial mounds on the hills above the River Deben; the deliberate signalling of status through the inscription of a horse on metalwork and pottery, the innovation of the god Tiw, and the delineation of power through the erection of a wall around a developing town. This concentration on social activity further aids to situate the reader within the Anglo-Saxon community, providing cross-temporal understandings of the signalling of social identity and association within Anglo-Saxon life.

In the last number of decades, the Anglo-Saxon landscape has become populated. It is

conceptualised as a palimpsest of features which were constructed and negotiated by its inhabitants. Communication and mobility are aspects of the landscape. Symbols are used to transmit knowledge. Artefacts are now being studied, not for the sake of chronology or as indications of cultural technology, but rather as objects that were created, used and discarded by people in the past.

In summary, different approaches to the past have presented various understandings of the Anglo-Saxon landscape. The Antiquarians identified the barrows and sepulchres of the early and middle Saxon populations. This landscape of death continued into the late nineteenth and twentieth century where culture history assigned racial and ethnic values to the artefacts, tracing cultural interaction through the development of styles. Scholarship was historically driven, appropriating the writings of the Anglo-Saxons and mapping the politico-cultural records onto artefact typologies. Settlements were added to this vision of the landscape during the mid-twentieth century. Towns became functional communities, 'islands of royal power' (Abels 1988: 80). The environment, geology and geography determined where the Anglo-Saxon settlements were placed and what territories each settlement controlled. It has been only in the last few decades that the landscape has become populated, that the blank areas between the towns and cemeteries have been addressed. Although rarely explicitly stated, the Anglo-Saxon landscape has become perceived as a socially constructed space, both by its past inhabitants and the present-day scholars who study it.

Landscape and Material Culture

The concepts behind social practice and landscape were introduced at the beginning of this chapter. Theoretical approaches to the Anglo-Saxon landscape were then discussed with the emphasis placed on current agendas. The following section delineates the specific agendas of this thesis. It begins with a theoretical discussion of landscape and social practice. It then moves to a review of the current themes in late Anglo-Saxon archaeology before addressing the rationale of Lincolnshire for a regional study. Consideration of how the social practices of pottery production and consumption during the tenth century are able to inform archaeologists about how the landscape was structured by its inhabitants will follow this. Discussion will then turn to the strategies used to analyse the patterns of pottery distribution and to contextualise them within the historical landscape of tenth century Lincolnshire. These sections will then be

drawn together into a summary statement leading into the following chapters.

Human agency is involved with material objects, be they the corn which was grown, harvested, consumed and burnt in a hearth or the axe which was used by a guildsman to hew timbers for a house. The construction of space and landscape is inherently bound up with the social use of artefacts (Massey 1994: 145; Barrett 1987: 6). While the material remains of past cultures are never complete, they do provide evidence of past social practice and the *locale* in which it was enacted (Barrett 1987: 6). Social action is constructed through a spatial medium and by the physical manipulation of material culture. Artefacts, their production, consumption and deposition, are part of social practice. Patterns of material culture thus represent the actions of past individuals and their communities within the landscape.

The social concept of territory is bound up with issues of spatial identity. Individuals associate themselves with a particular spatially understood community. This territorial identity, which could in some cases be described in ethnic terms, is contained within Bourdieu's concept of *habitus* (1990: 56; Jones 1997: 88-92). While *habitus* was primarily developed to address household communities, it has subsequently been used as a flexible way to approach landscape identity (Jones 1997; Llobera 1996). Instead of starting with the premise of bounded communities, which implies territorial closure and often asserts the primacy of politically imposed boundaries, *habitus* is concerned with social identity. This allows for multiple associations with places within the landscape by individuals and communities. This multiplicity is discussed by Bentley, who asserts that 'since ethnic identity derives from situationally shared elements of a multidimensional habitus, it is possible for an individual to possess several different situationally relevant but nonetheless emotionally authentic identities and to symbolize all of them in terms of shared descent' (Bentley 1987: 35; cf. Jones 1997: 91). Landscapes are constructed through the articulation of multiple identities: those of the walled town, the monastic promontory, the hundredal organisation, the kingdom or shire. These identities are formed through shared social practices, enforced and altered by the changing discourse of power.

Territorial identity is structured through material practices. Indeed:

'the material world, permanent and decaying, constructed and demolished, exchanged and accumulated, is a potentially powerful system of signification. It is inhabited by actors whose practical understanding of their daily routines is constructed with reference to a material architecture and their temporal

movement through those spaces and across their boundaries' (Barrett 1987: 9).

The use of particular material items articulates social identity. These can be overt symbols such as sculpture or dialect which are meant to signal ethnic affiliation or less strident practices such as regional trade which is influenced by social perceptions of movement and direction. Structures of power and authority strengthen social identification with a territory. Indeed, political or economic boundaries help to reinforce social movement within a territory rather than across it through such measures as border patrols and toll booths regulating and restricting travel.

Landscape is also constructed through the organisation and social perception of place. Places or *locales* are understood through the social practices enacted within them: the act of plowing is associated with the open field above the village, the Benedictine rule with the monastery, the striking of a coin with a town. Bourdieu notes this when he speaks about the dichotomy of sexual space within the Kabyle culture:

'the opposition between the sacred of the right hand and the sacred of the left hand, between *nif* and *h'aram*, between man, invested with protective and fertilizing powers, and woman, who is both sacred and invested with maleficent powers, is materialized in the division between masculine space, with the assembly place, the market or the fields, and the female space, the house and the garden, the sanctuaries of *h'aram*' (Bourdieu 1990: 76).

Places are structured through the practices enacted in them and through the identity of the participants. The use of material culture in these practices further defines *locale*, leaving visible traces for the archaeologist to uncover and to interpret: the coin on the cobbled street, the hearth in the beaten house floor, the grave cover in the church yard.

Place and *locale* are spatially oriented and geographically distinguished through social practice. Places are understood through the ways of life associated with them (Ingold 1993: 155). Giddens emphasizes this in his remark concerning the North-South divide in Britain: 'the North is not just a geographically delimited area, but one with long-established social traits' (1985: 275). Knowledge of *locale* involves direction, a social orientation towards certain *locales* and away from others, an association with North or South, with city or village, field or market. Place and *locale* are understood by the spatial orientation of the people engaged in the social practices which construct their identity (Giddens 1985: 281-2; Bourdieu 1990: 77).

Furthermore, those social practices are enacted because of the geographic place in which they occur. Part of the social perception of towns in tenth century Britain would have been their positioning on Roman roads and on navigable rivers, along which traders travelled in their carts and boats, participating in marketing activities which structured town identities. Other social practices would have been associated with this movement which are archaeologically invisible. Indeed, social practice would have also been articulated through gestures and postures, through the presence of certain individuals as well as through physical architecture which has not survived the centuries.

Giddens further raises the concept of spatial visibility. In his discussion of core-periphery relations in twentieth century cities, he notes that 'ghetto areas may be rendered 'invisible' by their regional enclosure in neighbourhoods having both very low rates of property transfer and of daily mobility from those neighbourhoods into other parts of the city' (Giddens 1985: 281). *Locales* are therefore made visible through social practice which focuses attention or relegates marginality. In a more complex discussion on spatial visibility, Bourdieu notes the association of the Kabyle house with the female (dark/nocturnal/damp) and the outdoors with the male (bright/day/dry) and remarks on the lack of male knowledge and visibility of the house and the activities which occur therein (Bourdieu 1990: 76, 276). Landscapes are understood through the social actions which make them visible or marginal to their inhabitants.

The geographic orientation of place and *locale* is further articulated through mobility and communication. This is partially constructed through perceptions of distance and time, of how long it takes to get from A to B along which route (Giddens 1985: 268). However, mobility is also influenced by territorial identities, boundary structures and *locale*. Movement is associated with direction, with the spatial orientation of social practice towards and away from places. The movement of people along roads towards towns impacts on the social perception of the places which lay along the route. The association of villages with travel towards towns influences how those places are geographically perceived, bringing them socially 'closer' to the town. Boundary structures, imbued with restrictions such as tolls, can encourage movement within territories rather than without, further strengthening the sense of territorial identity. Indeed, mobility and communication articulate the geographic relation of places and territories and of the practices associated with them.

Landscape is constructed through the social practices associated with place, territory and mobility. These issues structure the following discussions of landscape and social practice within tenth century Lincolnshire. They are based on the premise that the Anglo-Saxons

participated in social discourses which formed and transformed the communities, the places and landscapes in which they lived and died. These activities took place within a social landscape of culturally understood behaviour. The tenth century potter threw his pots in an emerging town, his waste was discarded in pits, his pots and bowls were traded throughout the region, to be used and then also discarded. The eleventh century trader may have greeted by name the man collecting tolls at the gates of Lincoln, participating in practices enacted daily, seasonally or annually by the late Anglo-Saxon communities. He may have been jostled while reaching for his coins, dropping one by mistake to lie forgotten for the trowel of the twentieth century archaeologist to discover.

~The landscape of late Anglo-Saxon England~

Despite the recent publication of a number of regional studies (Stafford 1985; Gelling 1992; Blair 1994; Yorke 1995), the landscape of the late Anglo-Saxon period is still dominated by the emergence of towns. Indeed, while rural and ecclesiastical studies have increased in the last two decades, archaeological debate is still primarily concerned with the rise of towns in the tenth and eleventh centuries. The great surge of urban excavations during the 1960's and 1970's uncovered a wealth of information about the Anglo-Saxon town despite the fact that these excavations sometimes represent only 0.025% of the potential archaeology (Hall 1988a: 125). The archaeological focus on town development has created a dichotomy between the burgeoning urban landscapes and equally important rural developments. Only a small percentage of Anglo-Saxons lived in towns. The bulk of the population inhabited the manorial settlements in the rural landscape (Darby 1971: 51). This infatuation with urban development has encouraged such assertions that towns were 'islands of royal power through which the king and his agents, ealdormen, bishops, and reeves, were able to dominate the countryside' (Abels 1988: 80). Statements such as this have been influenced by those excavations, such as York (Hall 1988a; b), Winchester (Biddle 1966; 1972) and London (Dyson and Schofield 1984; Vince 1988; Hobley 1988), which have demonstrated the requirements for generalized models and which have become the 'type' sites for such arguments. These descriptions of late Anglo-Saxon England say little about the people who were inventing and re-inventing these towns through their actions and perceptions. They disregard the settlements and landscape against which the towns are being defined. Indeed, the preoccupation of late Saxon archaeology with urbanisation has tended to ignore the intricate associations being articulated in the documentary

sources which are for the most part located in the rural rather than urban landscape.

The continuity of towns from the Roman period through the so-called 'Dark Ages' into Hodges' Age of Emporia (1989a; b) and the re-emergence of urbanism in the tenth century has been an area of archaeological interest. The social changes during this period were immense and the towns which developed in the husks of the Roman *coloniae* were very different from those at the turn of the previous millennium. The vast differences in the representation of Roman and Anglo-Saxon urbanism prompted debate on the nature of towns (Biddle 1976; Hill 1988; Haslam 1987; Carver 1993). This debate has hinged on whether the Anglo-Saxon town, or its European counterpart, qualifies as 'urban'. It has been claimed that British scholars optimistically claim the tenth and eleventh century town as urban since they are more comfortable with equating rubbish pits and rows of post-holes with urbanity. Nevertheless:

'it is also possible that we are too readily impressed by all traces of post-Roman continuity in Italy ... [and] are rendered a little starry-eyed, in a vaguely Europhile way, by the idea that people in Piazza delle Erbe at Verona (the site of the ancient forum) may have been sipping Campari sodas and admiring the fruit-stalls continuously since Roman times' (Ward-Perkins 1996: 13).

The establishment of continuity (of urbanism or of habitation of urban settlements) from the Roman period is also important to modern society which wishes to link its present concepts of civilisation to the ancient world in a search 'for stability in an unstable world' (Roskams 1996: 263). Indeed, the Roman gate, the fortress tower and the fortified wall are still visible today, the works of the giants, the reliquaries of modern civilisation.

In the last decade, there has been some concern to work towards a flexible definition of a town, one which also includes contemporary concepts of towns and urbanism (Carver 1993: 1-5; Halsall 1996: 236). Indeed, 'a town, like any settlement, is a complex of significant things, a conversation in matter, in which the various elements, from monuments to midden heaps, communicate different messages in different ways' (Carver 1993: 4). Less intent on ideological interpretations of towns, Halsall suggests that towns must satisfy five criteria: they must be permanent settlements, they must support a larger population than other contemporary settlements, they must be socially differentiated from other contemporary settlements, they must have an economy based on more than subsistence, voluntary or tribute-based supply, and they must be the foci of regional congregation for the provision of 'higher order' services (Halsall 1996: 236).

This definition of a town is oriented more towards the society which lived in or travelled to the town than the earlier definitions which focussed on urban attributes such as a market, a minster, a mint and a wall (Hill 1988: 201, 211; Heighway 1972: 8). Furthermore, it demonstrates an awareness that a town is not a unitary settlement but one which interacts and is defined by its relation to a hinterland (Halsall 1996: 237). The concentration on towns to the exclusion of other settlements has generated an abstract concept of 'the town' which is projected in an *ad hoc* basis upon all urban settlements and has little to do with contemporary geographic context (Roskams 1996: 263-4). Indeed, archaeologists must 'stop seeing the town as a thing-in-itself, a generic social reality, and recognise that such settlements do not indicate the arrival of urbanism with a simple, single relationship with general social development. 'The town' is not a social process; towns are a product of such processes' (Roskams 1996: 264). These social processes structure the entire landscape. They are not isolated in particular settlements or abstract ideals. Instead, the social practices occurring in the landscape, in the fields and in the fens, structure the organisation of settlements, both urban and rural, within the landscape.

The re-emergence of towns in Britain during the late Saxon period is not concerned simply with whether towns were continuously occupied from the Roman period. Indeed, there is little question that town life ceased at the end of the Roman period, coinciding with a fundamental shift in social practice towards a local and regional organisation (Esmonde Cleary 1995: 22-3; Scull 1993: 70). Excavations of towns indicate continued or sporadic use of towns but not in any way that could be characterised as 'urban' (Hinton 1990: 6-7). Indeed, the Roman town 'was not devoid of people... None the less, the recycled building material, haphazard appearance and asymmetrical plans of any buildings suggest, at best, a settlement with quite different investment and maintenance strategies' (Roskams 1996: 277). Social construction of landscape rested not in the use or non-use of the town, but in the social strategies practised throughout the landscape. This is true both for the decline of urbanism after the Roman period and its re-emergence in the late Anglo-Saxon period. Instead of characterising society solely by the presence or absence of material culture in towns, archaeology should be interested in how the use of material culture structured the landscape and in how this informs archaeologists of the social practices enacted in the past.

Recent contributions in rural and ecclesiastical archaeology have helped to redress the early and continued interest in urban strategies (Blair 1988a; b; Stocker 1993; Beresford 1987; Loveluck 1997; 1998). Regional studies have also directed attention away from the town and towards other social uses of landscape (Stafford 1985; Gelling 1992; Sawyer 1998; Blair 1994; Yorke 1995). This has begun to fill the blank spaces in Anglo-Saxon social geography left by the

concentration of research on towns. Furthermore, these works bridge the gap between archaeologist, historian and linguist to begin to address the Anglo-Saxon culture as a society whose gestures and speech, artefact and architecture, field and house; charter and lawcode structured the landscape in which they lived.

The rural landscape has been primarily represented by a few major excavations such as Cheddar, Somerset (Rahtz 1979) and Goltho, Lincolnshire (Beresford 1987). Recently Raunds Furnells, Northamptonshire (Boddington 1996) and Flixborough, Lincolnshire (Loveluck 1998; 1997) as well as the Cottam excavations in the Yorkshire Wolds (Richards 1997) have begun to alleviate the lack of knowledge of rural settlements in the middle and late Saxon period. However, the questions raised by the Flixborough and Cottam excavations concerning the continued use of a *locale* through a variety of settlement shifts (Richards 1997: 238; Loveluck 1998: 150; 1997: 181) highlight the lack of current knowledge about rural settlement strategies. This is also demonstrated through the query raised by Loveluck as to what constitutes a secular or monastic settlement (Loveluck 1998: 158). Indeed, little is known about the archaeological composition of the rural landscape. The scant archaeological knowledge of this area has been offset by the documentary knowledge of late Saxon and early medieval England. With their detailed descriptions of the beekeepers, swineherds and cheesemakers (Douglas and Greenaway 1953: 813-6), these sources have perhaps obscured the fact that little archaeological knowledge is available concerning the inhabitants of the rural settlements.

One of the difficulties with the current understanding of the late Saxon rural landscape is the concentration on sites rather than their *locales*. The rural map is much like the urban: a scattering of places with blank spaces between. Place-name evidence has contributed to the knowledge of the landscape by associating places with particular peoples and ethnic groups (Fellows Jenson 1972) as well as providing a picture of the woods and fields recorded within the names and boundary clauses (Gelling 1984; Hooke 1981). These studies are important for their representation not only of rural settlements but also of the landscape in between which was as inhabited as the settlements in which people built their homes.

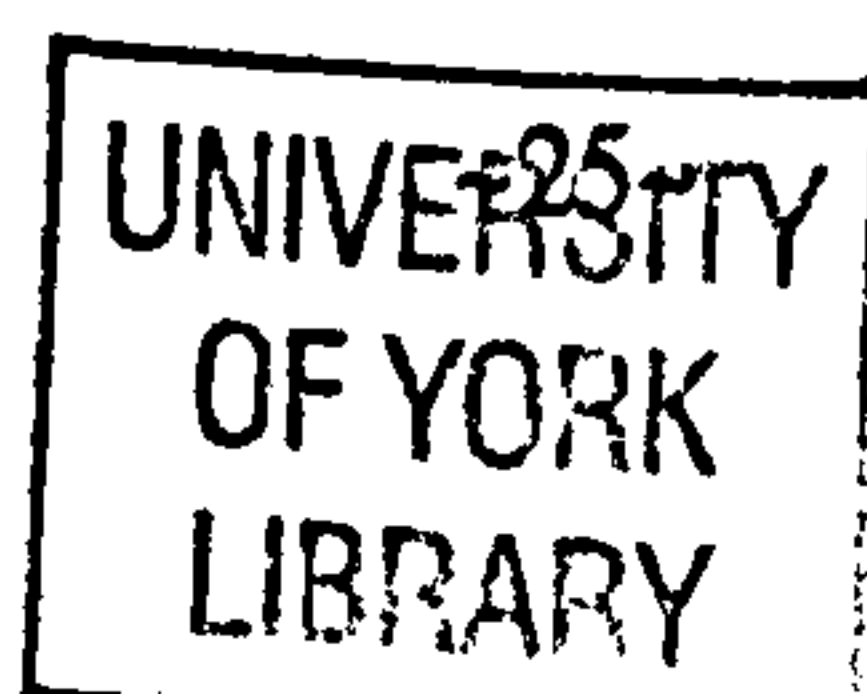
It is important to approach the Anglo-Saxons through the practices of social behaviour which structured their landscape and society. By approaching the Anglo-Saxon landscape and the social practices which constructed it, one does not lose sight of the furrow or the plow, the parish church and sundial, the cobbled street or the market, or indeed, the needle used to patch the *nålbinding* sock to be worn while skating on the river. While it is impossible to address the Anglo-Saxon culture in the way that anthropologists are able to study present day societies or

to incorporate the entirety of the patchy and incomplete nature of present knowledge of the Anglo-Saxon past, it is important to adopt an approach which recognises the many ways in which the Anglo-Saxons constructed their culture. The archaeological study of past landscapes does not end at the town or the manor but seeks to understand the practices of the people who built the houses, travelled the roads, and collected the tolls. Social practice is structured through the spatial manipulation of the material world. By addressing the practices surrounding the production, distribution, consumption and deposition of material culture, the archaeologist is able to address the ways in which people constructed and understood their landscape.

~Artefact and region: Pottery production in tenth century Lincolnshire~

Mellor noted the importance of pottery to landscape studies when she remarked that pottery 'studies corresponded with, and complemented the development of landscape archaeology' (1994: 4). The production and consumption of this ubiquitous artefact is bound up in some of the most observable changes in material social practices. Pottery production was focussed in the emerging towns. Craft techniques altered at the same time through the introduction of Continental potting traditions, likely caused by the immigration of potters from the Low Countries (Kilmurry 1977a: 184). These changes in craft practices, both in technique and *locale*, took place within larger social transitions. During the ninth to eleventh centuries, the feudal relations practised in the medieval period developed from the early and middle Saxon tributary organisation. Corresponding shifts in settlement strategies, characterised by the emergence of towns, manors and parishes, were connected with the transformation of the middle Saxon kingdoms into a nation of shires. The activities associated with the production and consumption of pottery were bound up in these changes in social practice. Through the examination of pottery distributions, the ways in which people during the late Saxon period understood and negotiated their surroundings can be explored.

Approaching the whole of the late Saxon landscape through pottery production and consumption would require more time and space than this thesis allows. Furthermore, archaeological understanding of pottery during this period is structured around county boundaries and regional consultancies. This has produced a patchy awareness of the pottery trade. Access to county records is just beginning to be made practical through the work of such data resource services as the Archaeology Data Service (ADS). However, the exchange of information across county boundaries is still problematic. This is also due to the lack of



funding available for the reassessment of the pottery assemblages. This desperately needs to be done, especially as the East Midlands Pottery Project (EMPP) discovered a significant amount of late Saxon pottery stored within Roman collections (J. Young *pers com*). Furthermore, museums have large numbers of unrecorded artefacts in storage such as the eight tons of unclassified pottery in the Scunthorpe Museum (Ulmschneider 1998: 31). Pottery analysis is also complicated by the differing typologies used and the different recording methods employed. Indeed, there is no standardized pottery analysis methodology and thus, currently, the data are not available to make a useful national study of pottery production and consumption practices across the late Anglo-Saxon landscape.

A regional study is therefore more appropriate for this project. Lincolnshire (*Figure 1*) was selected for this research. The changes in pottery production first occur along the eastern coast of England during the mid-ninth century, presumably because of the Scandinavian activity in the area. While not specifically a 'Scandinavian' phenomena, the changes in the pottery craft reflect the more general emergence of towns which occurs slightly earlier in this area than in Wessex and English Mercia (Vince 1993a: 161; 1994: 115). Addressing pottery production and consumption in Lincolnshire, therefore, provides the opportunity to investigate Anglo-Scandinavian social practices both in terms of town life and the development of the manor and the parish in the rural landscape. While part of the wider late Saxon culture, the Anglo-Scandinavian society of Lincolnshire did have distinctive ethnic overtones and the term Anglo-Scandinavian will be used to reflect this when referring specifically to Lincolnshire.

The importance of addressing the social implications of the pottery trade was also raised by Mellor who noted that 'only occasionally have the wider issues, not simply of date, but also of iconography and design, technology, cultural and economic links, patronage, social and political implications, been included. It is precisely this explanation of the wider issues and questions that seems to be lacking in many pottery reports' (1994: 16). There is a clear need for pottery to be contextualised within social practice.

Lincolnshire has the pottery data to support such a study of landscape. While there are a number of conflicting pottery typologies (Chapter II-III; Appendix II), the EMPP has developed a good understanding of pottery production in the region. Despite the cancellation of the project due to lack of funding, new pottery data have been continually added to the database as it was catalogued. This has provided a unique resource of pottery data unequalled in other parts of the country. Unfortunately, the cancellation of the EMPP has meant that Lincolnshire is the only county in the East Midlands which can be examined in this way and cross-county

comparisons have had to rely on published archaeological accounts. Thus, this project has been unable to address pottery production and distribution outside of Lincolnshire in detail, although the pottery trade within Lincolnshire has been placed in context within late Anglo-Saxon England as a whole.

However, Lincolnshire still allows investigation into the territorial changes occurring in the late Saxon period. During the middle Saxon period Lincolnshire was comprised of a number of Anglo-Saxon kingdoms, the most historically notable of which was Lindsey, a territory which existed until the creation of the county of South Humberside in 1974. The county of Lincolnshire is unique in that it incorporates two of the Danelaw Five Borough territories: Lincoln and Stamford. While Stamford fell early in the tenth century to Edward the Elder, the territory of Lincoln (previously the kingdom of Lindsey) remained under Anglo-Scandinavian rule until the mid to late tenth century. The territories were finally joined in the early eleventh century with the creation of the shire of Lincoln. These changes in political boundaries were part of a larger shift in social identity encompassing the transition from *villa regalis* and *minster parochia* to town, parish and manor. The practices of pottery production and consumption were embedded in the construction of territorial identity and community interaction.

The importance of pottery to archaeological research was re-iterated in the 1994 report on medieval ceramics (Mellor 1994). It highlighted the use of pottery to establish the date of a site, the deposition processes at that site, as well as its socio-economic context within the trading networks, production technologies and cultural tradition associated with the use of pottery (Mellor 1994: 9). It further emphasised the fundamental involvement of county and regional archaeologists as well as academic institutions in the development of ceramic studies (*contra* Hodges 1995: 105). Most pottery research has been developed through county and private archaeological firms such as City of Lincoln Archaeology Unit (CLAU), Heritage Lincolnshire and Yorkshire Archaeological Trust and through externally funded projects such as Flixborough (Loveluck 1998; 1997); Goltho (Beresford 1987); Coppergate (Mainman 1990) and especially the East Midlands Pottery Project (EMPP) (Vince and Young 1991). The other important resource for pottery studies has been in doctoral research such as that by Kilmurry (1980); Coppack (1980) and Hayfield (1985).

Much of the project-based and commercial research focuses on the use of pottery to provide a temporal and regional context for particular sites (Beresford 1987; Loveluck 1997; Palmer Brown 1996). Urban excavations continue to expand knowledge of pottery typologies and production practices (Adams Gilmour 1988; Miles *et al.* 1989; Mainman 1990) through pottery

reports which detail the wares in the assemblages typologically and chronologically. They assess the relationship between the site and those places which produced the wares found at that site. These reports provide a local and regional context for the site. They do not assess the region as a whole. Indeed, the value of these reports lies in the integration of pottery with knowledge of other forms of material culture recovered from the site.

The doctoral theses and works resulting from doctoral research which focus on pottery production within Lincolnshire have been primarily engaged with the development of pottery typologies and particular ceramic industries (Coppack 1980; Hayfield 1985; Kilmurry 1980). While trade and distribution have been considered by these studies, they have not focussed on the social landscape but rather on probable mechanisms of exchange (Kilmurry 1980: 171; Hayfield 1985: 408). These mechanisms of exchange have been discussed through the application of trade models to the data. Where distribution maps have been included, they demonstrate the extent and regional proportions of trade (Kilmurry 1980: 161, 167) or fabric percentages (Hayfield 1985: figs. 250-255). The regional 'zones of influence' discussed by Hayfield are not linked to territorial development and expression (1985: 406-419) nor are the transportation routes raised by Kilmurry explored through further data analysis (Kilmurry 1980: 171-175). Indeed, these projects were concerned with the development of the pottery industry not the social construction of landscape.

The models of exchange used by Kilmurry (1980) and Hayfield (1985) do not explore the social issues involved in the construction of landscape and settlement. Hayfield concentrates on historical references to market towns although he notes that the trade of pottery does not conform to a central market town distribution (Hayfield 1985: 406-419) Hayfield does not discuss the reasons for this except to suggest that 'markets could, therefore, be encapsulated within a zone of influence or lie on an interface between them' (Hayfield 1985: 410). Thus, the distribution of pottery is not interpreted in terms of the social construction of space and geography. Kilmurry provides a much more historically integrated discussion ranging from transportation to the trade of specific wares outside the town. However, she does not explore those networks nor the social construction of territory and place within the landscape (Kilmurry 1980: 171-5; Chapter III). While both Kilmurry and Hayfield discuss regional trade distributions and mechanisms of trade, they do not place them within their historical or social context.

While primarily concerned with discussing the use and origin of pottery in the London region during the early medieval and medieval period, the studies done by Vince (1984; 1985)

illustrate the applicability of using pottery to discern directions and methods of travel, as well as social associations between and within places. Through petrological analysis, Vince established that the predominant ware consumed within London (Late Saxon Shelly (LSS)) during the late ninth and tenth centuries was produced in the Oxford region, if not at Oxford itself (1984: 35-6). This shelly ware was then transported along the Thames, a route clearly associated with the LSS distribution (Vince 1985: 31; 1984: 36). This demonstrates a clear connection between Oxford and London via the Thames, a relationship which was not apparent from the middle Saxon trade axis towards Ipswich (Vince 1985: 34). It also implies that London, despite its prominence as a town and port, was supplied through trading connections with Oxford.

Furthermore, Vince was able to characterise the development of London as a town which, like its immediate hinterland, consumed and traded in one primary ware during the tenth century, but which during the eleventh century was engaged with wider trade and whose consumption patterns differed appreciably from nearby settlements (Vince 1985: 31, 38, 42). This demonstrates the increased distinctiveness of urban settlements from their rural counterparts during the eleventh century. Both the riverine connection between London and Oxford as well as the changing consumption patterns of the London inhabitants from the tenth and eleventh centuries, suggest that pottery can be used to discern social perception of place and mobility within the Anglo-Saxon landscape.

The use of pottery in the study of landscapes corresponds with many of the future research agendas detailed by the Mellor report (1994). Indeed, she notes that 'the study of landscapes (eg. the integration of the study of towns and their hinterlands, the evidence for change in rural settlement patterns) is required if research is to proceed in a coherent rather than piecemeal fashion' (Mellor 1994: 28). The relevance of establishing the production and distribution of pottery within a regional context and within other artefact traditions was highlighted as an area which needed more attention (Mellor 1994: 9, 16). However, the shortage of such studies corresponded with the lack of available data and the difficulty of integrating that data into a form which could support such a study (Mellor 1994: 5, 14-5).

Indeed, Lincolnshire is one of the few regions which has the data infrastructure to support landscape research in conjunction with practices of pottery production and consumption. The data compiled through the EMPP enables the social construction of landscape to be approached through the exploration of pottery distributions. While the Lincolnshire EMPP data-set is stable enough to support a landscape study focussing on territorial identity, social mobility and

settlement interaction, its integration within other collections is problematic. This is partially due to the wide range of data standards and recording methodologies in Lincolnshire and other counties. The EMPP database only covers Lincolnshire and other counties were not included due to lack of funding.

Investigation into the practices associated with the distribution of pottery offers a chance to examine the social activities of Anglo-Saxon communities. Individuals can be recognised in the pottery craft through personal techniques of potting. However, for the most part, pottery is a domestic item used by numerous individuals as part of communal consumption practices. The value of pottery lies in its practicality, its everyday usage, its commonality. This thesis explores the practices of pottery production and consumption as an avenue for addressing community interaction and identity in landscape.

~The social geography of Anglo-Scandinavian Lincolnshire~

During the late Saxon period there were a number of important changes in social practice which were conveyed in the landscape. The renegotiation of land tenure from large estates held by the king and his ealdormen, to smaller holdings based within a growing aristocratic nobility, who also had investments in town properties, was bound up in the shift from tributary to feudal relations (Stafford 1985: 60-2; Blair 1994: 140; Saunders 1990: 168, 282). The increased social mobility during the tenth century saw a rise in the nobility as more *ceorls* became *thegns*. As Blair remarks 'this was bound to intensify exploitation of lords' directly-managed land, and hence the demands on their dependants' labour... [thus] small manors were more productive than great ones, and were better managed' (1994: 140). The emerging towns, with their *hagae* and markets, were part of this shift to feudal tenure practices. The towns were linked to the growth in royal control from the early tenth century hegemonic rulership to an acknowledged monarchy during the eleventh century. Indeed, during the late Saxon period 'noble society experienced a period of rapid social mobility, with a burgeoning lesser nobility and the emergence of an exceptionally powerful greater one. The former was largely the result of changes in economy and land-holding; the latter was effected primarily by unification' (Stafford 1989: 155). These changes in social practice were manifested through an increased privatisation of land holdings which resulted in the development of the medieval manor, town and parish.

Alongside these more general changes in late Saxon society, Lincolnshire was involved with the social changes occurring with the Scandinavian settlement and the establishment of the Danelaw territories. Urbanisation was accelerated in the Danelaw through increased investment in craft production and trade (Vince 1994: 113-15). Towns such as Lincoln and Stamford emerged as focal settlements for the territory and region. Parochial development appears to be linked with the sharing out of lands by Scandinavian leaders (Sawyer 1998: 55-7). The fragmentation of lands is archaeologically visible in the stone sculpture presumably commissioned by the founders of the parish churches (Everson and Stocker 1999: 79; Boddington 1996: 67). Sculptural traditions exhibit territorial differences between the territories of Lindsey and that of Stamford (Everson and Stocker 1999: 81-87). Although both territories were part of the Five Borough confederacy, Stamford was conquered early in the tenth century by Edward the Elder linking it more closely with Wessex. Indeed, Lindsey appears to be more strongly oriented towards the north and Yorkshire, while Stamford and its territory are more southward looking (Everson and Stocker 1999: 81-87).

Summary

The social identities being created through territory, town, manor and parish were expressed through the varying practices associated with each place and the ways in which communities from these places interacted. Lincolnshire is dominated by the geographic discourse between watery fen and limestone wold, through which rivers such as the Trent, Witham and Welland flow. Roman roads, built along the upland surfaces, took advantage of the dry land. The interaction between road and river transport was important to this region during the tenth century. While more regional pathways and fenland waterways are difficult to discern, local communication between manorial settlements would have utilised these less trodden, though no less important, routes.

The Anglo-Scandinavian production and consumption of pottery were involved in these social practices structuring territorial identity and community interaction. Pottery production is linked to the emerging urban communities. It is bound up in the change of craft traditions and practices which occur during the late Saxon period. The introduction of a dramatically different manufacturing technique, involving the use of a fast wheel and structured kiln, differentiates these vessels from the previous middle Saxon hand-made pottery which was fired in a clamp-kiln. The Continental influence in the style of the late ninth and tenth century pottery in the East Midlands is suggestive of Scandinavian influence, not only in the

transmission of craft skills and/or craftsmen, but also in the increased development of urban traditions in the Danelaw boroughs. The production of this pottery is associated with the Anglo-Scandinavian identity of the Danelaw and in the emergence of a rural interaction with urban-based craft production.

Investigation into practices of pottery production and consumption in tenth century Lincolnshire therefore focuses on assessing the interaction between towns, their associated territories and their settlements. Inquiry into community interaction between rural settlements is established through other documentary sources such as Domesday and the *Rectitudines Singularum Personarum*. Indeed, it is important to highlight not only the present limitations of pottery analysis but also to characterise those social practices unable to be discussed through the practices of pottery distribution. Nevertheless, there is an immense amount of knowledge which pottery analysis is able to contribute to the understanding of past societies. The common occurrence of pottery on all Anglo-Scandinavian sites allows a unique opportunity to consider the regional construction of landscape.

The exploration of the practices of production and consumption within Anglo-Scandinavian Lincolnshire involves quantitative analysis of the patterns of material culture. GIS were chosen to facilitate the study of the pottery distributions and to aid in their contextualisation within the landscape. The visualisation capabilities of GIS are important to the study of landscape and allow interactive exploration of a wide variety of data-sets and statistical results. However, GIS were not designed to incorporate cognitive information and must be adapted to address social practice within the landscape. Much of the cognitive analysis of landscape has been based in viewshed analyses rather than studies of artefact distribution. This thesis explores the ways in which GIS applications can be used to address the social construction and understanding of past landscapes through the distribution of artefacts.

This thesis develops ways in which the production and consumption of pottery can be used to examine issues of social change within the landscape. Most landscape studies have focussed on monuments and built heritage rather than on the social practices involved with the trade of goods. The practices surrounding the trade in pottery participated in the construction of landscape through the places in which it was produced, the ways and means in which it travelled, the places where it was traded and those where it was consumed and discarded. Archaeological interpretation of these practices is dependant partially on how receptive pottery analysis is in discerning social action and communication within the landscape and partially on the present knowledge about the landscape. This thesis seeks to explore the relationship

between the pottery trade and the construction of landscape as well as to suggest avenues for future research.

The tenth century was a century of change. It encompassed the demise of kingdoms, the establishment of shires and parishes, the development of a northern Anglo-Scandinavian culture, a shift in settlement patterns from that of middle Saxon England to Domesday with its manors, berewicks and sokeland that reflects that of modern-day England, the emergence of urban society with its influence over production and distribution patterns and the development of an English identity. These developments occurred through the changing social practices of people whose understanding of the places in which they lived and from which they travelled, shifted as did their lifestyle, the food they ate and the items they made or bought. These decisions and actions produced patterns of material culture which can then be interpreted in terms of the people and of the society who established them. However, they must not be considered in isolation but as situated within the cultural geography of tenth century England.

CHAPTER II

THE SOCIAL GEOGRAPHY OF LINCOLNSHIRE

c. 850-1100

'There is in the midland district of Britain a most dismal fen of immense size, which begins at the banks of the river called Granta not far from the camp which is called Cambridge, and stretches from the south as far north as the sea. It is a very long tract, now consisting of marshes, now of bogs, sometimes black waters overhung by fog, sometimes studded with wooded islands and traversed by the windings of tortuous streams' (Felix's Life of St. Guthlac; trans. Colgrave 1956: 87).

'Any fool can appreciate mountain scenery, it takes a man of discernment to appreciate the fens' (Harry Godwin 1978; cf. Coles and Hall 1998: 1).

This chapter discusses current understandings of Anglo-Scandinavian geography and social structure in order to establish a context for the analysis of pottery below (Chapter III and IV). While pottery production and consumption patterns are extremely informative about social practice, their placement within a wider context of social behaviour is important to archaeological research (Mellor 1994: 25). Furthermore, investigation into past landscapes must draw together a wide range of evidence in order to present a coherent understanding of the social practices through which the Anglo-Scandinavian inhabitants of Lincolnshire (c. 850-1100) structured and negotiated the space around them. The integration of archaeological, geographic, historical and linguistic sources in this discussion of social geography is important in a period where sparse historical references survive, and where archaeologically, there are many questions to be answered and much knowledge to be gained.

This chapter begins its discussion with the social topography of Lincolnshire. This serves as an introduction for the subsequent section dealing with settlements and communities. The manner in which hydrological and terrestrial landscapes influenced the social geography are considered. This then leads into a discussion on territorial developments from the middle through the late Saxon periods before turning to the social interaction between rural settlements and the emerging towns. While the production and consumption of pottery was embedded in the changes in social practices from the middle to late Saxon periods, it will be considered in

the following chapter and emphasis here will be placed on a general discussion of material practices of production and consumption.

Social Topographies

Landscapes are socially created. They cannot be divorced from the people who lived in and traversed them. Social understanding of landscape is influenced by how people visualize the land. Topographical features, such as rivers or ridges, can become imbued with social meaning. The River Humber is not simply a major river but also the boundary between north and south. It is integrated into the social identity of those who live to the north -the Northumbrians- an identity first articulated by Bede in the eighth century, and still recalled in the name of the twentieth century county of Northumberland.

The importance of the visual characteristics of landscape in the construction of social space in the Anglo-Saxon period is clearly demonstrated in the charter bounds and place-names of these people. The bounds of the twenty hides at Ham convey the immediacy of the Anglo-Saxon landscape in its personal names and in the features which it records:

'First into *Mercecumb*, then to the greenpit, then onto the tor at *Mercecumbes* spring, then to Denewald's stone, then to the ditch where Esne dug across the road ... thence on to the old way towards the white stone ... thence along the highway to the ditch, thence down to *Weakdenesford*, thence on to the hollow way ... and there to the sea' (Whitelock 1968: 482-3).

Social practice both constructed topography and was structured by it. Indeed, the architecture of Offa's Dyke was a distinguishing feature separating the Mercian kingdom from the kingdoms of the Welsh in much the same way that the ditch of Esne, dug across a road, delineated the boundary of his estate.

This section introduces the topography of Anglo-Scandinavian Lincolnshire through an exploration of how the geography was understood by its inhabitants. It is divided into two sections. The first is concerned with the rivers and fens of Lincolnshire and the second with the terrestrial topography. Integrated into this description of the natural geography of Lincolnshire are issues of mobility (the navigability of rivers and the evidence for roads) and

territory (the topographical delineation of boundaries) (*Figure 2*).

~Geographies of water~

The rivers of Lincolnshire played an active role in the definition of Anglo-Saxon territorial boundaries (*Figure 3*). This is most apparent in the extent of the Anglian kingdom of Lindsey in the northern half of Lincolnshire. The northern and eastern bounds of Lindsey were comprised of the river Humber which leads into the Trent towards Torksey (*Figure 4*). The Trent was one of the major water routes running from the Humber estuary and was possibly navigable to Burton-upon-Trent, Staffordshire (Edwards and Hindle 1991: 131). This river passed Nottingham and flowed near Derby, both of which were important Danelaw towns. Indeed, the Nottingham Domesday notes that 'in Nottingham the river Trent and the dyke and the road to York are so protected that if anyone hinders the passage of ships, or if anyone plows or makes a dyke within 2 perches of the King's road, he has to pay a fine of £8' (Parker and Wood 1977: 280a.20). At Torksey, the Roman-built Fosse Dyke formed the southwest boundary of Lindsey running west toward Lincoln where it met the Witham at Brayford Pool. From Brayford Pool, the southern boundary of Lindsey followed the Witham southwest into the Wash and then turned northwards along the coast to the Humber estuary.

Surrounded by rivers and the coast, Lindsey was essentially an island, a characteristic which was captured in the suffix *-ey (-ig/eg)* meaning 'island'. This suffix is generally associated with a promontory of land jutting out into a marsh, suggesting that the reference to the province of Lindsey as an island might be misplaced. Nevertheless, whether the *-ig/eg* element originally referred to the entire kingdom or 'to the dramatic hill, rising up from the surrounding marsh, on which the Roman town was situated' (Yorke 1993: 143), it eventually gave its name to a territory bounded by rivers and sea. Lindsey's connection with water does not end here, however. The first element *lind-* also came from an allusion to water. *Lindum* originally meant 'pool' and is thought to refer to Brayford Pool beneath Lincoln which also takes its name from this feature. Lindsey or *Lindesig*, therefore, may have meant 'the island of the people of Lincoln/the pool' (Yorke 1993: 143). The Witham, moreover, was recorded by Leland in the sixteenth century as the 'Lindis' directly associating the river with Lincoln and Lindsey (Chandler 1993: 292).

The boundaries of Holland were also strongly associated with water. The Wash and the

Witham provided Holland with its eastern and northern limits. Holland was defined by fenland separating it from the woodlands of Kesteven to the west and Cambridgeshire and Norfolk to the south and east. The Car Dyke, a Roman canal, delineated the western fen edge which was parallel to the border of Kesteven, further into the fen. Whether the Car Dyke was used for navigation is debatable. Indeed, the Car Dyke was originally constructed for drainage purposes by the Romans (Everson and Stocker 1999: 9). Nevertheless, while documentary evidence for its use during the medieval period is slight, there is an allusion to the transportation of bells from Peterborough to Lincoln (Barley 1936: 17). Furthermore, a load of dressed stone was recovered from its bed at Morton, again suggesting the use of the Car Dyke for navigation (Barley 1936: 17). Based on research into court and patent rolls, Edwards and Hindle have proposed an extent of navigation along the Car Dyke to Swaton during the medieval period (Edwards and Hindle 1991: 131). Thus, the possibility of navigation along the Car Dyke during the Anglo-Scandinavian period is questionable and further excavation is needed to determine its use.

With the exception of the western edge of Kesteven, the internal and external boundaries of Anglo-Scandinavian Lincolnshire were primarily defined by waterways and fenland. Indeed, most of Kesteven was defined by the parish bounds of Ness, Beltisloe, Winnibriggs, Loveden and Graffoe, differentiating it from Rutland and Nottinghamshire. While the Trent would seem to provide an ideal boundary, it turns into Nottinghamshire just beyond Torksey. The rivers of Lincolnshire were integrated into the territorial dynamics of the Anglo-Saxon period and, indeed, remained an important part of boundary formation until the late twentieth century with the establishment of the county of Humberside, and the resultant reorganisation of Lindsey into a truncated North Lincolnshire.

Waterways in Lincolnshire were important routes of communication during the Anglo-Scandinavian period. Current understanding of Anglo-Scandinavian navigability relies heavily on medieval sources. Edwards and Hindle (1991; 1993) have been instrumental in assessing heads and potential heads of navigation. According to their reading of medieval documents most of the major rivers of Lincolnshire were partially navigable (*Figure 5*) with the exception of the Bain. The Trent was one of the major arteries of travel. Indeed, the Domesday notations for Torksey and Nottingham guaranteed the supply and transportation of the king's messengers along the Trent to York and ensured that the Trent was free from obstructions to navigation (Foster and Longley 1924, 11; Parker and Wood 1977: 280a.20). The suitability of the Trent to travel and communication was no doubt why the Romans constructed the Fosse Dyke, connecting the Trent to the Witham at Torksey and Lincoln respectively. Indeed, this allowed

access directly from the North Sea to the heart of the East Midlands and into Yorkshire via the Humber.

The fens of Lincolnshire would have made a significant impression on the early medieval population (*Figure 6*). Indeed, prior to the eighteenth and nineteenth century reclamation projects which drained the fens, the fenlands were a substantial part of the topography of Lincolnshire. Holland was primarily composed of fenland stretching from the Witham in the north to the Welland in the south.

The fens were at once both inhospitable and full of many resources to be exploited. As Hugh Candidus of Peterborough Abbey writes in the twelfth century:

‘floods and overflowing rivers cause the water to stand on all the land forming a deep marsh which is uninhabitable, except at certain places ... However, the fen is at the same time useful for men; from it they obtain wood and rushes for fires; hay and fodder for draught beast, and thatching for house roofs and many other uses’ (Coles and Hall 1998: 68; Mellows 1949: 204).

Travel in the fens was primarily accomplished by boat (Coles and Hall 1998: 68; Mellows 1949: 204; Bradley 1982: 282). Little is known about the types of boat which would have been used to navigate the fens or the inland rivers. Indeed, the Graveney boat (Fenwick 1978), a tenth century boat found in the marshes of Kent, is the only example from England of a small merchant ship. However, with its cargo of quern stones from the Middle Rhine (Fenwick 1978: 175), the Graveney boat was probably used as a cross-Channel ship like that described by the merchant in Alcuin’s Colloquy (Mitchell and Robinson 1986: 178-9). Whether the Graveney boat, which was longer than five metres and would have carried at least seven tons (Fenwick 1978: 175, 201), was a craft which would have also been used to navigate the rivers and marshes of Lincolnshire is difficult to discern given the lack of evidence. Certainly, the fenland boats would have been shallow draughted vessels, as demonstrated in the Guthlac poems when Guthlac’s servant drew his boat up on the gravel to bring word of Guthlac’s death (Colgrave 1956: 159). However, little else can be said of the actual boats used for inland water travel during the tenth century.

Travel in the fens could be an onerous task, as the fens, ‘neither land nor water’ (Darby 1974: 93) were not stable. As Darby writes:

'ofttimes, the streams lost their definite channels, or broke their banks and spread "into black pools as much as two or three miles in breadth", or into "deep and boggy quagmires in breadth about two bowshot"' (Darby 1974: 95-6).

This liminal wilderness was what encouraged St. Guthlac, a soldier-turned-monk, who wished to devote his life to solitary devotion to God, to inhabit what was to become the site of the great monastery of Crowland. Indeed, the fens are still 'thought of as a formerly intractable and uninhabited, waterlogged wilderness, one that owes its existence to the skills of post-medieval drainage engineers' (Hayes and Lane 1992: 1). Thus, while only inhabited on the raised outcrops of land - often homes of monastic communities such as Crowland, Peterborough and Ely - the fens during the late Saxon period were areas where sedge and rushes were gathered, where fish and wildfowl were caught and cattle were grazed. These activities were no doubt tied to the seasons as the fens were highly susceptible to flooding.

Mapping of the Domesday settlements demonstrated that fenland settlements such as Kirton-in-Holland, Dowdyke, Gosberton and Holbeach were originally bounded on the east by the sandy coast of the Wash while Quadring, Donington, Bicker and Spalding to the west lined the fens creating a semicircular strip of habitation along the Wash (*Figure 7*). Across the Witham, the fens ran along the edge of the limestone wolds from Tattershall to Mareham le Fen and Thorpe St. Peter meeting up with the coastal crescent along the Wash on which settlements such as Fishtoft, Leverton, Wrangle and Wainfleet were built. None of these settlements were located directly in the fens but instead were situated along the fen edge. Indeed, the Fenland Survey indicated that the small middle Saxon settlements in the fens were abandoned during the late Saxon period presumably in favour of villages on the edge of the fenland (Hayes and Lane 1992: 215; Lane and Hayes 1993: 69)

These coastal settlements along the Wash were protected by banks raised before the end of the Anglo-Saxon period (Coles and Hall 1998: 66-7). Erosion of the off-shore shoals had increased during the Roman period and had significantly increased the dangers of flooding (Stafford 1985: 6). Indeed, excavation suggests that these banks were erected during the late Anglo-Saxon period along with other land reclamation works (Coles and Hall 1998: 67). The *Hafdic* (OD *haf* 'sea') stretched along the Lindsey coastline. Another bank ran from Fleet to Holbeach along the Wash (Stafford 1985: 6). In the medieval period, the Witham would have been lined with fenland until Tattershall where the limestone ridge of Kesteven met the eastern Wolds of Lindsey, emphasising the importance of such settlements as Fishtoft situated along the stable

coastline to movement along the Witham. Marshland would also have surrounded the Isle of Axholme, now an island only in name. The River Ancholme, with its British morpheme *an*, meaning 'marsh' further suggests a marshy river between the Wolds and the limestone ridge leading to Lincoln (Sawyer 1998: 44). Marsh and fenland comprised a great deal of the geography of Anglo-Scandinavian Lincolnshire.

Information about activities associated with waterways and fenland comes primarily from medieval sources. Domesday indicates that fisheries were found near marshes on the Isle of Axholme and along the fast moving rivers of the Trent and Witham (*Figure 8*). Geoffrey de Wirce appeared to have a monopoly on the fisheries of Axholme holding fisheries at Crowle, Belton, Eastlund and Graizelund, Epworth, Owston and Haxey (Foster and Longley 1924: 191-2). Torksey was the site of a further eleven fisheries, and along with the fisheries at Tattershall Thorpe, demonstrates the importance of the Witham to the fish trade (Foster and Longley 1924: 13). Fenland fisheries were primarily engaged in catching eels which are recorded as renders in Domesday for places such as Pinchbeck, Stenning in Bicker and Bourne (Foster and Longley 1924: 163, 156, 88).

One of the most important resources in the early medieval period was salt. As previously noted, salt appears to have been taxed exclusively by the king (Whitelock 1968: 498) and many roads and settlements take their name from their participation in the movement of salt across the landscape (Blair 1994: 86; Sawyer 1998: 15; Rudkin and Owen 1960: 84) Domesday records a large number of salterns along the eastern fen edge and the Lindsey coast (*Figure 9*). Salt processing was a seasonal activity associated with the summer use of marshy pastures for grazing livestock. Sommercotes or 'summer huts' with its saltern mounds recalls this summertime activity. It has been suggested that the sea banks and dykes which were built during the Anglo-Scandinavian period were part of a permanent settlement strategy which developed from an earlier seasonal movement to the coast for salt extraction and summer grazing. With the stabilisation of the early medieval rise in sea level during the tenth century, settlement along the coastal areas might have become more reasonable (Owen 1984, 46-7). This argument is given credit by archaeological investigation into the Sea Bank or Dyke surrounding the Wash. This was not a Roman construction as had been supposed by the antiquarians but was part of a coastal strategy against flooding implemented during the Anglo-Scandinavian period. Indeed, many of the earthworks in the fens and along rivers, date to this period when a concerted effort began to reclaim and manage the fen and marshland for arable farming (Coles and Hall 1998: 66-7).

Water was an intrinsic part of social life in tenth century Lincolnshire. The rivers and coastline represented territorial boundaries and structured the social identity of the inhabitants of Lincolnshire. Movement along the rivers was facilitated by the king, ensuring that not only his messengers were able to reach their destinations, but that those activities such as trading, which depended on riverine travel, were not impinged upon by other aquatic practices such as fishing, which inhibited mobility through the construction of weirs. The fens provided retreats for soul-weary saints and resources such as meadowland, sedge, reeds, eels and waterfowl for the other inhabitants of the fen-edge. Indeed, while rivers and fen could represent boundaries of social identity and places of isolation, in other ways they were far from liminal. The rivers were places of great activity and movement, while the fens held valuable resources to be harvested by monk and merchant alike.

~Geographies of land~

The sharp limestone ridge running the length of Lincolnshire is perhaps its most striking feature. A narrow crest above the Witham, it broadens out in Kesteven further emphasizing the descent into the fens of Holland to the east and the flood plain of the Trent to the west. In Lindsey, the River Ancholme runs along the eastern side of the ridge separating it from the chalk wolds further to the east in the North Riding. Today, after massive fenland reclamation, Lincolnshire is considered to be a 'flat' county. However, in the tenth century, the landscape of Lincolnshire was a dialogue between watery fens and marshland, and upland hills and wolds.

The Roman roads accentuate the outline of the uplands (*Figure 2; Figure 10*). Ermine Street runs along the top of the limestone ridge from the ferry at Winteringham to Lincoln and then on to Stamford. Just north of Lincoln, Ermine Street is met by a Roman road, branching off to the west in an arch, skirting the edge of the lowland river estuaries of the Trent and Don as it heads eventually towards York. This provided an alternate route north to Ermine Street, which depended on the ferry linking Winteringham and Brough. There is one, possibly two, Roman roads branching off to the east of Ermine Street. While there is little doubt of the one leading from Ownby Cliff to Usselby, there is some doubt about the Caistor - North Kelsey road. The Ordnance Survey lists this as a Roman road joining Caistor with Ermine Street (Ordnance Survey 1973). Both Margary and Stafford list it as a Roman road between Caistor and North Kelsey but do not link it to Ermine Street (Stafford 1985: 10; Margary 1973: 192). This road has been left off of more recent maps (Sawyer 1998: 17) which implies that Caistor was only

associated with the Roman road leading from Horncastle to North Ferriby and that there were no Roman roadworks leading to or across the Ancholme. Just below Lincoln, Ermine Street is met by the Foss Way coming in from the south-west. In Kesteven, Ermine Street is paralleled by the extension of King Street and a road connecting the two which forms a double diamond across the broad limestone uplands. Ermine Street is further crossed at Saltersford by a Roman road heading east towards the Wash across King Street (Sawyer 1998: 17; Margary 1973: 192).

The Foss Way continues its north-easterly movement just above Lincoln, branching at Bullington. The lower branch lines the edge of the northern fens towards Burgh-le-Marsh, while the northerly road continues through the wolds towards Grainthorpe. The prehistoric pathway, now called High Street, which was presumably used as a Roman road, follows the edge of the Wolds from near the mouth of the Ancholme at South Ferriby to the beginning of the northern fens at Horncastle crossing both branches of the Foss Way (Margary 1973: 192; Sawyer 1998: 17; Ordnance Survey 1973). A ferry is recorded in Domesday at South Ferriby; its importance as a ferry port obvious in its name (Foster and Longley 1924: 106). This ferry would have provided an alternate link to Brough (or North Ferriby) on the north shore of the Humber (Margary 1973: 192). However, the Yorkshire Domesday does not mention a ferry for either settlement (Faull and Stinson 1975: 6N77, 6N64, 5E3).

Parallel to this is another Roman road running through the wolds. This road crosses the branches of the Foss Way before arriving near the coastline at the northern fen edge at Donington. One final road begins at Stixwold on the northern fen edge and runs parallel to the northern branch of the Foss Way towards Saltfleetby. This road crosses the lower branch of the Foss Way as well as the Roman road running parallel to the prehistoric pathway (Margary 1973: 192). The Roman roads provided a good internal coverage of Lincolnshire and the East Midlands, linking the inlands to the coast.

The coastal termini of the Roman roads which end at Grainthorpe, Saltfleetby and Burgh-le-Marsh are all associated with salt manufacture in the Roman, late Saxon and medieval periods (Owen 1984: 48; *Figure 11*). Indeed, Saltergate (the street of the salters) in Lincoln is part of the road leading to Grainthorpe, at which point it is called Salter's Lane emphasizing the movement of salt from the coast to the town (Rudkin and Owen 1960: 84). The Roman road crossing the Witham near Grantham is called Salter's Way reflecting the inland movement of salt. The importance of salt to the early medieval economy is indicated through the names of roads and settlements which give voice to the movement of the salt-carts across the landscape

(Blair 1994: 86).

Unfortunately, little is known about the local roads and pathways which would have complemented the Roman roads and formed communications routes between settlements. These route-ways (OE *stræts*, *wægs*, *paðs* and *herepaðs*) are recorded in southern England in boundary clauses along with fording places and other features. However, few such records can be attributed to Lincolnshire. Communication and mobility across the rural landscape primarily occurred along roads and pathways between settlements. While rivers were an important medium of transport, navigability was most likely limited to the major arteries such as the Trent and Witham.

Charter evidence suggests that route-ways were visually distinguished, a difference which is articulated through their nomenclature (Hooke 1981: 101). Indeed, *stræts* were often associated with Roman roads, the paved surfaces of these routes making them important for long distance travel (Hooke 1980: 43; 1981: 100-1). The combined use of *port* and *stræt* further link these roads to the Roman network with a renewed focus towards the late Anglo-Saxon *port* or market town, so often founded in previous Roman fortresses (Hooke 1980: 45). The paved nature of these roads and the stonework of the Romans is remarked upon by Anglo-Saxon poets who recalled 'the ancient work of giant's within the fortress, streets stone-paven' (Hooke 1981: 301). *Stræts* are often called 'great' which 'was probably an indication of both size and status and perhaps, too, of standard, a meaning also implied by the adjectival use of 'high'' (Hooke 1981: 306). Certainly, the *stræts* are linked to the salt trade, a resource jealously guarded by the king (Whitelock 1968: 498). Indeed, Hooke suggests that 'salt was the major commodity to be carried for long distances across the kingdom and beyond its confines' (1981: 306).

Herepæð was also used to refer to a Roman road. The word *herepæð*, or 'army road', is often linked to the movement of armies and the importance of the route to strategic defence (Hooke 1981: 307). However, one wonders if this places too much emphasis on military action rather than military service. The *trinoda necessitas* of armywork, bridgework and fortresswork were the three public duties owed to the king. It would not be surprising if armywork also extended to the upkeep of roads so vital to trade and communication as well as to the movement of troops.

Another word frequently used in reference to route-ways was *weg*. These appear to have been unpaved paths running between settlements often along ridgeways (Hooke 1981: 308-10). The association of adjectives such as 'clay', 'wooden', 'red' or 'green' with the *wegs* demonstrates

the difference between these roads, occasionally lined with logs, and the stone paved *stræts* and *herepæð* (Hooke 1981: 308). Unfortunately, these are the route-ways which are the least visible archaeologically, especially in absence of local landscape studies which are able to identify these routes.

The integration of road and waterway coincided at fords, bridges and ferries. Hooke notes that bridges were rarely used except to span small streams (Hooke 1981: 312). Instead, a river crossing was either referred to as a *ford* (ford) or a *gelad* (lode or ferry). Fords were often associated with a particular person, and sometimes served as meeting places (Hooke 1981: 312). Settlements at the crossing point of a river often recalled that practice in their name. Thus, Waithe, Stenwith and Langworth incorporate the Old Norse word *vað* or 'ford' (Gelling 1984: 82; Sawyer 1998: 18). Stapleford combines the Old English version of ford with 'staple', suggesting that posts were associated with the crossing (Gelling 1984: 69). Market Rasen, at the head of navigability of the Ancholme takes the last part of its name from the Old English word *ræsn* or 'plank' and probably refers to a plank or wooden bridge which crossed the Ancholme at this point (Sawyer 1998: 18).

Domesday records ferry points at Lea, South Ferriby, Barton-upon-Humber, Winteringham and Grimsby (Foster and Longley 1924: 61, 106, 45). Other references to ferries are recorded within the place-names themselves. Indeed, Kinnard's Ferry (documented to the twelfth century) derives its name from the Old English personal name *Cyneheard*, thus suggesting that the 'ferry' place-name was there during the Anglo-Scandinavian period (Barley 1936: 7; Sawyer 1998: 18). Other likely ferry points were at Littleborough where the Roman road of Tillbridge Lane crosses the Trent; Newton-on-Trent which is mentioned in the twelfth century; and possibly Newark where the bridge was built during the twelfth century (Sawyer 1998: 17-18). Tolls would have likely been taken at ferry points and bridges. Gilbert de Gand was accused of taking uncustomary tolls on 'bread, fish, hides, and very many other things' (Foster and Longley 1924: 215) at Barton-upon-Humber and South Ferriby during the eleventh century. Thirteenth century practice indicates that taxes were levied on the use of bridges and ferries in addition to the price paid to the ferryman for passage (Stenton 1965: 258-9). While the documentary evidence for Anglo-Saxon taxing practices has rarely survived, the movement of people and goods across rivers provided an obvious opportunity for kings and aristocrats to raise revenues.

Roads and rivers were an integrated system of travel along which people, goods, and armies travelled. Roads would have been negotiated by cart, packhorse and foot travel.

Archaeologically there is little evidence indicating the use of ox-and-cart or of horse-riding due to the lack of surviving material. However, the Cheshire Domesday notes that oxen were used to pull carts of salt while the horse was used instead as a pack animal (Douglas and Greenaway 1953: 871). Horses were commonly used for transport as indicated in the *Rectitudines Singularum Personarum* (The Rights and Ranks of People) which often notes the use of the horse in manorial life (Douglas and Greenaway 1953: 813-817). However, while horses may have been used to transport people or packs, oxen were primarily used for hauling goods before the twelfth and thirteenth centuries (Langdon 1986: 49, 114). This was especially true for the Anglo-Saxon period when the horse 'tended to be very much a luxury beast, primarily a riding animal for the well-to-do' (Langdon 1986: 26).

The calculations done by Langdon suggest that the average rate of travel was two miles per hour for ox and cart and twice that for horse wagon (1987: 56; 1986:162-3). Stenton further suggests that horses were easily able to be ridden at a rate of thirty miles per day and faster if necessary (1965: 255). Carters travelled in groups as is noted by the law codes (Attenborough 1922: 79). This is not surprising considering the notation in the Cheshire Domesday of carts being overloaded to the point of the axle breaking (Douglas and Greenaway 1953: 871), or in the 1294 journey to Norwich where extra help was hired because of the difficulty of travel and the consequent strain on the horses (Stenton 1965: 256).

Travel during the late Anglo-Saxon period was a daily activity, from the movement of salt carts along the *stræts* and *herepæðs*, to the daily movement around manorial lands along *wegs* and lanes. Interaction between road and river was regulated through the taking of tolls at bridges and ferries. There is little documentary evidence for Lincolnshire which would further complete the picture of travel taken from the Roman roads, navigable rivers and place-names. However, one can envisage the carts and horses moving salt from the coast along the Roman roads towards Lincoln and down through Grantham, or the fisherman rowing his boat to Lincoln from the fisheries along the Witham. The landscape of Lincolnshire was not static but filled with movement, not only along the roads and rivers but in daily movement of people in the fields, villages and towns.

These people lived in a changing landscape increasingly oriented towards privatisation of land. Through the breakup of the middle Saxon estate system and minster *parochiae*, the landscape became dominated by the manor and the parish (Sawyer 1998: 155; see below). Tenth century administration tended to be located in villas rather than in the landscape, bringing the locale jurisdiction of hundred and wapentake under the king (Sawyer 1998, 136). Domesday

addresses the hundreds within the Danelaw at twelve carucates to the geld, recognising an Anglo-Scandinavian land division of sixes and twelves, rather than the Anglo-Saxon division of fives and tens found in the south of England (Stenton 1924: xii-xiv).

The Scandinavian colonisation transfigured the toponomy of Lincolnshire, the Anglo-Scandinavian population adopting the Scandinavian village suffix nomenclature *-by* and the associated outlying settlement suffix of *-thorpe*. These settlements often recorded the appearance of their *locale* within their names. Thus, Birthorpe was 'the outlying farm by the birch trees' and Fenby and Moorby were the villages by the fen and moor respectively (Cameron 1961: 78-9). Other names recorded landholders, such as *Afi*, now contained in the wapentake Avelund (*lundr* 'wood'). The wapentake of Lawress originally meant Lag-Ufr's (Law-wolf's) coppice (Cameron 1961: 61-2; Sawyer 1998: 102-4). The settlements of Hawerby and Hawthorpe, derived from the personal name *Havarðr*, imply both an exchange of land during the Anglo-Scandinavian period and a change of local dialect through the addition of the Scandinavian suffixes *-by* and *-thorpe*. These names for village (*-by*) and outlying farm (*-thorpe*) are common throughout Lincolnshire and the Danelaw (Cameron 1961: 78-81).

Despite the impact of Old Norse on the language and placenames of tenth century Lincolnshire, many of the wapentakes retain Old English names which recall the names of meeting-places as particular trees, hills or burial mounds. As Sawyer notes: 'Calcewath was a ford, Lovedon a hill, Louthesk and Aswardun refer to particular trees, an ash and a thorn, and several were named after hills, or perhaps, burial mounds: Aslaoe, Haverstoe, Candleshoe, Wraggoe, Beltisloe, Langoe, Threo' (1998: 136). Allusion to the brandishing of spears at wapentake assemblies is found in the wapentake of Gartree or 'spear tree' (Stafford 1985: 143).

While Domesday was written after the tenth century, it still provides one of the best records for the use to which the land was put and to the resources it held during the early medieval period. Woodland (both coppice and pasture) is recorded in Domesday, with high densities in lower Kesteven (the area just below the Wolds before the northern fens and above Torksey) as well as at the Trent estuary. The woodlands of Kesteven are no surprise considering that the first part of its name is British for 'wood' (Cameron 1961: 57). Nevertheless, the Domesday figures for Lincolnshire indicate that only 3.5% of Lincolnshire was woodland, half the amount of the national average for England in 1086 (Rackham 1976: 59-61; cf. Sawyer 1998: 22).

Arable farming was not heavily practised in Lincolnshire. Most of Lincolnshire ranges from 30-50% arable land during the eleventh century with an area below Sleaford remarkably

reaching 90% arable land (*Figure 12*). Associated with arable farming was the use of the meadow to feed oxen during the winter. Indeed, those areas with more arable land also register higher amounts of meadow (Sawyer 1998: 25). Arable land was divided into hides and acres during the Anglian period in Lincolnshire. Terminology changed during the Anglo-Scandinavian period to from hides to ploughlands which were comprised of eight oxgangs (Stenton 1924: x). Reference at Domesday alters yet again to the carucate and bovate of the Norman administration (Darby 1971: 37; Sawyer 1998: 137). The Danelaw organisation of carucates differed from those in the south in that they were distributed in sets of six and twelve rather than in sets of five and ten which was the common practice in Wessex (Darby 1971: 37).

Lincolnshire participated primarily in a pastoral agricultural practices. Sheep were the predominant animal and were grazed on the salt marshes along the coast and in the limestone and chalk wolds and uplands (Sawyer 1998: 25-27). Indeed, the decrease of cattle farming from the late ninth century and the subsequent rise in shepherding during the tenth century has been suggested as one of the reasons for the low amounts of woodland. The rise in sheep is also linked to a decrease in pigs who used woodland as pannage (O'Connor 1982: 12). The amount of land needed to support the Anglo-Scandinavian population of Lincolnshire would have been immense. The rural population estimated from Domesday figures equals approximately 100,000 people. A further 10,000-20,000 towns-people living within Lincoln, Stamford and Torksey can be added to this number (Sawyer 1998: 27). The town of Lincoln (comprising a seventh of the population of Lincolnshire) would have needed approximately 700 sheep not to mention the 500 cattle and 400 pigs. This number of sheep would have been culled from an collective herd of 5,000 head of sheep grazing over 5,000-10,000 acres of land (O'Connor 1982: 48).

The landscape of Lincolnshire was full of activity during the Anglo-Scandinavian period. It was a landscape of agriculture, of shepherds, of cowherds and swineherds, of cottars and boors who ploughed and maintained the land. Scandinavian colonisation transformed the landscape through nomenclature and dialect, renaming and re-organising the landscape. Regional assemblies still met at, or retained the names of meeting-places, so important to Germanic administration, while settlements, fords and bridges took on the names of local landholders. The tenth century inhabitant of Lincolnshire would have recognised the palimpsest of Anglian features, still visible through the reinscription of the landscape through Anglo-Scandinavian social practice, brought through the colonisation of Vikings, and the transformations occurring throughout England during the late Anglo-Saxon period.

Settlements and Communities

Chapter I introduced the concepts of social practice and the construction of social identity. It explored the ways in which people - as individuals and as parts of communities- structure their landscape through their daily practices and interactions. Much of the discussion focussed on the importance of material culture to social practice and the construction of landscape. This section seeks to explore the ways in which the Anglo-Scandinavian population understood their landscape. It concentrates on the issues outlined in Chapter I: territorial identity and community interaction, interweaving concepts of mobility and social orientation. The rural and urban landscapes are discussed in separate sections due to the complexity not only of the information concerning manorial and town development, but also, of the archaeological debate surrounding towns and their hinterlands. These will be brought together in the concluding section to reconcile this artificial separation between rural and urban social practices.

There are a number of important themes which are developed throughout this section. The first one concentrates on the shift from the Anglian kingdom to the English county. The territorial development of Lincolnshire evolved from the middle Saxon kingdom of Lindsey to become the Danelaw territories of Stamford and Lincoln. These territories were then amalgamated into a single county with its administrative centre located in Lincoln during the 11th century. These developments were interrelated with the change most concisely expressed as a shift from a tributary to a feudal society. There was an increased privatisation of land by the aristocracy. Their investment in surplus exchange influenced the emergence of the town, the manor and the parish. Amongst these general themes are the people who lived in the landscape. It is their understanding and interaction with their landscape, within the developing manors and towns, which this section is interested in elucidating.

~Kingdoms and counties: territorial identities within Anglo-Scandinavian Lincolnshire~

The first mention of Lincolnshire in the *Anglo-Saxon Chronicle* is in the year 1016 where it is recorded that:

'prince Edmund rode to Northumbria to Earl Uhtred, and everybody imagined that they would collect levies to oppose king Cnut, but they went into Staffordshire, and to Shrewsbury and to Chester and harried on their side and Cnut on his. He went through Buckinghamshire into Bedfordshire, thence to Huntingdonshire, along the fen to Stamford, then into Lincolnshire, and thence into Nottinghamshire, and so to Northumbria towards York' (Garmonsway 1953: 147-9)¹.

Until this time, Stamford and Lincoln are mentioned as members of the Five Boroughs and Lindsey (the territory of Lincoln) is often noted as a territory in its own right. The exact date of the creation of Lincolnshire is difficult to determine. Sawyer rightly notes that the change in terminology mentioned in the Chronicle only says that by the time the section including 1016 was compiled, Lincolnshire was in existence (Sawyer 1998: 134). However, in 1015, Lindsey is mentioned as a separate territory suggesting that the change occurred during the second decade of the eleventh century. The delineation of shires was a process that began in the tenth century under the Wessex administration. However, during the tenth century, the Danelaw appears to have been under a separate organisation governed by the Five Boroughs of Lincoln, Stamford, Derby, Leicester and Nottingham (Garmonsway 1955: 110). The one reference in the Anglo-Saxon Chronicle to seven boroughs for the year 1015 is thought to refer to York and Torksey. Torksey is assumed to be the one of the additional boroughs as it was later included in Domesday with a population of approximately 200 burgesses. York is presumed to be the seventh borough due to the amount of land held by Mercian thegns under Edward the Confessor (Garmonsway 1955: 146; Stenton 1971: 388, note 2; *Figure 13*). East Anglia does not appear to have been part of this Danelaw administration despite its location within the area of Scandinavian colonisation. This distinct nature of the Danelaw is articulated through the law codes. It is first noted in the treaty between Alfred and Guthrum (886-900) and was still in existence by 1020-3 in the laws of Cnut (Whitelock 1968: 380, 421).

The delineation of the shires in the East Midlands during the eleventh century presumably required little more than a change of name from territory to shire, each borough administering the same lands as it had during the tenth century. The exception to this is Lincolnshire. It

1

'ƿa fyrdedon hi into Staeffordscire and into Scrobsæton and to Legceastre, and hi heregodon on heora healfe and Cnut on his healfe. Wende him ut þuruh Buccingahamscire into Bedanfordscire, and ðanon to Huntadunscire, swa into Hamtunscire andlang fennes to Stanforda, and þa into Lindcolnescire, þanon ða to Snotingahamscire, and swa to Norðhymbran to Eoferwic weard' (Old English Corpus 1998)

amalgamated the territories of Stamford and Lincoln within a single shire centred on the borough of Lincoln. Politically, the creation of the East Midland shires effectively dismantled the Danelaw and brought the East Midlands and Yorkshire under the administrative organisation of Wessex, a Wessex governed by the Danish king Cnut. While the laws of Edgar clearly indicate a separate territorial and ethnic identity for the Danelaw, this ceased to be important by the reign of Cnut when the Five Boroughs were renamed as shires. Indeed, the need for the Danelaw to exist as a distinct society may have been removed under the rule of a Scandinavian king (Sawyer 1998: 133).

The amalgamation of Stamford and Lincoln into a single shire is curious considering that the other members of the Five Boroughs became the central settlements of their own shires. Moreover, the territories of Holland, Kesteven and Lindsey still retain separate identities in documents such as Domesday and the Lindsey survey (Foster and Longley: 1924). Indeed, a territory the size of Lincolnshire was administratively unwieldy (Sawyer 1998: 134). Lindsey was governed through its riding organisation, which presumably originated under Scandinavian rule, as did the Yorkshire Ridings. Kesteven was once referred to as a riding in Domesday and certainly 'business concerning it that was normally a matter for the shire court at Lincoln was occasionally dealt with in Kesteven' (Sawyer 1998: 134). While subsumed under a single administrative unit during the eleventh century, the earlier territories within Lincolnshire were still active throughout the medieval period and, indeed, until the 1974 reorganisation of local government.

Lindsey was a strongly articulated territory during the tenth and eleventh centuries, as can be seen both in the documentary sources and in the archaeology (below; Chapter IV). Lindsey further appears to have had a separate identity from the other burghal territories in the East Midlands. In the *Anglo-Saxon Chronicle* citations of the Five Boroughs, Lindsey was often singled out, as in 1012, when 'at once Earl Uhtred and all the Northumbrians submitted to [Swein] as did all the people of Lindsey, and then all the people belonging to the Five Boroughs, and quickly afterwards all the Danish settlers north of Watling Street' (Whitelock 1968: 223). The agreement between Cnut and the men of Lindsey against Æthelræd in 1014 is indicative of the strong territorial identity within Lindsey during the Anglo-Scandinavian period. Unfortunately, their support was misguided as Cnut fled leaving the men of Lindsey to face the army of Æthelræd. Lindsey was 'ravaged and burnt, and all the men who could be got at were killed' (Whitelock 1968: 224). Originally a middle Saxon kingdom subsumed into the Mercian hegemony, Lindsey continued to assert a strong political identity within the Anglo-Scandinavian territories.

This is not the case with the territory of Stamford which was allied with Wessex during the early tenth century. In the spring of 922, Stamford was taken by Edward the Elder, who built a burh on the southern bank of the Welland to accompany the Danish burh already established on the north bank (Garmonsway 1955: 103; *Figure 14*). Previously, Stamford had been specifically associated with the Danes, as can be seen by Æthelweard's 894 report that, in York, he met 'the enemy, who possessed large territories in the kingdom of the Mercians, on the western side of the place called Stamford ... between the streams of the river Welland and the thickets of the wood called Kesteven by the common people' (Campbell 1962: 51). With Edward's conquest, Stamford, along with Kesteven and Holland, therefore, appears to have redirected its allegiance towards the house of Wessex.

Conversely, Lindsey was more strongly linked to Yorkshire. While little is known from documentary sources, Northumbrian coinage was occasionally minted in Lindsey. Sihtric (921-7) appears to have struck coins based on the York 'St. Peter' coinage in Lincoln (Blackburn *et al.* 1983: 14). Indeed, it was not until the fall of Eric Blood-axe that English coinage was minted in Lincoln under Eadred (Blunt *et al.* 1989: 192, 313; *cf.* Sawyer 1998: 124). These St. Martin coins were one of the few issues attributed to Eadred, and it has been suggested that this coinage with its profile of Eadred with his crown was a deliberate signal to the north that Wessex now ruled there. Subsequently, Lincoln became one of the largest mints in England. Indeed, between Lincoln and Stamford, Lincolnshire produced a quarter of the coinage during the reign of Edward the Confessor (Metcalf 1981: 74-7; *cf.* Sawyer 1998: 185).

The tenth century political separation between the territory of Stamford and Lindsey is likewise demonstrated by the sculptural traditions. Early in the tenth century, a social elite in Lindsey identified themselves with the kingdom of York through Hiberno-Norse memorial stones, including Borre-style covers from Hackthorn and Lincoln (Everson and Stocker 1999: 82). There are very few Borre style monuments within England, and they are often directly associated with Norway. Their early date and connection with Northumbria, Cumbria and the Isle of Man has been interpreted as an expression of Norse influence and identity (Bailey 1980: 54-5, 216-222). The examples of Hiberno-Norse sculpture in Lindsey demonstrate social links with the kingdom of York through their petrology. The stones found at Holton-le-Clay and Thornton Curtis parallel the stones buried under York Minster both in design and in petrology (Everson and Stocker 1999: 50, 172, 265). The cross-shaft at Crowle was originally cut from the millstone grit outcrop at Knaresborough, West Yorkshire, a petrology also familiar in the city of York (Everson and Stocker 1999: 28, 147). While Hiberno-Norse influence can be seen in sculpture throughout the Five Borough territories, these Lindsey examples add further

support to the numismatic evidence that Lindsey was a part of a 'greater Northumbria' (Everson and Stocker 1999: 81; Blackburn *et al.* 1983:13-14).

During the early to mid-tenth century, Kesteven seems to be participating in a regional sculptural tradition associated with the 'Wheel Rim Type' hogback (Everson and Stocker 1999: 35). It is probable that these stones were predominantly quarried in Ancaster within the territory of Stamford. This hogback has only basic similarities to the zoomorphic house-like forms found in Northumbria and Scotland. Instead, these monuments bear cross images reminiscent of eighth and ninth century sarcophagi (Everson and Stocker 1999: 36-7, 86). The Trent Valley hogbacks are also present in both Nottinghamshire and Derbyshire suggesting that these territories were participating in a sculptural tradition which 'had an internal cohesion distinguishing it from Anglo-Scandinavian groupings to the north and south' (Everson and Stocker 1999: 86).

Later tenth century sculpture further maintains a distinction between Lindsey and Kesteven in the funerary monuments referred to as grave covers (*Figure 15*). In Lindsey, the Borre style stones ceased to be used and, instead, flat grave slabs with a simple interlace pattern of Carrick bends and bordering cable design were produced from stone quarried near Lincoln (Everson and Stocker 1999: 51-5; *Figure 16*). These grave covers were both unusual in design and in their uniformity, and were perhaps linked closely to the re-establishment of episcopal power in Lindsey under the gambits of the southern English kings and archbishops (Everson and Stocker 1999: 84). The stylistic separation of Lindsey from the rest of the Five Boroughs, politically agrees with the Wessex advancement by Edward and Æthelflæd into the Five Borough territories of Stamford, Nottingham and Derby. Lincoln and Lindsey did not come under the sway of Wessex for a prolonged period of time until later in the tenth century under Edmund (939-46) and his brother Eadred (946-55). The extent of authority that these kings had over the Five Boroughs is debatable. It is probable that they were only nominally overlords of territories which continued to be administered through the local aristocracy (Sawyer 1998: 123, 126). Nevertheless, the exclusive distribution of these covers within Lindsey would also argue that a distinct social identity was associated with Lindsey. This would correspond with documents which differentiate Lindsey from the rest of the Five Boroughs (Everson and Stocker 1999: 84-5).

The corresponding mid-tenth century Kesteven covers from below the Witham are distinguished by their double-ended cross-motif. These stones were occasionally used north of the Lindsey border as well as in Nottinghamshire, Derbyshire and Leicestershire (Everson and Stocker

1999: 86; *Figure 17*). This further emphasises the isolated distribution of grave covers within Lindsey, as opposed to the inclusion of Kesteven traditions within the Five Borough territories. This distinction between the Lindsey and Kesteven traditions ceased during the eleventh century with the more general East Midland tradition based on Barnack/Clipston monuments (Everson and Stocker 1999: 87).

Holland, comprised predominantly of fenland, was rarely mentioned in the historical documents. Its prime recognition comes from the organisation of the Lincolnshire Domesday Survey where it formed one of the administrative units (Foster and Longley 1924). During the middle Saxon period, Holland was inhabited by two tribes, the *Spaldas* and the *Bilmiga* (Davies and Vierk 1974: 234-6, 283; Lane and Hayes 1993: 68). The boundary of Holland appears to have delineated these territories from Mercia, although both were later subsumed into the Mercian confederacy, as was Lindsey (Lane and Hayes 1993: 68). The Fenland Survey indicated that during the middle Saxon period, the Lincolnshire fens were inhabited and it was only in the late Saxon period that the settlements moved off the fenland (Hayes and Lane 1992: 215; Lane and Hayes 1993: 68-9). Despite obvious inhabitation during the middle Saxon period, the fens were perceived by eighth century society as a liminal wilderness, home to a 'multitude of fugitive settlements and the secret dwellings of wretched spirits' (Bradley 1982: 257). The fens were enough of a wilderness to provide a retreat for St. Guthlac so that he might devote his life to God.

After the death of Guthlac, the monastery of Crowland was founded and became a prominent monastic establishment during the medieval period. Indeed, raised promontories on the edges of the fens were favoured locations for monasteries, such as Crowland, Peterborough and Ely. During the late Saxon and medieval periods, the field systems in Holland did not conform to the open field systems established on more stable soil. Instead, agglomerative fields were maintained in ditched strips called *dylings* (Lane and Hayes 1993: 69). Intercommoning of livestock was extensively practised in the fens during the medieval period (Roffe 1994: 80) and presumably during the late Saxon period as well. However, despite its evident management, Holland was a territory less inhabited than Kesteven or Lindsey; a situation which no doubt contributed to its rare expressions of territorial identity.

The development of Lincolnshire, from the Anglian territories of Lindsey, Kesteven and Holland, influenced the social identities of their inhabitants and affected their interactions. Lindsey, despite a change of allegiance from the northern kingdom of York to a Wessex rulership, still maintained a separate territorial identity. After the amalgamation with Wessex,

the local aristocracy still preferred to signal its identity through the sculptural tradition, indicating a continued investment in a distinct society. While there may have been some emulation of Kesteven practices, or immigration by Kesteven lords into Lindsey, the sculptural designs associated with Lindsey were not adopted by other manorial lords outside of this territory.

While the delineation of Lincolnshire and the other East Midland shires might have reconciled the administrative dichotomy which existed between the Danelaw and Wessex, the territorial identities, apparent in the tenth century, continued to be recognised throughout the eleventh century and beyond. During the tenth century, Lincolnshire was a complex arrangement of territories, with strident Lindsey in the north and southward looking Kesteven, as well as the quiet fenlands of Holland. Indeed, the amalgamation of these territories into one shire is surprising considering the distinct identities apparent in the historical and archaeological evidence as well as the direct transition between Five Borough territory and shire in the rest of the East Midlands and in Yorkshire. The territorial distinctions within Anglo-Scandinavian Lincolnshire were structured through sculptural traditions, dialect and political organisation, and formed an important component of the landscape and in the lives of the people who inhabited it.

~Ploughing and supporting themselves: Anglo-Scandinavian rural practices~

Bowman begins his discussion of the Langton hundred in the late ninth and tenth centuries with the remark 'the chronology and process by which the dispersed pattern of the early to middle Saxon settlements was transformed into the known pattern of medieval villages and hamlets is still poorly understood' (Bowman 1996: 130). Indeed, the shift from minster and *villa regalis* to parish and manor is part of a profound change in territorial and political organisation where more is understood about the end result than its beginnings. This is further complicated in Lincolnshire by Scandinavian colonization and the virtual absence of documentary sources. Not only must one consider the general shift in the tenth century, from multiple estate to manor, but also one must contend with the Scandinavian strategies for land organisation, for which there is no association outside of the Danelaw where more documentary information exists. Because of the general lack of historical information for Lincolnshire, this discussion will borrow widely from the general understandings of the period and, where possible, link them to the Lincolnshire landscape.

The Anglian social landscape was organized into multiple estates managed by a focal settlement, often a *villa regalis* or royal vill. These lands were not necessarily contiguous; they represented the holdings of the aristocracy, who maintained themselves by progressing through their lands and by requisitioning the food rents and dues owed to them. These 'tribute and food-render regimes were designed to feed large, mainly itinerating households on an episodic basis' (Blair 1994: 140). Glimpses of the estate system can be seen in royal dues recorded in Domesday, where settlements such as Leighton Buzzard were expected to provide the king with 'a day's provisions of wheat, honey and other things plus dues for the upkeep of the king's hunting dogs' (Stafford 1985: 30). This 'farm of one night' demonstrates the mobility on which these tribute relations depended.

The middle Saxon estate system was the product of wider social changes which had been occurring from the early Saxon period. The itinerant tributary relations, between king and landholder, was derived from early Saxon social organisation. Kings held authority primarily over people, rather than land, during the early Anglo-Saxon settlement of England (Scull 1993: 67; 1992: 6). The aristocratic dependence on food renders and other dues in the middle Saxon period is a continuation of this investment in people. This association with people can further be seen in the politics during the middle Saxon period, when kingdoms existed as a set of allegiances given to a king during his lifetime, but which often held no substance after his death. As Sawyer notes, 'overlordships like Penda's were inherently unstable; few outlived the death of their creator' (1998: 75). The fluctuating boundaries of the kingdoms during the middle Saxon period are representative of a social organisation based on tribute relations and allegiance agreements.

Through the middle Saxon period, kings and kingdoms became more entrenched through the development of an aristocracy of ealdormen, former kings and subkings who had lost their independent status through defeat in battle by other kings. Power was embedded in the hands of fewer contenders over larger territories. The introduction of *bocland*, through the auspices of the Church, introduced the concept of alienable land from the king which could be disposed of by the landholder. This was introduced to provide a mechanism whereby the Church could gain the lands of its followers through bequests. As the will of Æthelric son of Æthelmund in 804 notes:

'these are the names of those lands which I will give to the place [minster] which is called Deerhurst, for me and for Æthelmund my father, if it befall me that my body shall be buried there: Todenham, and Stour, Shrawley and

Cohhanleah; on the condition that community carries out their vows as they have promised me' (Whitelock 1968: 472; cf. Blair 1988a: 2-3).

This ability to gain land was obviously sought after by the aristocracy, who instituted themselves as abbots but did not give up the pleasures of their secular lives. The complaint by Bede to the Archbishop of York in 734 is clearly disparaging of the state of affairs. He writes that the abbots are

'laymen and not experienced in the usages of life according to the rule or possessed by love of it, give money to kings, and under the pretext of founding monasteries by lands on which they may more freely devote themselves to lust ... the very same men now are occupied with wives and the procreation of children, now rising from their beds perform with assiduous attention what should be done within the precincts of monasteries' (Whitelock 1968: 741).

Nevertheless, whatever the abuses of sacred offices, the alienation of land from the king and the increasing complexity of the aristocracy were part of the momentum behind the development of the manor, the parish and the shire.

During the middle Saxon period, the agrarian landscape was divided into estates administered by kings and thegns. Some thegns held bookland retaining both the sake and soke of the land, meaning that they both held the land and derived customs from its tenants. Sake and soke were divisible, in that one lord could have the sake of the land (or hold the land) and loan the soke out to another, who would then be responsible for the *trinoda necessitas* (or three duties) incumbent on any lord: bridgework, burghwork, and fyrdwork (Roffe 1996: 110-11). This concept of bookland was sustained throughout the late Saxon period as can be seen from the *Rectitudines Singularum Personarum* (The Rights and Ranks of People) thought to have been composed in the first half of the eleventh century (Douglas and Greenaway 1953: 813). It opens with the Thegn's Law which states; 'the law of the thegn is that he be entitled to his bookright, and that he shall contribute three things in respect of his land: armed service, and the repairing of fortresses, and work on bridges' (Douglas and Greenaway 1953: 813). These services were owed to the king, by virtue of the position of the thegn in the aristocratic community as a landowner.

Alongside the estates of the *villa regali* was an ecclesiastical network of minsters and their associated *parochiae*. These minsters were often:

'founded near royal *vills*, their *parochiae* coterminous with the territories which the *vills* controlled ... royal *villae* and *regiones* constituted a coherent matrix within which the (often substantial) endowments of ... minsters were created, and in relation to which their *parochiae* were defined' (Blair 1988a: 2).

It is unfortunate that there is little evidence in the Danelaw for pre-Anglo-Scandinavian ecclesiastical development. The lack of evidence makes it unclear whether there were 'genuine regional contrasts, or merely differences in later developments, in the available evidence or in the preconceptions of local studies' (Blair 1988a: 2). Nevertheless, current research agendas are beginning to shed more light on ecclesiastical developments in Lincolnshire during the Anglian and Anglo-Scandinavian periods (Everson and Stocker 1999; Stocker 1993; Gem 1993).

During the eighth century, minsters were able to secure rights of burial within their close. This followed on the heels of the Final Phase burials and mounds, such as the Sutton Hoo complex (Geake 1992), which were not directly associated with the minsters. As Blair remarks, conversion to Christianity 'did not necessarily involve forsaking one's ancestral cemetery' (1994:70). This transition, from ancestral burial ground to minster graveyard, is poorly understood (Blair 1994: 70). However, on the eve of the Scandinavian invasions, the minsters were a focal point in the landscape. Religious practices were oriented towards these sacred places. The dead were carried from the outlying settlements to be laid to rest in the shadow of the minster. Other sacred rights such as marriage, baptism, and communion occurred at minsters. The saints attached to the minsters formed a part of regional culture. Indeed, while the saint's lives recorded in medieval texts are not a reliable indicator of middle Saxon social practice, they do indicate that there was a flourishing oral tradition which passed down these stories through the generations (Blair 1994: 75-6). People would have oriented themselves towards the minsters, so often located by the *villa regalis*. The places would have been central to the lives of the people within their *parochiae*.

There are a number of known or suggested minster sites in Lincolnshire: Crowland, Partney, Bardney, Hibaldstow, South Kyme, West Halton, Stow-by-Threekingham, Louth and Barrow (Stocker 1993: 10, 114; *Figure 18*). Minsters have also been postulated for Kirton-in-Holland, Kirton-in-Lindsey, Caistor, Grantham and Horncastle, due the size of their medieval parishes and the importance given to them by Domesday (Stocker 1993: 114-5; Sawyer 1998: 63-4). Louth is included in this list because of the later foundation of a Cistercian Abbey and its

topographical similarity to other seventh and eighth century minster sites (Stocker 1993: 114). This topographical similarity has been effectively explored by Stocker (1993), who suggests that most of the seventh and eighth century monastic sites in Lincolnshire were built on islands or on promontories with island-like qualities. This topographical aloofness of the sites is thought to have symbolized a spiritual separation from the world. Stocker illustrates this when he remarks:

'this seeking after physical isolation or enclosure, the desire to separate the spiritual life from the sins of the world, is the very essence of early monasticism and has long been identified as one of the main threads running through the lives of the seventh century British saints. It is quite clear that many early monastic communities sought out such topographically enclosed sites to give a clearly understood visual expression, to the sharp distinction between the monastery and the outside world, between the City of God and the city of men' (Stocker 1993: 106).

It is clear that this social mapping of topography and geography follows the religious beliefs, not only of the inhabitants of the monasteries, but also of Anglian society in general. The separation of heaven and earth would have been signalled through the approach onto a promontory or island, emphasized at Crowland through the erection of crosses around the monastic grounds (Stocker 1993: 103).

The shift from *villa regalis* and *parochia* to manor and parish during the late Anglo-Saxon period should be seen against more fundamental changes in economy and society. While the Viking invasions and the subsequent settlement certainly provided a catalyst for these changes, it undoubtedly was responsible for the regional differences apparent in the Danelaw. The fragmentation of estates, both secular and ecclesiastical, was part of a larger shift from a tributary to a feudal economy (Stafford 1985: 60-2; Blair 1994: 140). The ranks of aristocracy increased throughout the late Anglo-Saxon period. Formerly, kings had governed the large territories of England. As these kings (especially the scions of Wessex) became more powerful, ealdormen or earls were required to govern more territory. The reeve (shire- and port-reeve) became an important part of society, taking over responsibilities formerly held by ealdormen. As *bokland* became more entrenched, the thegns began to have more private power over landrights. This privatisation of land coincided with an increased interest in surplus production. Surplus trade started to become more important than the food renders which had previously supported the itinerant kings (Blair 1994: 140; Stafford 1985: 161-2; Saunders 1991: 168).

While itineration continued to be a large part of government practice, it was integrated with the land-based surpluses of the thegn with his manor and parish church.

The parish church became entrenched in the persona of the late Anglo-Saxon thegn (Hase 1988: 49). Indeed, one of the many requirements for a churl (freeman) to become a thegn (lord of a manor) was that 'he possessed fully five hides of land of his own, a bell and a castle-gate, a seat and a special office in the king's hall' (Whitelock 1955: 432). It was not until the twelfth century that manorial churches emerged from under the control of the lord. Before this, manors and manorial churches formed the ecclesiastical and socio-economic centres of the rural communities under secular rule (Blair 1994: 134). Landowners with a church and cemetery were required to give two thirds of the demesne tithes to the bishops, providing the seeds of the later twelfth century law that a local church was only able to retain a third of the parish tithe (Whitelock 1968: 395; Sawyer 1998: 155). While this is seen to emphasise the continued power of the middle Saxon minsters in the fragmented landscape of the tenth and eleventh centuries, the small parishes of Lincolnshire suggest that this control was a more southerly one, where the parochial structure had not been as disrupted by Scandinavian settlement (Sawyer 1998: 155-6). In Wessex and English Mercia it is apparent through the associations between minster and parish church that former parochial connections continued and that those *villae regales* which incorporated a minster within their *regiones* often were held by powerful lords (Blair 1994: 116; Sawyer 1998: 155).

Nevertheless, from the mid-tenth century, the parish church becomes the focus of local communities. Bequests and land endowments were given to the parish, rather than to the minster church, by the lords of the manor. Parish priests were drawn from the local community 'and owed their first loyalties to their lords and neighbours' (Blair 1988b: 57). While the southern minsters continued to retain authority throughout the late Saxon period, the fragmentation of middle Saxon estates into manorial communities meant that minster churches were now competing for resources which they began to jealously guard. As Blair comments, the minsters' 'collegiate structure and large *parochiae* had been essentially well suited to the old pattern of scattered settlements and centralized lordship ... From their old position of central and unquestioned importance, the minsters started to become anachronisms founded on entrenched rights' (1988b: 57). However, it is important to note that despite the deterioration of minster authority with the growth of the parish church, the Anglo-Saxon laws of the tenth and eleventh centuries still affirm the authority of the minster church over dependent chapels (Hase 1988: 51). The parish church radically altered the social and ecclesiastical landscape but the minster churches still retained positions of importance.

Lincolnshire exhibits a more extreme fragmentation of ecclesiastical authority during the Anglo-Scandinavian period than most counties. Yorkshire does not demonstrate this disintegration as clearly, despite the strong Scandinavian aristocratic presence during the tenth and eleventh centuries (Sawyer 1998: 155). However, strong archdiocesan involvement in the politics of Yorkshire continued throughout the Scandinavian rule, and this, no doubt, impacted on how land was divided. In Lincolnshire, there was not such a vibrant episcopal presence and church building fell in alongside estate management. As Sawyer notes, instead of gifts to monasteries, 'the landowners of the region [Lincolnshire] apparently preferred to demonstrate their piety and wealth by building and adorning their own churches' Sawyer 1998, 157). This ecclesiastical addition to secular assets is recorded in Domesday, where churches and parts of churches are recorded alongside fisheries, marsh and woodland. At Grasby in Yarborough, the Bishop of Bayeux had a church, a priest, a mill and forty acres of meadow. Robert de Todeini had a manor in Ringstone Avelund, where he owned the third part of a church (Foster and Longley 1924: 40, 97). Churches were assets that could be owned, shared and divided amongst manorial lords.

The strong connection between the social elite and the establishment of parishes is emphasized through the burial sculpture associated with these churches. Anglo-Scandinavian sculpture is affiliated with many of the parish churches in Lincolnshire and represents the graves of the secular lords who were establishing their parish churches during the middle of the tenth century (Everson and Stocker 1999: 78). Indeed, 'to judge from the sudden plethora of carved tombstones in the tenth and eleventh centuries, private manorial churches had begun to rival minsters as favoured burial-sites for the thegnly classes' (Blair 1988a: 8). The secular elite were signalling the right to be buried in their own churchyard, to which a third of their tithe to the Church was directed (Boddington 1996: 67). Indeed, only a third of these burial monuments can be associated with minster sites. Thus, the majority of the sculpture commemorated new establishments. These parish churches appear to be predominantly situated in more important settlements, rather than minor settlements bearing *-thorpe* names. This affiliation of secular estate and parochial establishment is underlined by the common inclusion of associated members of the estate within the parish bounds. This was not only true for Lincolnshire but for the East Midlands in general (Hadley 1996: 78). A common pattern of small endowments of land was associated with these Danelaw churches (Hadley 1996: 79-80), again underlining their secular association based on the redistribution of lands under Anglo-Scandinavian control.

The fragmentation of estates was no doubt started in 877 when Halfdan 'shared out the land of the Northumbrians, and they proceeded to plough and support themselves' (Whitelock 1968:

179) It is difficult to reconstruct this shift from Anglian to Anglo-Scandinavian settlement strategies. With virtually no written records referring to Lincolnshire during this time period, it is almost impossible to trace the developments from the Anglian period to the Norman. Nor is the Anglian period in Lincolnshire well documented or understood, except for monastic and fenland landscapes, where more detailed studies have been done (Stocker 1993; Hayes and Lane 1992; Lane 1993). Nonetheless, despite this bleak report concerning settlement strategies, some light can be shed on the Anglo-Scandinavian rural landscape. Place-name analysis suggests that in some areas, such as Lincoln, Barrow and Bardney, whole estates were assumed by Danish landowners without fragmentation. It has been suggested that the retention of large numbers of Anglian names in these areas was due to the lack of land division by Scandinavian landlords, who changed and altered the names of places they came to own and inhabit (Sawyer 1998: 98-100). Partney, an important monastic establishment during the Anglian period, was located in one of the densest concentrations of Scandinavian names. Barrow, another monastic establishment was also situated in an area predominantly comprised of Anglian nomenclature (Sawyer 1998: 98-99). The estates which survived the Scandinavian colonisation and redistribution of land appear to have been held by important leaders. Indeed, these lands were held at Domesday 'by the royal family or by the king's main agents, the earls' (Sawyer 1998: 100). The transition between Anglian estate and Anglo-Scandinavian manor was never uniform, each region or *locale* retaining and adopting different traditions.

Similarly, Hadley argues that those areas with plentiful Scandinavian toponymies are located in minor settlements where the land was more easily transferable (1996: 80-1). Hadley suggests that land such as sokeland was susceptible to changes in nomenclature, and thus, through the adoption of an Anglo-Scandinavian culture and language, would be renamed using Scandinavian toponymy. Those manors and berewicks, which remained in continuous control of lords, were less likely to alter their names. Indeed, 'the relationship of such holdings [sokeland] to major manorial centres may have been more fluid than that which bound berewicks to the corresponding manorial centre' (Hadley 1996: 81). Those lands which were less transitory than others, retained their Anglian names. One wonders whether this was linked to the increased importance of sheep during the tenth century (O'Connor 1982: 47) making those settlements based in pastoral agriculture less stable than those mainly practising arable agriculture.

In order to address manorial life in tenth century Lincolnshire, it is necessary to piece together various sources, such as land boundaries, archaeological excavations and documentary references from outside of the county as well as later source material. None of these, alone, is

very useful. Our historical understanding of the area is sparse, and there have been few archaeological opportunities to address the development of the manor apart from Goltho and perhaps Flixborough (if it is a secular rather than an ecclesiastical foundation) (Loveluck 1997: 190-1). Indeed, due to the lack of historical information for Lincolnshire, a detailed archaeological investigation of rural settlement patterns becomes extremely important. This, unfortunately, is a statement to which most counties could lay claim. With the increasing focus on landscapes and hinterlands within archaeology, it is hoped that future research agendas will be able to redress this lack of knowledge.

Documents, such as the law codes and the *Rectitudines Singularum Personarum*, demonstrate that late Anglo-Saxon society was extremely stratified. While these divisions are perhaps more rigid on paper than in everyday life, the rural community was comprised of interactions between many occupations and levels of society. The eleventh century document, *Rectitudines Singularum Personarum*, describes a manorial community as consisting of thegns, *geneats*, cottars, *boors*, bee-keepers, swineherds, goatherds, cowherds, cheesemakers, granary keepers, beadles, woodwards, and haywards (Douglas and Greenaway 1953: 813-16). To this Ælfric, in his Colloquy of the Occupations, adds the ploughman, the hunter, the monk, the fisherman, the fowler, the merchant, the shoemaker, the salter, the baker and the cook (Mitchell and Robinson 1986: 174-81). Each of these 'classes' of people were responsible for various activities and chores: the *geneat* brought strangers to the village; the cottar worked on the lord's land each Monday, earning him the name of *lundinariii* or 'Monday-man'; the boor gave the swineherd bread when he drove the animals to the mast-pasture; the beekeeper was given a horse to run errands; and the slaves, such as the herdsmen, were given corn, sheep, cattle and the right to the lord's wood. In addition to these manorial duties, freemen such as the boor, *geneat* and cottar tilled their own land and intercommoned their stock (Douglas and Greenaway 1953: 813-4). Life revolved around the changing seasons. For instance, the boor performed week-work for two days in Easter and three days before the Feast of the Purification. He paid *gafol* at Michaelmas and owed barley and hens to his lord at Martinmas. He ploughed an acre each week for the lord between the beginning of ploughing and Martinmas and then, from Martinmas to Easter, he had duties in the lord's fold (Douglas and Greenaway 1953: 814). Rural life was filled with diversity. Community interaction, especially at harvest time, was oriented towards the manor and lord (Douglas and Greenaway 1953: 813-818).

Research into medieval life often emphasises the solidarity of the manor and village. Indeed, the nucleation of settlements is a common theme of late Saxon studies. This is based on the observation that the origins of modern settlement patterns are often found in the reorganisation

of the landscape during the tenth and eleventh centuries. However, this 'typical medieval village of the textbooks: a firmly nucleated settlement with its own church and single manor-house in the middle, and its open fields and common pastures spread round about' (Reynolds 1997: 101) presents too much of a closed community. Domesday demonstrates that villages were identified with more than one manor, held by more than one lord. They could also contain berewick lands and sokelands of other manors. For example, Gilbert de Gand held a manor at Cherry Willingham, a place which also contained sokeland belonging to a manor in Redbourne (held by the Bishop of Lincoln) (Foster and Longley 1924: 105, 53-4). This patchwork of land-ownership within one *locale* is quite different from the manorial community described above. Certainly, the 'sheer proximity of dwellings would presumably promote some degree of solidarity, which would be increased if people had to co-operate in labour services at hay-making and harvest or in the working of a regulated open-field system' (Reynolds 1997: 101-2). However, the communal interactions, within settlements and between associated lands in other settlements, are difficult to determine. Furthermore, the extent to which the Domesday landscape existed in the early years of the tenth century is problematic. As Reynolds notes, 'before the twelfth century the evidence is, as usual, sparse, and its interpretation depends as often as not on procedures like reading social relationships into place-names or arguing backwards from the later period, with all the dangers of circular arguments that such reasonings involve' (1997: 105). Nevertheless, Domesday, and other post-Conquest documentation, do provide one of the few sources for landscape organisation at this time and as such are invaluable resources.

Domesday indicates that the manorial associations between places were often clustered within a 10 km radius. Taking a sample of places from Domesday, based on the sites held in the pottery database (see below), communication between these manors and their associated berewicks and sokeland would have easily been within a day's travel. From more extensive work in the East Midlands, it appears that those settlements affiliated with a manorial estate are located within the same parish (Hadley 1996 : 78). It is therefore not surprising that none of these small groupings of linked settlements crossed the Lindsey border or the Kesteven/Holland boundary. Instead, connections crossing the Witham and Fosse Dyke were located at considerable distance, unlike the clusters of manorial ties emphasising *locale* and community. Interestingly, there are no connections across the fens suggesting that they presented a substantial social barrier. Long distance relations were often held by more wealthy land-owners such as the King and Archbishop of York. For the most part only wealthy aristocracy could afford to maintain connections between distant settlements.

The lack of manorial associations across the fenland is intriguing. Land organisation in the fenland differs from that on more solid agricultural land. Fenland settlements are often elongated, extending into the fen. This allows the greatest variety of resources to be exploited by the inhabitants. Both Billingborough and Hacconby along the south-west fen edge are 8 km long and between 1 and 2 km wide. Furlong strips were used to plough these lands (Coles and Hall 1998: 70-1). However, while furlong ploughing was practised in the tenth century, it should not be equated with the open field systems of the thirteenth century (Blair 1994: 128). Drove ways extended down into the fen. These consolidated pathways exist now as raised routes through the fen, linking mother and daughter settlements, such as Gedney and Gedney Hill; or in Cambridgeshire, Holbeach and Holbeach Drove (Owen 1984: 48). Fenland was often intercommoned, at least in the twelfth century, when the abbot of Crowland claimed exclusive commoning rights against the men of Holland, based on a supposed land grant by Theobald of Mercia in 716 (Roffe 1994: 80). Exploitation of resources such as pasture, reeds, sedge, and peat was jealously governed by monasteries and manors alike (Coles and Hall 1998: 72). With so much activity (if not habitation) in the fens, it is surprising that more social ties across them did not exist. Nevertheless, the inner fenland was difficult to traverse, as can be seen from the murky descriptions of Anglo-Saxon and medieval chronicles (Bradley 1982: 257; Colgrave 1956: 89).

While documentary sources are quite illuminating in terms of landscape topography and past social practices, it is archaeology which provides the complimentary detailed knowledge of settlements and of the daily activities practised by their inhabitants. There have not been many extensive excavations of early medieval rural settlements, especially when compared to the excavations of towns. Furthermore, many have focussed on the primary settlement or manor site, rather than exploring the relationship between the manor and the other properties in the village. There have been two important excavations of rural settlements in Lincolnshire: Flixborough (Loveluck 1997; 1998) and Goltho (Beresford 1987). The publication of Goltho, a village fifteen kilometres east of Lincoln along the Foss Way, remains one the most significant excavations, not only in Lincolnshire, but for the late Anglo-Saxon period as a whole. However, one must be careful of the dating which places the first phase of late Saxon settlement too early to correspond with the pottery assemblage dates (J. Young *pers com*). Therefore, instead of placing the date of the first enclosed settlement at c. 850, it is more realistic to suggest a date of c. 900, which would more closely relate to the pottery assemblages. The excavations at Flixborough have already been invaluable before formal publication of the site. Flixborough is situated along the Trent near its confluence with the Humber, providing a geographic balance to the proximity of Goltho to Lincoln. While Flixborough is

predominantly an Anglian settlement, it does include some Anglo-Scandinavian habitation making it one of the few sites which spans the middle to late Saxon transition.

Goltho is a visually impressive example of a late Saxon fortified manor site (*Figure 20; Figure 21*). A person visiting Goltho in the early tenth century would have approached from the north west. They would have immediately been struck by the ditched enclosure supported by timber or turf and the rampart (Beresford 1987: 30-35). The gate, or *burh-geat*, was the most monumental part of the fortifications. The *burh-geat* was a characteristic of noble architecture. Indeed, if a churl had a *burh-geat* along with five hides of land, a chapel, a bell-house, a kitchen and a seat on the King's council he was to be considered a thegn (Whitelock 1955: 432). The *burh-geat* also features in the heroic tale of Cynewulf and Cyneheard. King Cynewulf is murdered by Cyneheard and his men while visiting his mistress in a *burh*. When Cynewulf's men come to revenge him, they find the gates closed against them and proceed to engage in battle around the gates (Whitelock 1968: 162-3). The fortified enclosure, with its gate and ramparts, was an important part of the Anglo-Saxon architectural practices of the aristocracy.

The buildings inside the gates were primarily of stave construction (Beresford 1987: 41-59). Decoration would probably have covered the buildings, especially the main hall, as can be seen in early medieval stave churches in Scandinavia (Beresford 1987, 48-9). Beresford suggests that the roofs were shingled, drawing analogy to the hog-back stones found to the north of Lincolnshire (1987: 50-52; Lang 1984: 90-97; Bailey 1980: 85; *Figure 22*). The hall was the most impressive building. It was an internally subdivided bow-sided building approximately 24 metres long and 6 metres wide. This was the place where public assemblies, meetings and festivities occurred (Beresford 1987: 38-45). Associated with this was the bower, or private house of the thegn and his family. In the early tenth century this building was not divided internally (*Figure 23*). During the mid-tenth century, interior divisions were added, while those in the main hall were removed (Beresford 1987: 61; *Figure 24*). The bower was approximately 12 metres by 5.4 metres, half the size of the hall, and had a private garderobe attached (Beresford 1987: 54). A kitchen and weaving shed completed the arrangement of buildings. All buildings had clay floors with central hearths often placed in the first partition of the buildings (Beresford 1987: 38, 55, 59). Indeed, the plan of Goltho coincides with the understanding gained through the documents, especially the requirements for a thegn. There is no chapel. However, while churches were associated with manors, they were not resident inside the fortifications.

Cheddar, located in the Somerset levels, provides the best comparison for Goltho (*Figure 24*;

Figure 25). Rahtz (1979) identified three architectural developments which occurred during the late ninth to early eleventh centuries. The original arrangement of the Long Hall and ancillary buildings was altered in the early tenth century, when a chapel was built over the hall and the hall was rebuilt to the west. The early tenth century alterations also included an extension of the ditches to enclose a larger area of the site, including a double-ditched section along the eastern extent. Cheddar had two entrances across the eastern ditches. The main entrance appeared to incorporate a gate house structure (Rahtz 1979: 54-5). Later, during the late tenth century, these buildings were rebuilt but maintained their earlier tenth century positions (Rahtz 1979: 49-60). A porch, or dais, was incorporated into the main hall at this time (Rahtz 1979: 57).

Both Goltho and Cheddar demonstrate the importance of enclosure to manorial sites. These places were designed to stand out in the landscape, signalling the presence of authority with their ditches and *burh-geats*. Within these enclosures, the dominance of the hall is clear. These manors were meant to impress, to support the power of the thegn who lived there. This investment in architecture increases during the late tenth century, as halls and chapels are restructured. Nobility structured their authority within the landscape through the building of aristocratic residences as the manor began to rival the meeting-place for the location of the courts and other administrative activities (Blair 1994: 108, 134).

This aristocratic investment in architecture is mirrored at Flixborough, where there is a distinct decline in artefacts from the middle to late Saxon periods and an increase in the size of buildings (C. Loveluck *pers com*; *Figure 27*). It is unfortunate that more of this site could not be excavated, as the middle to late Saxon transition is not well understood. However, the shift from aristocratic interest in artefacts (during the middle Saxon period) to buildings (during the late Saxon phase) appears to be a general trend linked to the shift from tributary to feudal economies (Loveluck 1998: 154; Hinton 1990: 102; Saunders 1991: 167-68). This investment in architecture increases through the tenth century, the wooden parish churches being replaced in stone at the beginning of the eleventh century, potentially by carpenters relearning the masonry art (Sawyer 1998: 161).

Flixborough demonstrates increased investment in sheep agriculture in Lincolnshire during the tenth century complimenting the evidence from Lincoln (C. Loveluck *in litt*; O'Connor 1982: 47). Not only do the numbers of sheep increase through the ninth and tenth centuries, but the loomweights become lighter, suggesting a finer production of cloth (C. Loveluck *in litt*). The emphasis on weaving, at both Flixborough and Goltho, demonstrates that this was an important

part of manorial practice (C. Loveluck *in litt*; Beresford 1987: 55-8, 68). References to woollen cloaks, from England and Frisia during the eighth century, further imply that wool and wool products were a significant part of the early medieval economy (Whitelock 1955: 782).

The importance of wool to the economy of Lincolnshire in the tenth century was associated with the increased privatisation of the landscape by aristocratic landholders. Trade relations were established between the rural settlements and the developing markets within the towns, to exchange the surplus of goods produced in both settlements. This re-emphasis of social practice towards aristocratic, rather than royal, control over the landscape was further conveyed through the development of the parish church with its basis firmly contained within aristocratic tenure. The high fragmentation of estates and the apparent lack of ecclesiastical presence within Lincolnshire during the tenth century suggests that the orientation towards individual estates might have been greater in this area than elsewhere. The aristocratic involvement in the erection of monumental sculpture and in the fortified manors which were being constructed across the landscape further emphasises the emergence of an aristocracy, which signalled its importance through investment in architectural, rather than artefactual traditions. Community interaction was increasingly focussed on the manor as well as parish church and with movement towards the growing towns which provided markets for the agricultural surpluses, being produced in the fields and meadows of the manorial settlements.

~Urban landscapes~

The *burhs* of Wessex were the first towns to be eagerly explored earlier this century. Riding on the tails of Alfred's greatness, these settlements not only had the benefit of the 1960's and 1970's surge in urban excavations, but also the documentation and propaganda provided by the *Burghal Hidage*, the law codes, the *Anglo-Saxon Chronicle* and *Asser's Life of King Alfred*. Seen as a deliberate defensive strategy against the Vikings and as planned market settlements, the Wessex *burhs* were considered to be the amalgamation of the middle Saxon royal vill and emporia sites (Biddle 1976: 114, 119, 131). In contrast, towns in the Danelaw did not develop from the concerted fortification programme established by Alfred. Instead of such a vigorous military inception, these towns seem to place more impetus on trade, although this impression could be led by the lack of documentary support for military endeavours in this area. Indeed, without the documentary support, towns in the Danelaw were dependant on archaeological research to bring them to light. While early research into the *burhs* of Wessex emphasized town

planning and mercantile activity (Biddle 1976: 130-1), it has become apparent, in the last few decades, that the northern towns, with their early connections to the Scandinavian trade networks, were economically more strident than the garrisoned towns to the south (Vince 1994: 113, 115).

There has been considerable deliberation on the elements which comprised a town (Hill 1988: 197; Ward Perkins 1996: 5-6). While there has been a call to approach towns as one type of settlement within a landscape and to focus on the social processes which create towns, urban archaeology still tends to approach the town as an isolated settlement (Roskams 1996: 263-4). This trend is most frequently observed in political models of the late Saxon period, where towns are conceived as 'islands of royal power through which the king and his agents, ealdormen, bishops, and reeves, were able to dominate the countryside' (Abels 1988: 80). Indeed, with the lack of contemporary rural excavations, it was easy to see these settlements simply as a network of fortified market towns, administered by an increasingly powerful Wessex royalty. Furthermore, 'the separation of urban studies from other aspects of the archaeological record has likewise allowed interpretation to proceed with little attempt at contextualisation' (Roskams 1996: 264). This separation of town from hinterland is difficult to sustain. As Esmonde Cleary remarked on the decline of towns at the end of Roman Britain:

'human societies can get along perfectly well without towns and usually have. Even once towns come into existence they have no pre-ordained right to a continued existence; individually or collectively they can and have failed ... Instead of seeing them as an inevitable part of the change from Romano-British to Anglo-Saxon, *moira* to *wyrd*, we should instead look at why people found towns useful and then stopped doing so' (Esmonde Cleary 1993: 6).

Indeed, urban development is not a latent evolutionary seed within human society, but one which is brought about by social investment in particular practices and ways of life (Roskams 1996: 264-5).

Towns were an integral part of the tenth century landscape, emerging from rural economies and social practices. Indeed, towns depended on rural resources to support and sustain their inhabitants (Reynolds 1997: 166). The tenorial changes in the countryside 'in which hundreds of landowners, great and small, needed regular supplies of goods to consume and to sell' (Blair 1994: 140) led to the production of surpluses. Instead of sustaining a tributary and itinerant kingship through food renders, the aristocratic investment in surplus exchange was increasingly

oriented towards the production and trade of goods within towns. The alienation of land from the king through the institution of *bokland* and the later fragmentation of estates, during and after the Viking invasions and settlement, saw the growth of a landed aristocracy which was less dependant on the king for political, social and economic status (Stafford 1985: 34-5). Indeed, the increased investment in structures, rather than artefacts, among the rural estates (C. Loveluck *pers com*) demonstrates this move from tributary to feudal society. The decline in ostentatious personabilia is evident, not only in the lack of such artefacts from the late Saxon period, but also in the lessening of decoration inscribed upon them. As Hinton notes:

‘rings [were] like bullion stores carried on the person, rather than the filigree and niello-enhanced decorations of earlier centuries ... the wealthy found it less important to express their status in display of objects admirable in workmanship and design, redolent of the gift-giving tradition that cemented earlier societies’ (Hinton 1990: 102).

Land, and the wealth and surplus derived from it, was increasingly associated with the individual, rather than with the family (Stafford 1985: 34-5). Landlords, with their local surpluses, entered into trade and the exchange of goods within the growing towns. They mapped out these tenurial relations on plots of land within the town, sustaining a growing community of craftsmen who were dependant on a supply of resources being directed through the town (Roskams 1996: 76, 80; Saunders 1991: 281-2).

While the aristocracy, with its focus on regional exchange of surpluses, may have stimulated town growth and development, the king was an important innovator of town policy. While no laws of the Scandinavian rulership of the Danelaw have been recorded, by the mid-tenth century Æthelstan was implementing legislature, which stipulated that trade must occur in towns and be witnessed by appropriate members of the community, such as the town reeve (Attenborough 1922: 115). Rulers were able to grant rights, such as that given to bishop Wærferth in the late ninth century by Æthelræd and Æthelflæd of Mercia. Wærferth was granted half the ‘land-rent, the fine for fighting, or theft, or dishonest trading, and contribution to the borough-wall, and all the [fines for] offences which admit of compensation ... exactly as has been laid down as regards to the market-place and the streets’ (Whitelock 1968: 498). Similarly, Ealhham, Bishop of Worcester was granted *Ceolmundinghaga*, the former estate of Ceolmund in London, by Burgred of Mercia in the late ninth century. This grant contained the rights ‘therein to use freely the scale and weights and measures as is customary in the port [of London]’ (Whitelock 1968: 488). Kings were actively involved in placing tolls and taxes on activities within towns

and controlling the access to the wealth which accumulated as a result. Economic activity within towns was controlled by the king through administrators such as the *portgerefa*, his very title indicative of the community for which he was responsible

Æthelstan further dictated that minting was to occur in specific towns and listed the number of minters per town (Whitelock 1968: 397). Foreign coinage was arrested at these ports of trade and reminted in the currency supported by the kings. Æthelstan was the first king to attempt to implement a uniform coinage. He was only moderately successful and regions still maintained a certain amount of diversity (Stafford 1989: 213). It was not until Edgar's reform of the coinage in 973 that such control over minting was accomplished. The legacy of this coinage continued throughout the eleventh century. Indeed, Æthelræd Unræd was able to debase the currency to raise the Danegeld and still maintain a high value for coinage. However, both Æthelræd and Cnut were unable to maintain a uniform currency and regional variations still existed during their reigns (Stafford 1989: 213).

Lincoln and Stamford were highly involved in minting activities, especially from the mid-tenth century under the Wessex kings (Sawyer 1998: 123; Blackburn *et al.* 1983: 15-16). As one might expect, Torksey also had a mint in the tenth century though not nearly as important as those at Stamford and Lincoln. Further evidence of minting activities exists at Caistor, Louth and Horncastle (Blackburn *et al.* 1983: 15). However, unlike other parts of England, these subsidiary mints 'failed to take root and withered', an occurrence which Blackburn speculates is linked to the control over hinterland relations that both Lincoln and Stamford held (Blackburn *et al.* 1983: 15-16). These places are also associated with possible minster status during the Anglian period (Stocker 1993: 114-5; Sawyer 1998: 63-4). This suggests that these settlements retained a focal identity within the landscape into the tenth century. It further implies that current understanding of the social practices associated with urban development are more vague than current models allow.

The legal regulation of coin production within towns also extended to a general concentration of craft activity within the towns. This is particularly visible through the move of pottery production from the rural sites to a production based, almost exclusively, in the town. The changes in pottery production also extended to the adoption of Continental ceramic traditions using the fast wheel and structured kilns (Chapter III). Other crafts, such as metalworking, leatherworking and those specialising in amber, wood and bone, were also located within the town on the tenement divisions controlled by the aristocracy (Hall 1988a: 130). The one industry which did not focus its production within the town during the tenth century was

weaving and wool production. While weaving occurred within the town, manorial participation in this craft was still prevalent (above). This suggests that while the trade in wool might have been important to the developing market trade, weaving was still an important household craft in a way that cobbling or metalworking was not.

Towns were dependant on an external supply of meat. Analysis of faunal remains in town is invaluable to understanding, not only daily practices of food consumption, but also the organisation of the economy. The middle Saxon consumption of animals in emporia or wic sites seems to have been primarily beef from mature cattle (O'Connor 1994: 139; Bourdillon 1988: 181-2). Sheep were also eaten in significant quantities. The slaughter-age of these animals suggests that meat consumption was not the only reason for the maintenance of herds (O'Connor 1994: 139; Bourdillon 1988: 182). Indeed, the people living in these trading settlements:

‘were fed overwhelmingly with the results of domestic husbandry, and this husbandry was not specially tailored to the table ... [the animals] were valued for the contributions they made in their lifetime as well as for their meat, and for those other products such as horn and hide which would come once and for all after death’ (Bourdillon 1988: 180).

The middle Saxon supply of meat to the wic sites appears to have been on the hoof and slaughtered within the settlement (O'Connor 1994: 139; Bourdillon 1988: 188). Furthermore, the main supply of meat came from cattle, sheep and pig with little variety supplied from wild fauna, suggesting that the consumption of meat was regulated and not controlled by the inhabitants of the wics (O'Connor 1994: 141; Bourdillon 1988: 189).

Conversely, the late Saxon consumption of meat within towns demonstrates an increased variety in the resource base through the tenth and eleventh centuries. While cattle, sheep and pig still represent the majority of meat eaten, other animals, such as wildfowl and fish, begin to be consumed in greater amounts (O'Connor 1994: 144-5). O'Connor links this to ‘the emergence of a substantial element in the town’s population with disposable wealth, by the tenth century probably largely expressed as coinage, which they could use to obtain commodities additional to the staple food resources’ (1994: 145). Indeed, there is an increase in backyard fauna such as pigs, fowl and geese (O'Connor 1994: 143). Improved butchery practices further imply the development of craft traditions within the town (Bourdillon 1992: 130).

Research of the documentation of the late Saxon period is also able to comment on the development of a distinctive urban identity in town communities during the late Saxon period. Domesday studies indicate that towns were assessed separately from the rural manors and their associated lands. Towns were imposing entrance tolls on those people who did not hold land within the town walls (Foster and Longley 1924: 11). The fisherman in Ælfric's Colloquy sold his fish to the *ceasterware* or townspeople (Mitchell and Robinson 1986: 177). Lawcodes demonstrate the reason for the fisherman bringing his wares to the town market. Kings were increasingly interested in regulating trade within the town. Æthelstan's laws issued at Grately are most indicative of this: 'And we have pronounced that no goods over 20 pence are to be bought outside a town, but they are to be bought there in the witness of the town-reeve or of another trustworthy man, or, again in the witness of the reeves in a public meeting' (Whitelock 1968: 384; Attenborough 1922: 135). Witnesses were imperative in legal trading transactions. The continual emphasis of this within the laws implies that the king had a direct economic interest in trading practices, presumably deriving revenue from the exchange.

Mercantile activity was strongly regulated by kings and rulers throughout the middle and late Saxon periods. The laws outlining the relationship between king and merchant suggest that it was one of mutual benefit. Early medieval society was organised around duties and protection given to king and kin. Merchants, through their itineracy, were unable to take advantage of the structures which governed the more steadfast agrarian societies. The laws which provided witnesses from family and community (Whitelock 1968: 378-9) would not apply to them and thus their protection was guaranteed by the king. Kings took an interest in the movement of merchants, both to secure the safety of a valuable resource and also to ensure the protection of their territory from other unwholesome travellers such as thieves (Sawyer 1977: 150-1). The late ninth century laws of Alfred further indicate a royal concern for the movement of merchants, stipulating that traders and their men should declare themselves to the king's reeve (Attenborough 1922: 79).

The protection offered to strangers and traders by the king was repaid through toll and tribute. Sawyer suggests that 'tolls were probably the most valuable source of revenue' and notes the interest that religious communities took to acquire and maintain rights to tolls in harbours and markets (Sawyer 1977: 153). Toll on ships and ports during the eighth century, at places such as London indicate an early regulation of mercantile movement (Whitelock 1968: 452), as does the waggon-shilling and load-penny (*wægonscilling* and *seampending*) levied by the Mercian kings on salt from Droitwich (Sawyer 1977: 147). While Anglo-Saxon documentation does not include the list of tolls and charges due from traders and travellers to Louis the Pious, similar

taxes were probably in existence. These appear to have been levied at every possible opportunity, from bridges, to moorage and harbour, to passage-right through fields to pay for possible damage to fishing and accommodation (Sawyer 1977: 153). Indeed, in the eleventh century, Cnut complained to the Emperor Conrad and Pope John concerning the passage of traders and travellers to Rome. He requested 'that they might be granted more equitable law and greater security on their way to Rome, and that they should not be hindered by so many barriers on their way and so many unjust tolls' (Whitelock 1968: 417). Freedom of passage for English and Danes alike was apparently granted to Cnut by the Easter assembly at Rome (Whitelock 1968: 417).

While trading had been regulated by kings throughout the seventh to ninth centuries, the increased mercantile activity in towns generated more laws. From the reign of Edward the Elder, legal codes began to restrict major trading transactions to towns (Attenborough 1922: 63). The trade and purchase of goods was strictly controlled and had to occur in front of the witnesses assigned to the town or wapentake. Intention to trade was also to be announced before the journey was undertaken to obtain the goods. Furthermore, the witnesses under which the trade occurred must be named within five days of the return of the travellers. If unexpected purchasing occurred, it was to be announced upon return to the village (Whitelock 1968: 399). The reliance on oral witness for trade, rather than written receipt, is clear. Indeed, the accounts of witnesses were a mainstay of Anglo-Saxon legal procedures. The laws regarding trading behaviour outside of towns further suggest a reason behind the duties of *geneat* to bring strangers to the village (Douglas and Greenaway 1953: 813). If trade were part of the intention of the visitor, then it would have to occur in front of witnesses who were presumably inhabitants of the village. Earlier laws, stating that traders must keep to the roads or announce their movements through shouting or ringing a bell, were aimed at distinguishing trader from thief (Whitelock 1968: 364). Thus, the *geneat*'s responsibility of escorting strangers may also have been designed to facilitate the regulation of legitimate travel through the region.

Towns were where most exchanges occurred during the late Saxon period, from selling and purchasing to the giving and receiving of tolls. Most of the information about the rights and dues within towns comes from the granting, or exempting of these rights in the law codes and charters of the period. Bishop Wærferth was able to secure half the rights of street and market both within and without the town of Worcester from the rulers of Mercia in the last decades of the ninth century, with the exception of the toll on salt, which remained under royal jurisdiction (Whitelock 1968: 498). These included fines for fighting, theft and dishonest trading, as well as other dues such as land-rent and *burgh-work*. This regulation of trade and other commerce

within the towns illustrates the importance these places had in the distribution and organisation of wealth and goods.

Royal restrictions on trading transactions to markets within towns emphasize the aristocratic investment in towns as places of redistribution (Attenborough 1922: 115, 135). This is underlined by Æthelstan's further decree 'that there shall be one coinage throughout the king's realm, and no man shall mint money except in a town' (Attenborough 1922: 135). Furthermore, the penalty for minting base or light coins was the loss of a hand which would then be displayed on the wall of the mint as a deterrent for other minters with similar ideas (Attenborough 1922: 135). Despite the concerted effort of kings to restrict trading to the towns, there are less coins found in urban contexts during the late Saxon period than in the middle Saxon wics. Furthermore, there are numerous late Saxon coins found on rural sites, suggesting that the legislation restricting trade to town markets was not always effective (Hinton 1986: 17, 24, 26).

Nevertheless, the amount of coinage minted and exchanged was substantial during the tenth century, especially after Edgar minted his reformed coinage (Metcalf 1986: 156-7). While during the mid-ninth century, minting occurred primarily in the south-east of England and the distribution of coins was reflective of this practice. By the middle of the tenth century, there were unusually high levels of minting activity in the north of England, especially at such places as Lincoln, Stamford, York, Tamworth, Stafford and Chester (Metcalf 1986: 134-5). The distribution of coins implies a regional trade during the tenth century, with less foreign contact than later in the eleventh century (Metcalf 1986: 156).

The investment in minting and trading activities within towns was linked to the growing importance of rents within these communities, and indeed, within the late Anglo-Saxon landscape as a whole. The use of coinage facilitated exchange within the towns which were increasingly dependant on goods brought in from the rural settlements. As Saunders notes 'peasants were engaged in urban market transactions in order to exchange surplus rural products for cash, so that essential commodities, such as salt, clothes, tools, etc. could be purchased' (1991: 281). By situating economic activities predominantly within the towns, the kings and aristocracy were participating in the structuring of towns as places, distinct from their rural counterparts, in a society where the tributary demands of sustaining multiple kingdoms were diminishing in the face of a growing national government.

The emergence of towns was also tied to a royal investment in military organisation, especially in Wessex and English Mercia. Alfred's defence of Wessex heavily relied on a strategy which

combined a mobile army with town garrisons (Abels 1988: 71, 74). The *Burghal Hidage* illustrates the military importance of towns, listing the number of men needed to man the walls: 16 men per acre of wall (Abels 1988: 74). Indeed, the Wessex *burhs* were 'situated in such a way that no part of the kingdom was more than twenty miles, a day's march, from a fortified centre' (Abels 1988: 69). Thus, the town garrison was able to protect its surrounds independently or in conjunction with the army or *fyrð* (Abels 1988: 71-2). These fortifications were positioned along the major rivers and roadways (*Figure 28*), often utilising the locations of the Roman towns situated along the same lines of communication. The strategic importance of towns cannot be understated, especially for the Wessex expansion into Mercia and the north.

While Wessex abounded in fortified *burhs*, the Danelaw towns were not oriented as much towards defence as they were towards trade (Stafford 1985: 47-8). Indeed, discussion of these settlements must rest largely on the development of trade and production within them (Stafford 1985: 40-62). The towns of the East Midlands had an early economic focus which must have been influenced by the trading practices of the Scandinavian settlers (Vince 1994: 115; Stafford 1985: 49). While defence was probably important in the early days of habitation, there is little direct evidence to discern whether the town defences of places, such as Nottingham, were as extensive as is normally claimed (Stafford 1985: 47). Whatever the defensive nature of the Danelaw towns, the strong association of these places with trade and industry cannot be refuted.

The inhabitants of towns, in their tenement dwellings, became a society set apart from the rural inhabitants described in the *Rectitudines Singularum Personarum*. They were dependant on the incoming surpluses of meat and grain from regional manors. They lived in settlements where the commerce and minting were strictly controlled. Walls were maintained both as protection and as socio-economic barriers to commerce. Certainly, in the documents pertaining to Queenhithe in London, control over mooring and marketing privileges was granted to the bishop Wærferth of Worcester and archbishop Plegmund of Canterbury (Dyson 1978: 202). Control over economic privileges was paramount in these settlements, and tolls for marketing activities were part of everyday life. The development of urban communities through the tenth and eleventh centuries was one of the most visible changes in Anglo-Saxon societies before the Norman Conquest.

The development of urbanism in Lincolnshire is primarily associated with three towns: Lincoln, Stamford and Torksey. Most of the archaeological evidence of town life comes from Lincoln. Archaeological knowledge of tenth century Stamford rests largely on the excavation of kiln sites at Wharf Street and underneath the castle (Mahany *et al.* 1982). Torksey, similarly,

is known only from its kiln sites (Barley 1982; 1964; Palmer-Brown 1995). Indeed, the location of the settlement at Torksey is still an unanswered question. Lincoln, with its excavations at Flaxengate (Perring 1981; Coppack 1973) and Silver Street (Miles *et al.* 1989), have made Lincoln archaeologically comparable with towns such as York (Hall 1988a; b), Chester (Thacker 1988) and Thetford (Dallas 1993; Rogerson *et al.* 1984) where substantial evidence for tenth century occupation has been uncovered.

Pottery was one of the predominant artifacts recovered in these excavations, and its importance to archaeological understanding of late Anglo-Saxon society will be further discussed in the next chapters (Chapter III-V). While potters were not highly regarded during the medieval period (Moorhouse 1978: 14), they produced an artefact which is extremely informative about the communities which inhabited both the town and the rural settlements. Potters were amongst the craftsmen who took up residence within the town walls, participating in the emergence of urban life. The changes in the craft traditions of the potters, within places such as Lincoln, Stamford and Torksey, are some of the most visible archaeological phenomena which signal the development of towns within the Anglo-Saxon landscape. The potters would have produced and sold their wares at market. They would have walked past the tenement of the minter on the stone-paved street as they went on their daily routines. Potters were an integral part of urban communities during the tenth century.

Tenth Century Lincoln

The most impressive approach to Lincoln is, and was, from the south along Ermine Street (*Figure 29*). Today, the cathedral and castle rest high above the city on the limestone escarpment dominating their surroundings. In the tenth century, cobbled streets, timber houses and stone houses lined the hillside. A traveller along the road would have passed first through Wigford, at the bottom of the hill below the Witham. By the beginning of the tenth century, this stretch of Ermine Street was lined with churches (Clarke and Ambrosiani 1991: 98), many of which probably had their origins in the tenth century. Indeed, town churches, such as the St. Michael-at-the-North-Gate, Oxford, were important both to town dwellers, and to the 'travellers wishing to say a prayer' (Ottaway 1992: 140). It has always been suggested that Wigford, with its *wics* element, was a trading suburb of Lincoln, although no excavation evidence has been forthcoming to shed light on this issue (Ottaway 1992: 156). The large quantity of sculpture,

associated with St. Mark's in Wigford, is perhaps indicative of a trading community whose more ostentatious members were able to invest in the sculptural traditions upheld by the rural elite (D. Stocker *pers com*).

Crossing the Witham into Lincoln, the traveller would have encountered cobbled streets such as those found along the Flaxengate frontage. With the remains of the Roman fortress still standing, the words '*enta ærge weorc innan burgum stræte stanfage*' (the ancient work of giants within the fortress, the streets stone-paven) (Hooke 1981: 301) could easily pertain to Lincoln. In the early tenth century these roads were well built with limestone pieces in a silt matrix positioned over a limestone rubble core. Later in the tenth century, these roads were less pristine with occupational debris encroaching onto their surfaces (Perring 1981: 10). The street names of Lincoln, with their *gata* endings, like those of York, are representative of Scandinavian presence within these towns. Furthermore, this suffix is indicative of an early origin, as evidenced by the Flaxengate excavations (Ottaway 1992: 156; Perring 1981: 6). These streets, unlike those of Winchester (Biddle 1976: 130), cannot be associated with a gridded street plan, although the main streets followed a general alignment linking the Roman gates. While the Roman street plan had been obscured through the centuries, the standing fabric of the gates and walls influenced road development (Ottaway 1992: 156; Perring 1981: 44).

As in York, buildings often fronted these streets (*Figure 30*). However, the linear plot arrangements, so familiar from the Coppergate excavations, have not been found in Lincoln. Nevertheless, the spreading of loam across the entire site at Flaxengate still indicates control of the property by a landlord who was able to arrange for an uniform levelling of his property. Indeed, there is some suggestion that the property at Flaxengate was approximately the same dimensions as those in the upper city (Perring 1981: 43-4). This would indicate that Lincoln was laid out with specific plot measurements in mind. A similar suggestion has been made for other towns such as York (Hall 1988a: 130) and London (Vince 1988: 90). The term used to describe these divisions is *haga* which originally meant 'a hedge or enclosure' (Hooke 1980: 39). Indeed, Ine's laws of the seventh century dictate that a 'ceorl's homestead [*haga*] must be fenced in winter and summer' (Whitelock 1968: 368). A charter giving land to Æthelræd and Æthelflæd of Mercia by Bishop Wærferth in 904 suggests that this particular *haga* was a large block of land within the walls (Hooke 1980: 39). This agreement, between archaeological and historical sources indicates that urban land was distributed in blocks, by the aristocracy and nobility, along with certain economic rights pertaining to markets and mooring (Dyson 1978: 206). These *haga* were owned by local aristocracy and can be linked to manors within the region (Biddle 1976: 383). This direct connection between the landscape of the manor and the

town further emphasizes the need to see both rural and urban development, not as separate activities, but as an interrelated whole.

The buildings of Lincoln were structured around a post-in-hole or post-in-trench construction. These posts were not symmetrically arranged indicating that roofing was not reliant on tie-beams, but instead, was probably thatched. There is some suggestion that planks were secured with dowels to the upright posts. Indeed, there was a scarcity of clay or daub found in the excavation. Where it was uncovered, it was generally associated with hearth activity, rather than along the walls. The central position of the hearth within the house and the lack of substantial and paired timber posts suggests that these buildings were only single storey. Despite a lack of symmetrical post arrangements, these buildings, like those of York, appear to have been planned with uniform measurements based on the perch, a measurement of 5 ½ yards (Perring 1981: 37-39).

Craft production in towns is an important activity. Lincoln has produced evidence of glass and metal-working, as well as large scale pottery production (Chapter III). From the general level of craft activity on the Flaxengate site, it appears people were operating at a household level. Remains of antler- and bone-working, textile manufacture and jewellery production in amber and jet were uncovered (Perring 1981: 42-3). Presumably leather, wood and other perishable materials would have completed the range of household crafts. The large numbers of coins found within Lincoln (Blackburn *et al.* 1983: 34-9) are further indicative of the trading transactions taking place within the town.

The faunal remains for Lincoln generally suggest similar consumption patterns to those at York (O'Connor 1994) and Southampton (Bourdillon 1992). Geese were kept as backyard animals. Cats and dogs are similarly found in association with town habitation. The lack of young dog bones and the burial of complete skeletons indicates that dogs were kept as pets. Cats were not as domesticated and appear to have been free agents within the town (O'Connor 1982: 11, 37-8). Approximately 10% of the diet was comprised of pig. This does not seem to radically fluctuate throughout the tenth century, unlike the relative numbers of sheep and cattle which were the main sources of meat. This suggests 'that the influences which brought pigs into the Flaxengate area were independent of those which controlled the movements and marketing of cattle and sheep' (O'Connor 1982: 11). Pigs were not kept on the Flaxengate site, implying that if pigs were bred elsewhere and brought into the town for fattening, this occurred in a different area of town and was not associated with household production (O'Connor 1982: 33). However, the impression of pig feet in the kiln at Torksey suggests that pigs were part of

household life in other places (Barley 1982: 275).

There is a significant rise in the consumption of sheep during the tenth century and a contrasting reduction in cattle (O'Connor 1982: 11, 47). This is consistent with the evidence from Flixborough (C. Loveluck *in litt*) suggesting that there was an increased investment in wool production in Lincolnshire. York continued to consume larger amounts of beef than mutton (O'Connor 1994: 143), suggesting that an investment in wool production was a regional phenomenon in which Lincolnshire was participating. The increased number of sheep may also have influenced the slight decrease in pigs during the tenth century. Indeed, if the consumption of sheep within Lincoln corresponded to an increase in pasturage at the expense of wood and wasteland outside the town, this would have impacted on the amount of woodland available for the pannage of pigs (O'Connor 1982: 12)

The hunting of wildfowl appear to have taken place during the winter months, providing a welcome supplement to a standard diet of mutton, beef and pork. The inhabitants of Lincoln were taking advantage of the flocks of plover in the abundant Lincolnshire marshlands (O'Connor 1982: 44). Cod represented the predominant fish consumed in Lincoln. Salmon was also a favoured fish. Eel did not figure amongst the fish bones found at Lincoln, which is surprising considering the importance given to eels in Domesday. Indeed, 'the historical accounts of the freshwater fisheries at this time are much more extensive than the archaeological evidence indicates; this may also be a reflection of recovery methods as most freshwater species are fairly small' (O'Connor 1982: 46). Fish and fowl were never main components of the diet of people living in Lincoln during the tenth century, although the archaeological recovery of fish is not representative of the amounts which were undoubtedly consumed (O'Connor 1982: 48). Instead, most meat came from sheep and cattle arriving on the hoof from the countryside. The winter months were those in which the most variety of meat was eaten. The diet was supplemented by the inclusion of wildfowl. Indeed, wildfowling must have conjured up images of brisk weather and longer nights, as it does today.

This image of a townsman hunting wildfowl in the marshes around Lincoln, once again, illustrates the merging of the urban and rural landscapes. Indeed, the emergence of towns should not be treated as a separate issue from the other changes occurring in the late Saxon period. The development of towns during the late Anglo-Saxon period was part of a larger shift in social practice which influenced conceptions of community and interaction. The appearance of a feudal society during the late Saxon period was associated with an increase in the privatisation of land under the control of the aristocracy. This is visible in the manorial and

parochial developments in the rural landscape, as well as in the urban *haga* inhabited by craftsmen. Control over trade was regulated by the king and noblemen through the restriction of minting and trading activities to markets within the precincts of the town. The concentration of craft activities within towns further indicates aristocratic interest in practices of production and consumption. Towns were involved not only with regional trade with outlying settlements, but also in an interregional exchange with other towns. As Saunders notes, towns:

'possess[ed] a dual economic role, simultaneously operating externally and internally with respect to the peasant economy. On one level, the larger towns and ports which were engaged in mercantile trade were divorced from the production for use, thus forming a specialised-commercial sector within the feudal economy. On another level, all towns large or small were integrated with the countryside forming centres for petty commodity production as well as nodes in the articulation of agrarian surpluses' (Saunders 1991: 253).

The town was an integral part of the landscape during the late Anglo-Saxon period. It developed through the changing structures and practices enacted by the inhabitants of the landscape; from the lord with land in both manor and town, to the potter producing wares to be consumed within and outside the town, to the swineherd taking the sheep to pasture.

Throughout the late Anglo-Saxon period, the town began to develop a communal identity separate from that of the manorial settlement. The community of craftsmen and traders began to develop guilds, asserting their identity not as members of a village but as members of a craft tradition. This was also encouraged by the regulation of social practices of craft production and trade within the town. The distinction between townspeople and those living within the hinterland was further structured through the extortion of tolls at the entrance of towns, the paved streets and the tenements with their rows of buildings fronting the street. The town was visually distinctive from the rural settlements with their fields and fortified enclosures. Indeed, the late Anglo-Saxon town in the infancy of its later medieval developments, was a distinctive settlement within the landscape. While the town should not be considered in isolation, its importance to late Anglo-Saxon society should not be underestimated. As Roskams notes 'if the *villa regalis* and the *wics* are the key players in the power game in Britain from the seventh century, this rôle passes in the ninth century to the *burh*' (1996: 267).

Social landscapes

The shift from tribal to feudal landscape, with its political and economic implications on settlement strategies, influenced how people understood their communities and their landscapes. Indeed, 'the tenth and eleventh centuries were to bring a new framework and new problems: unification and conquest, new military needs, the rule of two kingdoms, the growth of towns and trade, the difficulties and opportunities of ruling a large kingdom' (Stafford 1989: 138). The fragmentation of estates during the ninth century, and the development of the manor and the parish during the tenth century, meant that communities, and their lords, were increasingly involved in the local landscape with an eye towards surplus produce to be traded in the burgeoning towns. The movement towards these proto-urban communities is demonstrated through reference to roads as 'portways', roads leading towards the town. Manor and town were involved in a socio-economic relationship with aristocratic holdings both in the town and within its hinterland. The development of a hinterland is evidence of a strategy of land tenure which was focussed on trade and communication within the towns. Indeed, Abels' view (1988: 80) of the towns as nodes of communication and administration is not unwarranted. His lack of discussion of town-hinterland relations is problematic. Abels rightly notes the importance of the town - with its mints, markets and burghal courts - for the extension of royal power. However, his concentration on the military importance of these settlements ignores the rural landscape with its hundred and wapentake courts, its monastic and manorial establishments and their social interaction with towns. Towns do not exist on their own or in isolation. They are part of a landscape strategy which relies on surplus production in the hinterland to support artisan and craft communities living within the town.

The themes which are continually re-addressed for the late Saxon period are those of increased privatisation of land and resources which influence the fragmentation of estates and the development of the manor, parish and town. Movement throughout the landscape was regulated by legislation enforced by the king and aristocracy and administered through the reeves and communal courts of the hundred, wapentake, shire and borough. Trade was oriented towards the town through acts of legislation and through the development of an urban community of craftsmen and traders. Much less is understood about manorial relations. However, the fortified manors and their surrounding lands were engaged in a wide variety of practices from beekeeping to shepherding and ploughing which structured their communities and interactions. More archaeological research is needed on the practices which occurred in the rural landscape.

Focus has centred on the manorial sites rather than the villages surrounding them. At present, a great deal of our knowledge about the rural communities lies in documentary sources, rather than archaeology discoveries. Until this is redressed, knowledge of the late Anglo-Saxon period will still rest primarily in the towns, rather than in a balanced understanding of social practice within the landscape.

Investigation into the practices of pottery production and consumption is able to focus on the landscape through the analysis of distribution patterns. While the production of pottery is centred in the towns - the potters participating in the developing craft communities in those settlements - trade and consumption of pottery is informative about the rural landscape. Distribution patterns help to demonstrate the structure of the settlements within the landscape and their interaction with the emerging towns. It can begin to characterise mobility within the landscape and the ways in which it influenced manorial settlement and territorial identity. However, although pottery is extremely informative about the social construction of landscape, it must be contextualised within a wider understanding of social geography. It is only one artefact among many which was used in the construction of social practice. Until a greater understanding of rural settlement is reached, pottery analysis must be oriented towards hinterland relations with the town rather than amongst manorial communities.

The following two chapters focus on the practices of pottery production and consumption. Through discussion and analysis of the pottery trade in Anglo-Scandinavian Lincolnshire, the issues of territorial identity, community interaction and social mobility addressed in this chapter will be further investigated. Lincolnshire was engaged in the restructuring of territorial boundaries and identities, so apparent in the sculptural monuments erected by the aristocracy. The increased emphasis on the privatisation of land gave rise to such settlements as Goltho and influenced the investment in sheep pastoralism so evident at Flixborough and Lincoln. The emerging towns of Lincoln, Stamford and Torksey became focal centres for their regions, structuring movement towards them through the thriving markets and craft communities within them. The potters with their kilns and town *haga* were involved in a social interaction which structured the Anglo-Scandinavian landscape, stretching from the Lincoln minter using a Stamford crucible, to the use of a cooking pot in a small settlement along the fen edge.

CHAPTER III

PRACTICES OF PRODUCTION: THE CRAFT OF POTTERS IN ANGLO-SCANDINAVIAN LINCOLNSHIRE

Stewed capons

Take parsley, hissop, sage, rosemary and thyme, break them between your hands and stuff your capons with them and colour them with saffron and put them in an earthen pot or else in brass byt an earthen one is better and lay splints underneath and all about the sides so that the capons do not touch the sides nor the bottom and cast the same herbs into the pot among the capons and put a quart or a pint of the best wine that you can get and no other liquor and set a lid upon it that will fit within the brim and make a batter of white of eggs and flour and put between the brim a mass of paper (mss: paper lefe) or else linen cloth that the batter may seal it surely so that no egg comes out. See that the batter is thick and set your pot on a charcoal fire to the middle side and see that the lid does not rise with the heat and let it stew gently for a long time and when you think that it is cooked, take it from the fire; if it is an earthen pot, set it upon a wisp of straw so that it does not touch the cold ground and when the heat is well drawn and overpast take off the lid and take out your capons with a stick and lay them in another vessel and make a syrup of wine and mince dates and cinnamon drawn with the same wine, add thereto currants, sugar, saffron and salt, boil it a little and cast in ginger powder with a little of the same wine and add the same to the above syrup and pour upon the capons and serve them forth with a rib of beef every one a capon on a dish.

late fifteenth century recipe (Pepys 1047) (Hodgett 1972, 14-15; cf. Kilmurry 1980. 28)

This chapter is primarily concerned with situating the potter and the production of pottery within Anglo-Scandinavian society. Chapter II discussed the social geography of Anglo-Scandinavian Lincolnshire, touching on themes which were affecting the whole of late Anglo-Saxon society, as well as addressing issues and details specific to the landscape of Lincolnshire. This chapter places the potter and his craft within the town. It also discusses the social use of pottery, and the ways in which this must affect our interpretations of pottery distribution within late Anglo-Saxon society. In addition to these historical themes, this chapter provides an introduction to the pottery produced in Anglo-Scandinavian Lincolnshire. Finally, it considers the distribution of pottery within Lincolnshire, establishing a context for the more detailed examination of trading and consumption practices in Chapter IV.

Archaeology reconstructs past societies through the recovery and analysis of material culture within the landscape. Artefacts are deposited through human action, although later environmental or cultural occurrences may alter this resulting pattern. The pattern of artefact deposition reflects the social movements and interactions of the people producing, trading and consuming this material.

Pottery is extremely informative about past social practices. The versatility of the processes of pottery production makes each tradition unique, even within the same society. The use of clays and tempers is associated with particular regions and *locales*, while the firing of pottery within a bonfire or a structured kiln, is influenced by more general social practices of production. The shape and decoration of pottery is often able to suggest the ways and places in which that pottery was used. Pottery also provides a window into the lives of individual potters, through the way in which a rim was thumbled, or a design fingered across the surface of a pot.

Pottery production within tenth century Lincolnshire was involved with the development of craft traditions and, indeed, with the construction of a communal identity within the town (Chapter II). Potters are unknown from pre-Conquest documentary sources. However, they would have participated in the life of the town: in the renting of *haga* from a lord, in the market practices, and the advantages of living in a community of craftsmen. Perhaps, they might have been members of a town guild, who would have been exempt from the same tolls as all townspeople. Archaeologically, potters are one of the most visible members of the town: their wares distributed in vast amounts throughout the town, their kilns and wares demonstrating a change in production practices from hand-made pottery, fired in a rural clamp kiln, to wheel-thrown pottery fired in a structured kiln within the town. The practices of pottery production were inexorably linked to the development of urban communities in the late Saxon period. Through investigation into the production and trade of pottery, the discourse between towns and their hinterlands can be discussed.

The Study of Late Anglo-Saxon Pottery

Since the 1950's, the study of late Saxon pottery has greatly contributed to archaeological

research of this period (Vince 1993a: 151). In a series of papers, John Hurst and Gerald Dunning established the basis for late Saxon pottery research by publishing a typology of the wheel-thrown wares now recognised as belonging to the ninth to eleventh centuries (Hurst 1956; 1957; Dunning 1959). During the large scale urban excavations of the 1960's and 1970's, the production of late Saxon pottery was linked to the development of towns (Kilmurry 1980; Vince 1985; Mainman 1990; Dallas 1993; Hebditch 1967; Carver forthcoming). As pottery began to be associated with particular towns, typologies of town 'types' were developed, and the original typologies established by Hurst and Dunning were modified to reflect this new knowledge. A detailed review of the changes in late Saxon pottery typologies and ceramic research has been concisely addressed elsewhere (Vince 1993a). In summary, the variation in fabric type appears to be not only a factor of regionality and the availability of clays but also one of social practice. Indeed, 'it is likely that this reflects a desire by potters to use familiar materials and to follow a mental template' (Vince 1993a: 156). The shelly, sandy, gritty and untempered white clays used by the potters reflect a deliberate intent to follow a craft tradition. While the introduction of these wares to the Danelaw might have originally created a change in the practices of pottery production, the association of tempers with particular towns and regions implies the establishment of a craft tradition.

Pottery production within the Danelaw can be distinguished from that of Wessex and English Mercia. Potters within the Danelaw favour a narrower base and less squat form than do the more southern potters. Danelaw potters often removed the base from the wheel with a wire but did not always alter the bases, leaving a distinctive throwing whorl on the bottom of the vessel. Roller-stamping (diamond and square) as a form of decoration is also limited to the Danelaw (Vince 1993a: 160). Indeed, the pottery production within the Danelaw was distinct from that elsewhere. This was probably due to the early introduction of wheel-thrown pottery traditions to the Danelaw and the subsequent spread and adoption of these techniques by potters in Mercia during first half of the tenth century and Wessex during the late tenth century (Vince 1993a: 161).

One of the primary issues discussed was the origin of the wheel-thrown wares of the late ninth to eleventh centuries (Vince 1993a). These wheel-thrown hard-fired wares, with their globular forms, were strikingly different from their hand-made, soft-fired barrel-shaped predecessors. Indeed, they most resembled Continental pottery which had still retained its Roman forms. The sudden appearance of these wares during the Scandinavian colonisation of England has alternatively been explained by the immigration of potters into England on the wave of Scandinavian settlement, or by the cultural transmission of technological knowledge across the

Channel (Hurst 1957; 1976; Dunning 1959; Vince 1993a: 152). The immigration argument favoured either a family tradition being maintained throughout the generations or a craft tradition introduced by Continental potters which was later adopted by Anglo-Saxon potters (Kilmurry 1977a: 183-4; Vince 1993a: 152). The immigration of Continental potters is supported by the fact that the technical expertise and knowledge needed to produce these wares at the high standard of production with which they first appear is considerable (Barley 1982: 275; Kilmurry 1980: 190; Vince 1993a: 152). Indeed, the earlier pottery is generally better made than that which occurs later in the tenth century (Miles *et al.* 1989: 226). Furthermore, there was no transitional period between the hand-made middle Saxon pottery and the wheel-thrown wares, except in East Anglia with its Ipswich ware production during the eighth and ninth centuries (Vince 1993a: 153). Finally both the form of the pottery and the kilns is directly paralleled on the Continent (Kilmurry 1977a: 183-4; Vince 1993a: 152; Musty 1977: 43, 50).

Wheel-thrown pottery appears to have been originally introduced in the middle of the late ninth century by immigrant potters in the emerging towns along the north east coast of England in towns such as York (Mainman 1990), Lincoln (Miles *et al.* 1989; Adams Gilmour 1988), Stamford (Kilmurry 1980) and Thetford (Dallas 1993). It then spread into the surrounding Danelaw territories establishing regional traditions and fabrics. During the first half of the tenth century, wheel-thrown pottery emerges to the west and south in towns such as Stafford (Carver forthcoming; Ford 1995) and Oxford (Vince 1985; Mellor 1980). Finally, during the late tenth and early eleventh centuries, wheel-thrown wares can be found in Wessex with the Cheddar, Michelmersh, Portchester and Exeter industries (Vince 1993a: 161).

The introduction of wheel-thrown pottery into England must be seen against the general changes occurring during the late Anglo-Saxon period (Chapter II). The emerging towns incorporated more crafts than pottery within their walls. Coin production, leather working, smithing, woodworking and other crafts established a craft and mercantile community within these settlements which was not based on agricultural husbandry. The situation of late ninth and tenth century pottery production exclusively within towns suggests that craft production was encouraged within these communities. Certainly the law codes indicate increasing aristocratic control over town activities (Whitelock 1968: 384). However, while the regulation of town markets would suggest a vigorous international trade (Chapter II), the pottery evidence does not reflect this (Vince 1985: 36). Indeed, the middle Saxon trade in international pottery is significantly reduced during the late ninth to late tenth centuries. Instead, only locally and regionally produced wares are found. The turn of the eleventh century saw the resurgence of an international pottery trade, and imports from the Rhineland and the Low Countries were

being consumed within the towns (Vince 1985: 38). This coincided with a re-emergence of regional hand-made wares competing against previously established wheel-thrown industries (J. Young pers com). Furthermore, there was a differentiation between the types of pottery the towns people are using and that found outside the town (Vince 1985: 42). The social changes, evidenced by the pottery industry, were paralleled in developments in building construction, coinage and in an increased range of animal resource consumption (Chapter II). During the late tenth and eleventh centuries, the towns of the late ninth and early tenth centuries were recognisably urban in character.

The emergence of wheel-thrown, hard-fired pottery within Danelaw towns during the late ninth century was indicative not only of a social change, which encouraged large-scale craft production within towns, but also of a distinct social identity being constructed within the Danelaw. The law codes indicate a distinct identity for the Danelaw (Whitelock 1968: 380, 421) as do the wapentakes and riding divisions. Regional identities being structured through media such as sculpture (Everson and Stocker 1999: 86), are indicative of distinctive Anglo-Scandinavian social practices. Archaeology further suggests that the Danelaw towns demonstrated more 'urban' characteristics during the late ninth century, the period when the wheel-thrown pottery tradition was introduced, than their burghal counterparts to the south (Vince 1994: 113). The establishment of an urban pottery tradition during the late ninth century was engaged not only in social changes affecting the early medieval society in general, but also in the construction of an Anglo-Scandinavian identity within the Danelaw.

Producing Pottery Data: Collection Strategies in Lincolnshire

One of the important analytical advances over the last few decades has been the use of computer technology in research. Indeed, these advances have made this thesis possible. Collection and interpretation of data through computer-aided techniques has allowed the exploration of vast quantities of complex information. These techniques depend both on the standardisation of data and the recording of that data in formats usable by computers. Although technology has made tremendous advances, this has not always been matched by the rate of data entry, and many resources are still held on paper rather than in electronic archives. Nor has the reassessment of past collections often been accomplished. Lack of financial resources has been

one of the fundamental reasons for the absence of computer-maintained up-to-date collections. However, without the administrative support from funding agencies, this is unlikely to change.

Nevertheless, there have been some important advances in this direction. There has been much discussion concerning data standards in recent years especially with the advent of the Arts and Humanities Data Service (AHDS) and its service-provider, the Archaeology Data Service (ADS). Their mandate is to provide regulated access to data which is in standardised formats and therefore usable by a wide range of people. This was one of the aims of the East Midlands Pottery Project (EMPP) begun in 1991. The EMPP was interested in providing a database of East Midlands pottery which used standardised and accepted pottery codes and terminology. This entailed re-analysing pottery stored in museums as well as encouraging new finds to be analysed according to the EMPP format. Unfortunately, as with many projects, the size of the project was larger than anticipated, and there were no further finances forthcoming to cope with the work which needed to be done. As a result, Lincolnshire (where the project was based) has a good coverage of pottery data under this project but other counties were not assessed.

Most pottery used in this research has been recorded using EMPP codes (*below*). These codes are based on recognising kiln products such as those from the Lincoln Silver Street kilns or from Castle Farm, Torksey. The codes are arranged in a hierarchy of information from a basic late Saxon category to a specific kiln product. Other data can be included within the general scheme when it does not conform to the EMPP codes, allowing for a wider range of data to be interrogated. This kiln-based typology permits comparison between kiln traditions and allows the recognition of craft movement among potters, such as a Lincoln potter travelling to Horncastle or a Stamford potter moving to Nottingham. The EMPP typology allows research to be undertaken involving movement of wares and potters. As such, it is the typology used for this thesis, with additions, where possible, from other typologies. Unfortunately, projects such as the Fenland Project, have used fabric-based codes which were not established to recognise kiln products but rather are a basic description of the pottery matrix (Healey 1992: 249-52; 1993: 7-8). The only kiln-based codes which were recorded were a general Stamford, Torksey, Thetford, Maxey and Ipswich assignation. Therefore, it is only at the most general level that the two typologies, EMPP and Healey's fabric-based code, can be correlated and used together. This means that such important projects as the Fenland Project cannot be assessed in conjunction with the majority of pottery data for Lincolnshire.

The research done by Coppack for his doctoral thesis (1980) focussed on defining a relative chronology and typology for the medieval pottery from Nottingham, Derby and Lincoln (1980:

1,3). His results were based on distinguishing differences in colour, temper and texture as well as a comparison of forms. Other methods such as chemical analysis were only being developed during the course of his thesis and so were not employed (Coppack 1980: 18-20). The basic typology, established by Coppack for the Lincoln wares, separated the shelly wares into a finer (shell-tempered) and coarser (harsh shell-tempered) shell-tempered ware, the difference lying not only in the character of the temper but also in the basal structure. The shell-tempered ware had knife-trimmed, sagging bases while the harsh-tempered bases were flat (Coppack 1980: 39-41). These two wares were later separated, in the EMPP topology, into a larger number of ware-types based on post-excavation analysis of the Flaxengate (Adams Gilmour 1988) and Silver Street (Miles *et al.* 1989) material. Coppack also distinguished an early medieval grey sandy ware and splashed glazed ware in addition to a later orange ware (Coppack 1980: 43-4). This over generalisation of the Lincoln shell-tempered wares caused Coppack to presume that there was no substantial change in pottery manufacture at the time of the Danish incursions, despite his observations to the contrary from the material from Derby and Nottingham (1980: 341-2). Instead, Coppack concludes that Lincoln had a strong pottery tradition which continued from the middle Saxon period and which influenced other pottery practices of the East Midlands (1980: 331-2). However, while Coppack maintains that the Lincoln pottery industry was instrumental to the development of the East Midland pottery traditions, he also links the Stamford pottery with that of Derby and Nottingham (1980: 217-18, 275). With the lack of pre-Conquest material at the time from both those towns, further conclusions were difficult to draw (Coppack 1980: 292). Nevertheless, Coppack dates the connection between the Stamford-Derby-Nottingham industries to pre-1100 (1980: 293-4).

The focus by Coppack on the typological development of the pottery from three towns meant that he did not consider the rural consumption of these wares in detail, except for a comparison of the Lincoln material at Goltho (1980: 113-134). He notes that little was known about the rural industries of the medieval period (Coppack 1980: 331). However, other than a cursory glance at the rural consumption patterns in the East Midlands, Coppack does not address trade and consumption of the material which he studied. Indeed, as he notes, there was little understanding of urban pottery production patterns in the East Midlands before the late 1970's and 1980's with his and Kilmurry's (1980) theses on East Midland pottery and the analysis of the Flaxengate (Adams Gilmour 1988) and Silver Street (Miles *et al.* 1989) excavations in Lincoln. Knowledge of the development of the wares within their place of production was an important step to understanding the development of the regional landscape.

Kilmurry's (1980) thesis has remained an instrumental work on the development of Stamford

ware. Kilmurry recognised a number of different fabrics produced in Stamford. This was based on analysis of excavation of kilns, such as those excavated at Wharf Road and under Stamford Castle (1980: 31-4, 44-5). While the detailed distinctions between these wares are often difficult to distinguish, Kilmurry's fabric types and general ware developments are still used in current analysis. Unlike Coppack (1980), Kilmurry did not stop at a typological assessment of the pottery, but included discussions concerning the practices of production, trade and consumption of Stamford ware (1980: 171-5). Indeed, her thesis remains a seminal work in the understanding of one of the finest of East Midland pottery traditions and is used in the following discussions of Stamford ware.

The typology developed by Hayfield considered a large temporal range of ceramics from AD 410 to AD 1540 (1985: 2) within North Lincolnshire. Hayfield established one of the first typologies for this area from the excavations at Thornholme Abbey. Like that done by Coppack (1980: 18-20), this was done on visual similarities through an alphabetical code, which 'sought to avoid the need to adopt any established name for particular fabrics which may have had any unfounded implications for their place of manufacture' (Hayfield 1985: 6). This differed from Healey's approach which was not based on stratified assemblages and was, therefore, chronologically imprecise. Furthermore, Coppack's comparison of Lincoln, Nottingham and Derby did not address town-hinterland interactions and instead focussed on relationships between the town assemblages. Hayfield sought to address the distribution of pottery within the landscape from a chronological perspective (Hayfield 1985: 7). However, by structuring the typology without reference to particular kiln sites, Hayfield's typology is ultimately unproductive. Furthermore, without the use of microscopic and thin section analysis, much of the typology is not secure. While his work represents important research, the alphabetic fabric codes are unwieldy and do not have the precision of those identified from kiln strata. The lack of a kiln-based typology is problematic as it removes the processes of production and consumption from their spatial and social context. It is the interactions between town and hinterland - or the place of production and places of consumption - which are of particular interest, and it is appropriate to base the typology firmly within that spatial relationship.

The establishment of the East Midland Pottery Project (Vince and Young 1991) was instrumental in the understanding of the pottery traditions within Lincolnshire. The EMPP sought to establish a database of pottery from current and previous excavations based on a typology developed from microscopic, neutron-based and thin section analysis which linked pottery to specific kilns. Unfortunately, because of funding restraints, this project was unable to continue, and only Lincolnshire received detailed coverage. The following descriptions of

the pottery in Lincolnshire are primarily based on this understanding as well as that developed by Kilmurry (1980) and Barley (1982; 1964). The two articles by Barley contain detailed descriptions of the kilns and wares from his two excavations at Torksey. Subsequent excavations and analysis have built upon the knowledge presented by Barley (Palmer-Brown 1995; 1996b). However, his research of the Torksey pottery industries is still the main reference for that tradition.

The following discussion of the Lincolnshire pottery industries in the Anglo-Scandinavian period will be based on the typologies developed by the EMPP (1991), Kilmurry (1980) and Barley (1982; 1964). Further dialogue concerning the use of this information in the pottery analysis will occur in Chapter IV. This chapter focuses on the production practices of the potters in tenth century Lincolnshire and provides an introduction to the trade and distribution of that pottery.

Anglo-Saxon Pottery Traditions within Lincolnshire

This section describes the production and trade of pottery within Lincolnshire during the Anglian and Anglo-Scandinavian periods (AD 650-1100). It focuses primarily on the Anglo-Scandinavian developments to complement the focus of this thesis. The Anglian wares are only briefly discussed to provide a context for the Anglo-Scandinavian pottery. References to ware types uses the typology developed by the EMPP. The EMPP typology is the one most prevalently used in Lincolnshire and is the typology used in the analyses undertaken in Chapter IV. Further discussion of typologies will be addressed in the methodology section in Chapter IV. This current chapter is concerned with the social practices surrounding the production and use of pottery in the late Saxon period.

During the Anglian period in Lincolnshire, pottery production was a rural industry, operating clamp kilns to fire coil-built pots. These were shell-tempered vessels, and are generally referred to as Maxey wares from the site which they were first observed despite later fabric subdivisions. These pots were 'flat bottomed with simple bucket and barrel shapes, usually with a flat or slightly everted rim' (J. Wilkinson and J. Young *in litt*). The quality of these vessels appears to be linked to fabric, suggesting a range in the skill of the potters producing

the ware. There appears to have been both a northern and southern Maxey tradition being traded within Lincolnshire along a north/south divide. Indeed, the southern Maxey ware dominates the sites in the south of the county while being absent from those in north (J. Wilkinson and J. Young *in litt*). This might suggest that the kingdom of Lindsey, while nominally part of Mercia, was still asserting a regional identity which was observed by trading practices. However, the distribution of Maxey-type wares is still limited (*Figure 31*) and such a conclusion would be premature. Nevertheless, the question as to whether pottery distributions were structured by concepts of territorial identity in the middle Saxon period would be worthwhile pursuing when a sufficient quantity and quality of data was available.

One local ware emerges in the ninth century around Lincoln (Early Fine-Shelled Ware (ELFS)) for a brief period before being overwhelmed by introduction of Anglo-Scandinavian wheel-thrown pottery during the late ninth century. The potters producing ELFS incorporated some of the Maxey characteristics (coil-built, flat bottomed, barrel form) but were producing a distinctive ware which had grass-wiped, striated exteriors and round everted rims (J. Wilkinson and J. Young *in litt*).

Trade in the regional shell-tempered Maxey-type ware production was complimented by imports from Ipswich. Ipswich ware was thrown on a slow wheel and fired in structured kilns. It generally had uneven girth marks, sagging bases and was knife-trimmed (Dunning *et al.* 1959: 14). The Ipswich ware potters appear to have been copying Rhenish and Merovingian forms and stylistic elements employing traditional Anglo-Saxon techniques and technology (Dunning *et al.* 1959: 28; Hurst 1957: 30; Vince 1993a: 154). This sandy grey pottery was primarily traded within East Anglia along the coast and up navigable rivers from Essex to the eastern Fens at King's Lynn (Hurst 1957: 31; *Figure 32*). Indeed, it is ubiquitous on sites in Norfolk and Suffolk which date from the eighth to early ninth centuries (Vince 1993a: 154). However, it was also used extensively outside the kingdom.

During the latter half of the ninth century, the abrupt appearance of hard-fired wheel-thrown pottery in Stamford, Lincoln and Torksey submerged the earlier hand-made production. Both Lincoln and Torksey developed daughter industries: Lincoln at Horncastle, and Torksey at Newark. The pottery production within the Lincolnshire towns must be seen in context with the East Anglian Thetford, Ipswich and Norwich industries and Seven Boroughs production at York, Leicester, and Nottingham (*Figure 33*). Associated with the growing craft activity within these emerging towns, the shift in pottery production illustrates the formation of new settlement strategies within the landscape.

Production Practices: Kiln-yards and their Wares

Discussion of the production and consumption of pottery in Anglo-Scandinavian Lincolnshire must include the kiln-yard and the pottery produced there. Kiln-yard is used here to refer to the area used for the production of pottery, the town *haga*, presumably held by a lord to which the potters owed rent. This section explores how the kiln-yard was situated within the growing towns of Lincoln, Stamford and Torksey. It discusses the differences in kiln construction and the general developments in kiln technology throughout the Anglo-Scandinavian period. Evidence of craft techniques evident from the excavation of kilns are also introduced.

~The kiln-yard~

During the medieval period, kilns tended to be located on the edges of communities. The late ninth and tenth century pottery production was often situated just inside the walls of the burgeoning towns. The potters later moved outside the town and there are medieval references to both individual potters, as well as to communities of potters, within the rural landscape (Moorhouse 1981: 97). There may have been a practical reason for this marginalisation. The Silver Street kiln in Lincoln was associated with glass production and iron smelting. This suggests that these furnace-based crafts were purposefully positioned to take advantage of the prevailing winds which blew the smoke away from the inhabitants of the town (Adams Gilmour 1988: 173; Miles *et al.* 1989: 198). This raises the possibility of 'industrial zoning'. While towns were managed by the aristocracy and their reeves, without more extensive evidence, it is difficult to argue that the aristocracy were able to establish communities of craftsmen where they willed. Furthermore, Kilmurry suggests that the lack of industrial zoning in Stamford (as opposed to Ipswich or Norwich) was perhaps due to the more intense habitation of Stamford which encouraged more movement within the town (Kilmurry 1980: 151). Nevertheless, such indications of craft zoning are tantalizing suggestions of social control either at the administrative or community level. Ironically, this peripheral placement of the kiln may have reflected the low status of the potter in medieval society (Moorhouse 1978: 14).

With so few kiln sites excavated in their entirety, it is difficult to obtain a visualization of the people and the activities which surrounded the firing of the kiln. This lack of kiln-yard investigations was remarked upon by Musty who commented

‘that all too frequently only a solitary kiln has been excavated. Its discovery will have often resulted from an accidental exposure of part of it and once it has been excavated no attempt has been made to search for others. Equally, on occasions when more than one kiln has been located, no attempt has been made to search the ground *between* the kilns for associated structures’ (Musty 1974: 57).

Investment in a kiln-yard stretched over successive generations of kilns. Further inquiry into the extent and longevity of kiln-yards would increase current knowledge of the period of individual craft activity on town tenements. Indeed, the kiln-yard excavated at Thetford (Dallas 1993) has proved invaluable for the understanding of pottery production. However, due to the commercial nature of archaeology - especially within cities- a second excavation of an entire kiln-yard is unlikely. The evidence for kiln-yards in Lincolnshire is primarily based on the kiln and its products. However, the social practices associated with the kiln-yards of Lincolnshire can be discussed through the combination of information gained from excavations

Pits are the most numerous feature on a kiln site. These contain wastage from kiln firings such as pot sherds, silt, clay, loam and charcoal (Miles *et al.* 1989: 197). Pits were also used to store and weather clay, as well as for adding filler and temper (Dallas 1993: 60; Barley 1982: 270, 275). One pit at Thetford contained a large storage jar which was suggested to have held water for pot-throwing activities (Dallas 1993: 60). Few structures other than the kiln have been excavated. There is little evidence for domestic habitation of the site unlike other craft tenements within towns (Perring 1981; Hall 1988a: 130; b: 240). This suggests that the potters may have lived within another tenement separate from the kiln-yard. Indeed, it would be unpleasant to have lived in the kiln-yard while the kiln was firing. Experiments suggest that this lasted approximately ten to thirteen hours (Bryant 1971: 116).

The excavations at Thetford (Dallas 1993) provide most of our information about the movements of potters. Here the kiln-yard was enclosed by gullies on the north-east and north-west, indicating a delineation of property bounds (Dallas 1993: 60). The delineation of property was a common Anglo-Saxon practice. Tenements in York indicate that there was fencing between the plots (Hall 1994: 66). Indeed, the Anglo-Saxon word for plot, *haga*, is

associated with hedges (Hooke 1980: 39). There was some evidence for buildings at Thetford. One post hole perhaps represented the base for a potter's wheel from the packed debris of flint and pottery surrounding it. There was an unoccupied area east of the kilns where the fuel for the kiln might have been stored (Dallas 1993: 60). Indeed, a large amount of fuel would have been needed to operate the kilns, as firing would have taken more than one day (Musty 1974: 55). Most of the activity at the Thetford kiln-yard was located in an area south-west of the kilns. The ground was trampled and churned here perhaps caused by loading pottery into a cart (Dallas 1993: 60).

Other finds begin to give an insight into the potters themselves. Excavations at Silver Street recovered a discarded cattle rib, which may have been used for scraping, on top of one of the refuse pits (Miles *et al.* 1989: 193). Other cattle ribs have been found at Thetford (Dallas 1993: 68) suggesting that this was part of the potter's tool kit. Many of the routines and practices of pottery production have not been recovered. However, these techniques are apparent on the vessels themselves. The potters used stamps and material for painting and glazing (*Figure 34*). Roller-stamping was probably applied while turning the pot on the wheel. Wires were used to cut the pots from the bases, and knives were used to trim any excess clay. Slurries were formed through smoothing with a cloth and bases were often wiped (Miles *et al.* 1989: 206-7, 212; Kilmurry 1980: 79-85). A more endearing glimpse of a potter's life is seen in the human heel and young pig hoof impressions round the pedestal of one of the Torksey kilns (Barley 1982: 275). One can imagine the potter on his daily routine followed by an inquisitive young pig.

The kilns themselves are generally circular single flue updraught kilns: circular pits with a flue entrance into a stoke pit (*Figure 35*). These kilns come in two forms: the first a simple oven pit on the same level as the stoke pit; the second a more elaborate construction with a raised oven floor (either supported by a pedestal or sprung from the kiln wall) (Musty 1974: 44). The fuel would have been placed within the flue arch, the heat being funnelled into the kiln proper (Musty 1974: 57). Branches of oak, hazel and poplar were used as fuel (Miles *et al.* 1989: 186, 194). Wood would likely have been delivered in a cart, perhaps also accounting for the area of churned soil at Thetford. However, whether the potters were involved in a reciprocal arrangement with an estate, like the salters at Droitwich were with Bromsgrove to obtain wood (Blair 1994: 86; Hooke 1981: 132, 140-1), or whether they obtained it themselves, is unknown. The procurement of clay was also part of the routine of the potters. Both clay and wood would have been collected a season in advance to allow for souring of the clay and drying of the wood (Bosworth 1982: 44). These activities further indicate the dependance of the town crafts on resources outside the town.

Often the kilns were simply lined with clay, but linings of limestone, skerry and pottery are sometimes used (Miles *et al.* 1989: 186; Kilmurry 1980: 85-6; Barley 1982: 273). This indicates a more substantial investment in the kiln to reduce shrinkage of the lining after repeated firings. The kilns where this technique is employed were in use for a significant amount of time (Barley 1982: 372; Miles *et al.* 1989: 186). Despite a query by Musty (1974: 54) about the necessity of an impermanent roof structure to load the kilns, it is generally thought that these kilns had a removable superstructure (Miles *et al.* 1989: 199; Kilmurry 1980: 86). A non-permanent dome would have certainly facilitated the loading of the kiln (Musty 1974: 54). These superstructures appear to have been built out of clay and loam (Miles *et al.* 1989: 186, 191). Internal structures such as baffle bars, pedestals and firebars were used, both to support the kiln and the pottery as well as to increase the air flow (Kilmurry 1980: 86; Barley 1964: 176-7; 1982: 273). The excavations at Torksey and Stamford suggest that introduction of these structures developed during the mid-tenth century, the earlier kilns being a circular basin with no internal additions (Kilmurry 1980: 86; Barley 1964: 175-7; 1982: 270-5; Young and Wilkinson 1995: 6). Pottery at Lincoln was likely stacked upside-down from the grey reduced interiors. This would have protected the rims from rapid cooling. The sometimes grey patchy exteriors on these pots further suggest that they were cooled in hot ash (Miles *et al.* 1989: 199). Stamford pottery also was primarily stacked upside down and it was suggested that this position better retained hot air preventing extreme differentials of heat within the kiln (Bryant 1977: 110-1, 120; Kilmurry 1980: 86-7). At Stamford the kilns appear to be fully loaded at each firing, again ensuring better results (Kilmurry 1980: 86).

The twelve kilns so far known from Torksey represent the largest number of known kilns from a settlement. Indeed, if so many kilns have been recovered at Torksey, one wonders whether the number of kilns at other towns was originally a similar number, or whether Torksey was unique amongst pottery producing towns. Barley originally examined six of the kilns and noted the development from a simple clay lined kiln basin to a pedestaled base supported by fire-bars (Barley 1964: 175; 1982: 271-5). His sequencing of kilns was later reworked by Wilkinson and Young (1995: 6) whose chronology suggests that the kilns became more complex during the mid-tenth century. The kilns all have different life-spans with three consecutive kilns from the mid-tenth to mid-eleventh century demonstrating a large output (Barley 1982: 279-85; Wilkinson and Young 1995: 3-6).

The Silver Street potters in Lincoln employed a unique kiln structure after briefly using what appears to be a more standard circular kiln (Miles *et al.* 1989: 194; *Figure 36; Figure 37; Figure 38*). Instead of a circular kiln pit with flue arch and stoke pit construction, the Lincoln

potters built rectangular kilns of about 1 ½ metres wide and 3- 6 metres or more long (Miles *et al.* 1989: 186, 193). These were not proper kilns, as the fuel source was not separated from the kiln proper. In essence, these were elaborate clamp kilns, which combined the wood with the pottery, capping it with loam and clay (Miles *et al.* 1989: 186, 199-200). The two excavated kilns were lined or partially lined with limestone blocks (Miles *et al.* 1989: 186), presumably to prevent wall shrinkage and to support the vertical kiln sides. The only parallels for these kilns come from Merovingian and Carolingian contexts on the Continent (Miles *et al.* 1989: 198).

The two late Saxon kilns which have been excavated at Stamford are located on Wharf Road and beneath Stamford Castle. The Castle kiln was the earlier of the two and was in use during the latter half of the ninth century extending early into the tenth century (*Figure 39*). It was part of a larger complex of kilns probably situated to the north of the excavation (Kilmurry 1977a: 180). This kiln had flue arch and stoke hole like the kilns at Torksey and Thetford, but was elongated with straight sides. The potters had relined the kiln a number of times. It was rotated 180 degrees during its productive life, the stoke hole shifting from the south to the north. There were no internal structures, and the superstructure is assumed to have been removed by the potters after each firing. The piece of oak found in the flue arch indicates that oak was one of the sources of fuel for the Castle kiln potters. Pits nearby had been used to dispose of pottery and firing debris and there was a probable puddling pit excavated (Kilmurry 1980: 31-4; Mahany forthcoming).

The kiln-yard at Wharf Road was probably in use at the turn of the eleventh century (*Figure 40*). It was superficially circular, but became elongated and sub rectangular towards the bottom, suggesting a similar structural design to the kilns under the Castle. The floor was sloped, facilitating the movement of air from the southern stoke hole to the flue towards the north. The sides were lined with pottery to minimize wall shrinkage. The potters were using baffle bars as structural supports, which also increase air flow through the kiln. These bars could have held a temporary upper shelf on which the pottery could have been stacked. Alternatively, the pottery could have simply been stacked with the glazed pots at the bottom. There did not appear to be any permanent superstructure associated with the kiln, suggesting that the potters were removing a temporary roof after each firing (Kilmurry 1980: 44-5).

While the kiln-yards appear to be similar, the kiln structures found within Lincolnshire vary from place to place. Indeed, there is no uniform kiln structure being repeated in each town. Except for the early circular kiln at Lincoln, there appears to be a relative uniformity of kilns

within each kiln yard, and indeed, within the town as a whole. This suggests that the potters were operating within a craft tradition linked to the production of each ware. This would not be surprising if, indeed, the potters were immigrants into Lincolnshire, and were establishing their trade along the knowledge they had brought with them from the Continent. This further implies that the potters continued to work within the kiln tradition in which they were educated, emphasising the importance of craft tradition within early medieval society.

There does appear to be a general development in kiln structure through the tenth century. Early kiln basins were simply lined and relined with clay. During the mid-tenth century, there was a greater investment placed on kiln architecture. The walls were lined with stone or pottery to prevent shrinkage, and internal structures such as pedestals, fire and baffle bars were inserted. However, there was no move to create a permanent superstructure for the kilns, presumably due to ease of loading. Certainly, in the case of the Silver Street and Torksey potters, the development of the kiln architecture was linked to a greater output of kiln products (Barley 1983: 279-85; Wilkinson and Young 1995: 3-6; Miles *et al.* 1989: 200).

~The pottery~

The late Saxon potter did not have a large repertoire of forms and decoration. The most commonly made form was the cooking pot representing 70-80% of production (Adams Gilmour 1988: 65; Mainman 1990: 427; Barley 1964: 179). This was a globular shaped vessel generally having an everted rim, although they ranged to inturned. The rims were often rebated (lid-seated) possibly to hold a lid. Bases were cut with a wire. The 'sagging' bases often found on tenth century wares are the result of subsequent trimming after removal from the wheel. Basal trimming removes excess clay, which would produce differential heating, increasing chances of cracking (Kilmurry 1980: 79-80). The cooking pot could be modified into a pitcher or storage vessel with the addition of a spout and/or handle. Bowls and dishes were also made and represented the second major form. Occasional production of cups, crucibles, large storage vessels, pedestal lamps and costrels further completed the late Saxon ceramic range (Miles *et al.* 1989: 208; Kilmurry 1980: 25-28; Adams Gilmour 1988: 120). These forms appear to have been standardised and the rims may have been produced with the aid of a template (Miles *et al.* 1989: 205).

The artful scrolling and interlace inlaid in bone, metal and wood as well as inscribed in

manuscripts, characteristic of the Anglo-Scandinavian period, is not evident on the pottery. Instead, there is a scarcity of decoration. Under 10% of the vessels are decorated (Miles *et al.* 1989: 207; Mainman 1990: 403, 431). Stamps, both singular and roller, were employed to create square, diamond and occasionally rosette patterns. Wavy incised lines were a further decorative technique. Finger pressing and applied decorated strips were also used to create texture and decoration (Miles *et al.* 1989: 206-7; Barley 1982: 279-287; Kilmurry 1980: 21). Glazing occurred in rare instances, primarily at Stamford, and red paint is only known from the potters of this town (Kilmurry 1977a; 1980; Miles *et al.* 1989: 207; *Figure 34*).

It has been suggested (Carver forthcoming) that the decoration indicated the pots' contents or perhaps the place of production. The use of similar decorative techniques across a number of industries would tend to counter the latter proposal of kiln specific decoration. Indeed, decoration appears to vary more across time than geography. Roller-stamping appeared on rims and shoulder from the late ninth to the mid-tenth centuries, after which it was replaced by thumbed decoration on rims and applied strips, as well as inscribed linear designs (Wilkinson and Young 1995: 6). Moreover, while there is some suggestion of decoration being linked to the size of the pot, as with the applied strips on the large storage jars of Thetford and Torksey, this may have more to do with the structural integrity of the pot rather than its contents (Mainman 1990: 437). Although if these large storage jars were being used as a container for one substance, then the decoration and shape may have been associated with that substance, in the same way that today we associate glass jars with jam or other preserves. However, there is so little evidence for decoration and content that it is difficult to do more than speculate on a correlation between the two.

Historical evidence

The Anglo-Saxon language was alive with meaning and connotation. This extended to its poetry as well as to its everyday usage. Thus, a pot was not just a pot but a pitcher, a bucket, a kettle, a tile, a cup, a bucket or a vat. Anglo-Saxons tended to combine words to make the meaning more precise: *sopcuppe* (*sop* = soup; *cuppe* = cup/bowl) or *stanfæt* (*stan* = stone; *fæt* = vessel/cup/vat). Words also had a number of different meanings depending on the context. *Mele* could mean hollow vessel, cup, pot or basket. *Æschen* (bucket) was derived from its material, ashwood, as was *spear* (*æsc*). *Panne* may have meant pan in the kitchen, but its other connotation was skull as in *heafodpanne* (headpan) or *brægpanne* (brainpan). Words

specifically connected with pottery were *pott* and *greofa* (pot). *Crocc* (crock, pot or pitcher) could be combined with *-hwære* (kettle), *-sceard* (potsherd) and *-wirhta* (potworker or potter). *Tigel* was specifically a tile but could also be used to mean any ceramic item such as a pot. *Ceac* could mean a basin, cup, pitcher or beaker (Roberts 1992: 201-2).

Boiling was the main culinary theme of Anglo-Saxon cuisine. Stews and broths retained juices and flavours while having the advantage of softening tough or dried meat as well as dried vegetables. Eggs were hard-boiled and vegetables seethed in combinations of milk, butter and honey as well as oil. Fruits were stewed in vinegar and wine, occasionally being sweetened with honey (Hagan 1992: 53-4). However, one should not think that these were unsavoury as the Anglo-Saxons had a wide variety of herbs and seasonings at their disposal (Hagan 1992: 60).

Meals such as these would likely have been cooked in a ceramic pot. Medieval cookery books imply that slow simmering was a popular technique. If pots were set in ashes, it is therefore 'not surprising that many pots show only slight sooting, as they would not usually have been near the flames' (Kilmurry 1980: 26). However, further accounting for the popularity of the pot, were the other uses to which it could be put: flour and grain could be stored in pots; fruit and vegetables could be stored and preserved; oil, wine and ale could be kept and transported in pots depending upon the porosity of the pot; milk would stay cool in earthenware vessels; pots could be used in making butter and cheese; and coals could be contained within them providing a portable brazier (Moorhouse 1978: 7-13). Indeed, as Moorhouse notes, the open-mouthed 'cooking pot' was one of the most suitable and versatile of vessels (1978: 7). Pitchers and storage vessels would have been more adapted to some of these uses, but the 'cooking pot' could be used for all.

Lids were rarely constructed from clay. Instead the wood, linen and parchment were often used. although the latter may have been a medieval practice rather than an Anglo-Saxon one (Moorhouse 1978: 14-15; Moorhouse 1973:14). Sealing agents, such as an egg and flour mixture, as well as clay, dung, wax and lime, could also be employed (Austin 1888: 72-3; cf. Moorhouse 1978: 6, 14). The angled rims on late Saxon vessels would have been ideal for binding a cloth over the mouth of a vessel holding such contents as fruit and vegetable preserves. Furthermore, the pie-crust rim decoration on bowls might have intentionally complemented a pastry lid on a pie. Indeed, decoration is often more common on the smaller vessels which might have been brought to the table (Kilmurry 1980: 26).

In addition to their uses as kitchen accessories, pots were also buried in the ground. Reasons for this type of deposit have been suggested; such as coin hoards, good luck charms and even distilling apparatuses (Moorhouse 1978: 12-13). Lamps were sometimes made of pottery and must have been an important household item. One other use pottery had, and probably will continue to have, is as a weapon. Examples of medieval incidents can be found in court rolls such as the time when in 1306 Richard Schackelok 'broke one jar upon the head of Gilbert the merchant' (Ratcliff 1946: 122; *cf.* Moorhouse 1978: 17) and in 1532 William Bakon killed his prior in the heat of an argument by hitting the prior on the head with an earthen pot which caused, incidentally, a two inch long wound penetrating into the prior's brain (Hunnisett 1969: 57, no. 2; *cf.* Moorhouse 1978: 17).

The documentary evidence supports the suggestion that the primary use of pottery was domestic. While there is some archaeological evidence for the production of table wares, this was on a small scale, and pottery appears to have been mostly a utilitarian item used in conjunction with the wooden, leather and metal implements necessary for food production. As Kilmurry rightly notes, it is important to remember, that pottery was not the only material at the disposal of early medieval communities, however much pottery might dominate archaeological assemblages (Kilmurry 1980: 25). Pottery was used amongst other materials such as wood, leather, metal and cloth. Wooden barrels were used for storage as were baskets, leather vessels, and cloth sacks. Metal as well as ceramic vessels were used for cooking. Indeed, the image of a caldron or pot suspended over a central fire is a common image in manuscripts. Metal was also associated with high status practices, and other materials would have been used in lieu of metal if it were not readily available to the household (Kilmurry 1980: 25).

Stamford wares

The Stamford potters were using a nearby source of Upper Estuarine clay to produce their pottery (Kilmurry 1980: 63). This clay did not need to have any additional temper and the resulting vessels were extremely fine in comparison to other tempered wares (Vince 1993a: 156). There appear to have been five fabrics in production during the tenth century: E, F, H, A and D. The chronology of these fabrics begins at the Castle kiln with E/F (*Figure 41*). This earliest fabric of Stamford ware is referred to in the EMPP topology as Early Stamford ware (EST) (*Figure 42*). Fabric H is suggested to have been subsequently produced at the Castle kiln-yard, but no direct evidence of this has yet been found. The difference between E and F

is based on the amount of sand and quartz inclusions, the quartz in F resulting in a mica-like appearance. However, it is unlikely that the potters made any distinction between either E or F (Kilmurry 1977a: 181; 1980: 34). Fabric H is distinguished from E/F by its numerous quartz inclusions and the fact that it is soft and often under-fired (Kilmurry 1980: 42). Fabric A was produced at the Wharf Road kiln-yard in the late tenth century. Fabric H exhibits similarities in form and rouletted decoration to the Wharf Road vessels, suggesting a possible relocation of kiln and clay source by the potters producing Fabric H (Kilmurry 1980: 132). Fabric D was produced in the late tenth and eleventh centuries but appears to have been a distinct workshop specialising in glazed table-ware, inturned bowls and large storage vessels. Fabric D is more commonly found on sites outside of Stamford, as demonstrated by its high occurrence at Flaxengate in Lincoln (Kilmurry 1980: 132; *Figure 43*). The similarity between Fabrics E/F, H and A would argue for a single tradition of Stamford potters operating throughout the Anglo-Scandinavian period (Kilmurry 1980: 132). The later Stamford wares are termed Stamford ware (ST) in the EMPP topology (*Figure 44*). However, it is often difficult to distinguish between earlier forms and those produced in the eleventh century. Therefore, they are often grouped more generally into the ST type.

The Castle Kiln potters were able to constantly centre their vessels and produce uniformly thin walls through the use of a fast kick-wheel (Kilmurry 1980: 70-1). The bases were cut by a wire or string. These were occasionally hand-wiped to remove the drag marks, and there is little evidence of knife trimming. These early rims are generally everted with the flanges forming a triangular cross-section. This often caused air bubbles to form which cracked the rims (Kilmurry 1980: 34). Handles were formed by throwing a hollow cylinder, before being cut and attached to the vessel by smearing. The trefoil spout, rim and handle forms as well as the flat bases employed by the Castle Kiln potters are most closely paralleled on Continental forms emphasising the Continental origins of the industry. They are also the only potters who used red-painted decoration on their wares (Kilmurry 1977a: 183-4; *Figure 45*).

In contrast to the high standard of production evidenced by the Castle Kiln potters, the pots from the Wharf Road kiln-yard are poorly made with thick sagging bases and walls. The few handles are slab cut rather than being thrown on a wheel. Rouletting, where it occurs, was often done before the vessel had properly hardened, causing a blurred appearance to the decoration. Some pottery was decorated with thumbled applied strips but this too was rare. Slight splashes and speckles of glaze are also occasionally found on the Wharf Road vessels. However, there was a wider range of vessels produced than at the Castle Kiln yard, although there was less standardisation of rim form (Kilmurry 1980: 45-6).

The Stamford potters decorated their vessels with rouletting, applied strips with or without thumbing and grooved linear designs as decoration from the beginning of the industry (Kilmurry 1980: 22-24). The Castle Kiln potters were also occasionally glazing their wares with two lead based glazes, one opaque and yellow, the other clear and ranging from yellow to olive green. This glaze was applied in streaks or splashes and there is no indication that whole vessels were glazed (Kilmurry 1980: 36; 1977b: 55). Yellow splashed glaze was also used on the Wharf Road products. The iron-based red paint decoration employed by the Castle Kiln potters is unique to Britain. Instead, it is more often found on the Continent. Red paint was often found in combination with glazed decoration. It appears to have been applied with finger strokes but there is some indication of the occasional brush being used. On one example the potter had placed his paint-smearred hand in the vessel to remove it from the wheel, leaving a hand print (Kilmurry 1977a: 181; 1980: 36).

The Stamford potters were primarily producing cooking wares. These fall into the standard late Saxon ratio with the vast majority being cooking pots followed by bowls. Variation within these basic divisions increases through the tenth century (Kilmurry 1980: 34, 45). A number of developments occurred within the Stamford industry. Early in the tenth century the bases changed from flat wire-cut bases to concave sagging bases. There was also a shift from well-thrown, thin-walled vessels to more irregular, thicker pots. Rouletting was introduced in the early tenth century on the rims of Fabric H vessels. Fabrics A/D also had rouletting on their shoulders (Kilmurry 1980: 131). Handles and applied strips, first cut from wheel-thrown cylinders, were later slabcut. The crucible was introduced in the early tenth century indicating that Stamford potters were also catering to an industrial market (*Figure 46*). Finally, lamps were produced from the mid-tenth century following the general increase in form variation through the tenth century (Kilmurry 1980: 142).

Torksey ware

Torksey ware (TORK) production was a single fabric made in at least twelve different kilns from the late ninth to the mid-eleventh centuries (*Figure 47; Figure 48*). Indeed, except for variation in the amount of calcite in the vessels, neither macroscopic nor microscopic analysis is able to ascertain any differences between vessel fabric and form (Wilkinson and Young 1995: 2, 6). Potters were using a local lias clay with blown sand temper from a narrow zone extending east of the Trent from Scunthorpe to Collingham (Barley 1982: 275). These were

generally coil- built and then finished on a wheel. Potters often wiped their vessels with a wet cloth and trimmed the bases upside down on the wheel. The walls were thin, 2-4 millimetres thick. Cooking pots were a standard rim size of between 13-18 centimetres throughout production and were the predominant form. Bowls were based on two rim sizes of 20 centimetres and 30 centimetres. The smaller bowls often had plain out-turned rims, while the larger bowls had in-turned rims suggesting two different uses. The larger in-turned rims might have been used for holding liquid such as milk. The in-turned rim would be ideal for stopping undue spillage. It has been estimated that these larger bowls would have contained 14 litres of liquid (Barley 1982: 279, 284).

While this gives a general description of the ware, it is important to remember that there was variation between kilns. Not all potters were as skilled as others resulting in quality variation, as can be seen from the potters at Kiln 6 who did not wipe the vessels. Other potters had greater output resulting in the large storage jars produced by the Kiln 5 potters (Barley 1982: 284). The potters from Kiln 3 appear to have made vessels with a near black finish in contrast to the lighter greys coming out of other kilns (Barley 1964: 179). Nevertheless, there was a remarkable standardisation between the kilns.

Torksey production spanned the shift from rouletting to thumbed decoration which occurred during the mid-tenth century. Roller-stamping was concentrated on the rims and shoulders of vessels. Thumbing occurred on the rims, creating a piecrust-like appearance, as well as on the thumb pressed applied strips on the large storage jars. These strips extended the length of the body running diagonally and vertically (Barley 1964: 179), like those on Thetford ware storage vessels (Dallas 1993: 123-4). Other decoration included incised horizontal and wavy lines as well as bosses (Barley 1982: 279; Young and Wilkinson 1995: 2-3).

Lincoln wares

Unlike Torksey, Lincoln appears to have fostered a number of pottery industries producing either shell or sand/grit tempered wares (*Figure 49*). The ware produced by the Silver Street potters (Lincoln Kiln-Type or LKT) tended to dominate over the others for most of the tenth century. Nevertheless, it is clear that there were a number of competing potters at different times throughout the Anglo-Scandinavian period. Unfortunately, only two kilns have been excavated: one at Silver Street and one at the Sessions House, of which only the Silver Street

kiln has been analysed and published (Miles *et al.* 1989). Thus, the classification of Lincoln wares is primarily based on similarities of material, form, manufacture and supply (Adams Gilmour 1988: 77). Indeed, thin section analysis indicated that there was little variation in fabric between the shell tempered wares although microscopic analysis tended to confirm the groupings established through visual comparison of decoration, colour, form, temper and manufacture (Miles *et al.* 1989: 222). The potters were evidently procuring clay and temper from the same *locale*. This suggests that the variation between the Lincoln industries was due to production practices in the workshops throughout the town rather than a difference based on material composition.

One of the earliest Anglo-Scandinavian wares thought to be produced in Lincoln was similar in form to St. Neot's ware. This has been called Local Late Saxon Shelly Ware (LSLOC) and it is found in contexts dating to the late ninth early tenth centuries (*Figure 50; Figure 51*). It was both wheel-thrown and coil-built, often in combination. The potters used a distinctive sweeping roller-stamping pattern across the shoulders of the jars. The potters also were achieving a standard ovoid jar form, the height of which was 1 ½ times the diameter. Jars were the primary form corresponding with the general trend of production ratios for the Anglo-Scandinavian period but other forms were also made (Miles *et al.* 1989: 222).

The potters at Silver Street were producing what has become known as Lincoln Kiln-type Ware (LKT) (*Figure 52; Figure 53; Figure 54*) This shell tempered ware was the primary ware produced in Lincoln throughout the tenth century. The potters threw the vessels on a wheel producing interior ridges which were occasionally smoothed. Vessels were wiped after trimming and sometimes the exterior wall and bottom of the vessel bases were tool smoothed (Miles *et al.* 1989: 205). The jars were standardised in form: the height and maximum width conforming to 1 ½ - 1 ¾ times the rim diameter. This created a globular jar which was easily stacked (Miles *et al.* 1989: 208). Wheel-thrown handles were attached to this form to create jugs and pitchers (Miles *et al.* 1989: 206). Bowls and dishes, however, had little correlation between the dimensions of rim and form. While jars were the most numerous vessel form produced, followed by bowls, the LKT potters were also producing pedestal vessels, bottles and costrels (Miles *et al.* 1989: 210).

It is possible to trace some of the changes in the LKT industry through the tenth century. The earliest vessels were well thrown and fired. During the early to mid-tenth century, the quality of production started to decline and bases were coil-built and pressed onto the body which was thrown as a hollow cylinder. The wall thickness also began to vary and the vessels became

irregularly centred (Miles *et al.* 1989: 205). The firing was less controlled and the LKT pottery became more oxidised (Miles *et al.* 1989: 204). This changed the colour from a light red to a reddish yellow or pinkish buff (Miles *et al.* 1989: 226). Decoration changed through the tenth century both in style and frequency. While decoration was rare (being found on only 5% of the vessels), it declined during the tenth century (Miles *et al.* 1989: 207, 226). Roller-stamping on the rim, and/or shoulder, of vessels was the most common. Earlier in the period, the potters preferred a diamond pattern, which shifted to a square pattern in the mid-tenth century (Miles *et al.* 1989: 226). Finally, there was a shift in rim shapes for a number of forms. The frequency of inturned bowls increased from the early to mid-tenth century. Simultaneously, there was a decrease in dishes with upright or sloping rims. Throughout the production there was a shift towards a more defined lid-seated rim (hollow everted 1 - hollow everted 3) (Miles *et al.* 1989: 226).

These differences are most apparent between the earlier kiln groups at Silver Street and the products fired in Kiln 200. However, while both the pre-Kiln 200 and the Kiln 200 assemblages appear to be very distinct, this distinction is not mirrored on the sites within Lincoln to the same extent. As Young comments 'seen separately these two groups are very distinctive, but there is no clear dividing line on Flaxengate, where the groups seem to merge in the mid-tenth century' (Miles *et al.* 1989: 204). This is what might be expected in a community which was both regularly trading and using the vessels produced. The new styles would be used alongside the old, the sharp distinction visible on the kiln site being blurred through household practices.

Another shell tempered ware (LSH) was produced in Lincoln from the late ninth to early eleventh century (Group A, B and C) (*Figure 55*). The main difference between these groups, other than fabric, is the quality of production. Group A potters were constructing their vessels with a coil/ring technique which was smoothed on a wheel. These were generally poorly made and there was little effort to finish them. Group C potters were employing both coil/ring building and wheel throwing, often combining these techniques on the same vessel. They finished the vessels with a thick slurry or slip. The vessels produced by the Group B potters were well thrown and finished with no coil/ring building used (Miles *et al.* 1989: 222). Although LSH is not as prolific as the LKT vessels, it is indicative of a range of production occurring within or near Lincoln.

Finally, Lincoln Fine-Shelled ware (LFS) appeared during the late tenth century and proceeded to fill the gap left by the declining LKT industry (*Figure 56; Figure 57*). These vessels were

hand-made and coil-built demonstrating a clear shift in practice from the earlier focus on wheel-throwing techniques. The LFS vessels were more cylindrical than the globular forms, which dominated the late ninth and tenth centuries. Decoration was rare, but where it appeared, was comprised of nail pressing or incised wavy lines (Miles *et al.* 1989: 223).

Potters who employed sand temper instead of shell were also practising in Lincoln first during the late ninth to mid-tenth centuries, and then again from the late tenth century into the eleventh century. The earlier wares formed three distinct groups: Lincoln Late Sandy Ware (LSLS), Lincoln Gritty Ware (LG) and Lincoln Glazed Sandy Ware (Miles *et al.* 1989: 222-3). The later sandy production began in the mid-tenth century with the potters producing Lincoln Saxo-Norman Sandy wares (SNLS) (Miles *et al.* 1989: 222-3).

Lincoln Late Sandy Ware had two fabrics (Group A and B) both of which were wheel-thrown and well finished (*Figure 58; Figure 59*). These potters were mainly producing a medium jar. Decoration consisted of square roller-stamping, with Group A potters also employing the occasional thumb pressed applied strip, and Group B potters using wavy-incised lines (Miles *et al.* 1989: 222-3). The Lincoln Saxo-Norman Sandy (SNLS) potters retained the wheel-thrown form into the eleventh century, when the shell tempered potters reverted to ring/coil-built production (*Figure 60; Figure 61*). Nevertheless, the wheel-throwing technique was poor in comparison to the earlier tenth century examples. Decoration consisted of finger pressing and wavy incised lines rather than the earlier roller-stamping patterns. The jar/pitcher is still the most common form, although the shallow dish of previous production has disappeared (Miles *et al.* 1989: 223).

The potters producing Lincoln Gritty (LG) used a combination of wheel throwing and coil/ring building (*Figure 62; Figure 63*). The bases of these vessels tended to be coil-built, while the upper portions were turned on a wheel. These grey wares were sometimes decorated with square roller-stamping. The lower body of LG was often knife-trimmed and rims were made with the use of a former, leaving a sharp edge (*Figure 64*). The potters were primarily producing medium jars but also bowls and dishes (Miles *et al.* 1989: 222-3; A. Vince and J. Young *in litt*).

Glazed pottery production has been linked to the LKT potters due to similarities between fabric, form, manufacture and decoration of both LKT and glazed vessels. Glazing only adheres to sand tempered fabrics. Thus, the additional shell tempering found in the Lincoln glazed pottery suggests an attempt by shelly ware potters to glaze their vessels, but still retain their distinctive

shelly fabric (Miles *et al.* 1989: 226). Three fabrics were produced: Group A, B and C. The potters who produced this glazed ware decorated their vessels with diamond roller-stamping, a style also found on early LKT vessels. The glaze was either splashed across the pottery (Group B and C) or it covered both surfaces (Group A). Glazed pottery production also extended to the production of the only sandy glass-melting crucibles made in Lincoln during the late ninth to mid-tenth centuries (Miles *et al.* 1989: 222-3).

Discussion

During the middle of the ninth century, immigrant potters from the Continent took up their craft within the settlements, which were later to develop into towns along the north-eastern coast of England. In Stamford, there is a direct linkage with Frankish pottery traditions seen in the form-types, red paint and splashed glaze used by the Castle Kiln potters (Kilmurry 1977a: 184). Indeed, the sudden appearance of fully fledged wheel-thrown wares in Lincoln and Torksey argues for the immigration of potters versed in the Continental craft traditions of this pottery (Miles *et al.* 1989: 226; Barley 1982: 275). The pottery craft underwent a number of changes during the Anglo-Scandinavian period. The finest wares were the earliest produced, further indicating the introduction of a fully-fledged craft tradition from the Continent to the East Midlands during the ninth century. However, while there was a later decline in the standard of pottery (thicker, more irregular vessels with sagging bases which are often not completely wheel-thrown), a larger number of forms were produced throughout the tenth century. This corresponded with the development of furniture and internal structures within the kilns which was related to increased production later in the tenth century.

The East Midland potters were operating within established craft traditions as can be seen from the distinct movement of potters from one town to another. Indeed, Torksey-type ware is further known from Newark and Leicester (Vince 1993a: 156; *Figure 65*) and possibly a site north of the Humber due to the preponderance of Torksey-type wares at York (Mainman 1990: 422-440; Vince 1993a: 156). Stylistic similarities, between the thumbing technique of the Torksey potter and that of the potter at Newark, suggest the movement of a potter down the Trent from Torksey to Newark, perhaps during the development of the town during the tenth century (J. Young *pers com*). Torksey-type wares are also extremely similar to the East Anglian grey ware tradition associated with the Thetford industry (Dallas 1993; Rogerson *et al.* 1984; Vince 1993a: 156; Mainman 1990: 437). However, Thetford-type and Torksey-type

wares remain two separate traditions within the East Midlands. Potters also appear to have travelled from Stamford to Northampton (Vince 1993a: 156; Coppack 1980: 217-8) and perhaps to Derby where a Stamford variant was also produced (Coppack 1980: 274-6). Furthermore, a potter within the LKT tradition can be located at Horncastle during the tenth century (Vince 1993a: 156; J. Young *pers com*). The Horncastle potters continued into the eleventh centuries despite the demise of the LKT industry in Lincoln (J. Young *pers com*; *Figure 66*). Shelly wares are also known from St. Neots (Hurst 1956; Hunter 1979; *cf.* Vince 1993a: 56) as well as Oxford/London (Vince 1985; Vince 1993a: 156) indicating that the use of shell temper was wide spread in the Midlands.

The East Midlands potters were participating in the general development of craft industry within the towns. These potters were engaged primarily in the trade of cooking vessels (pots, pitchers, bowls and dishes). They hard-fired these vessels in kilns within the towns, their kiln-yards spotted with storage pits for clay and firing waste. Procurement of clay and fuel would have been an intermittent activity, as would the firing of the kiln, a process which would take a full day (Bryant 1977: 166). Potters were not involved in a prestigious trade, and indeed, appear to have been poorly regarded (see above). However, pottery was a necessary commodity, and the potters did produce a range of specially decorated wares ranging from imprinted designs to red paint and glazing. There is some suggestion that these potters were situated on the edges of the town communities, perhaps to take advantage of prevailing winds. However, this was not always the case as can be seen with the centrally located Thetford kilns, despite the suggestion by Davidson that his kilns represented an industrial area (Davidson 1967: 194; *cf.* Kilmurry 1980: 151). Indeed, as Kilmurry points out, the two kiln sites at Thetford are in two distinct areas (Knocker and Hughes 1950: 43-4; Davison 1967: 194; *cf.* Kilmurry 1980:151). The lack of evidence for habitation on the kiln-yards suggests that living near a fired kiln was not particularly desirable. Further excavation is needed to more clearly relate the pottery industry with the other crafts within the town.

Consumption Practices: The Distribution of Pottery within Lincolnshire

There is much less understood about the consumption of pottery in the Anglo-Scandinavian

period than the production of it. While sooting on the pots suggests cooking practices, and crucibles are indicative of metallurgic crafts, there is little archaeology has been able to say about the use of these pots. Barley has suggested that the Torksey bowls were used for holding milk (Barley 1982: 284) and later medieval documentary evidence suggests both culinary and dairy uses for pottery (Moorhouse 1978: 7-13). Pottery was often used in food production and storage. This would make it a necessary part of a household, although wooden and leather vessels would have been used alongside their ceramic counterparts. Anglo-Scandinavian potters were producing vessels primarily for household usage (cooking pots, bowls, globular lamps and costrels), as well as maintaining a separate trade in crucibles to the town metal workers.

Mechanisms of pottery distribution within Lincolnshire have been discussed by Kilmurry (1980) and Hayfield (1985). Both focussed on models of trade which outlined general scenarios of exchange (Kilmurry 1980: 171; Hayfield 1985: 408). These models describe commercial interactions between producer and consumer with occasional intervention by a middleman or trader. Thus, in Kilmurry's adoption of Renfrew's methods of exchange, there are five possible models:

1. Pottery is directly traded at the workshop to the consumers.
2. Pottery is traded by the potters who travel themselves to the consumers.
3. Pottery is traded by the potters to the consumers at a designated *locale* such as a market.
4. Pottery is traded by the potters to middlemen who then trade it to the consumers.
5. Pottery is traded to a standardised central agency by the potters (Kilmurry 1980: 171).

Kilmurry determined that the first four methods were possible models for the trade and exchange of Stamford pottery. She concluded that the population of Stamford could have traded directly with the potters (1) as well as at a market (3) which would have also served a regional population. Traders, either the potters themselves or designated middlemen, would also have been able to serve the regional population (2, 4) (Kilmurry 1980: 171-2).

Kilmurry situated her discussion of the means of distribution for Stamford ware (1980: 171-5) more firmly in its historical context than Hayfield who was interested in defining the 'zones of influence' for a market distribution (Hayfield 1985: 410). Kilmurry suggested that the main method of pottery distribution was through middlemen traders who carried the vessels as an extra item to complete a load (1980: 170,172). This was partially based on the wide

distribution of Stamford ware which implies interaction with specialised traders who were able to carry the pottery those distances (Kilmurry 1980: 172). She also noted that the Stamford pottery trade was different from that of Thetford-type pottery which she linked with the grain trade. Indeed, Stamford appears to be trading predominantly in smaller vessels (Kilmurry 1980: 170).

While Kilmurry and Hayfield link the distribution of pottery to specific models of exchange, these discussions are ancillary to their main purpose of establishing typologies for a particular town or region. Thus, while Hayfield provides numerous distribution maps for the South Humberside pottery production during the medieval period, he does not consider the reasons why pottery would be travelling to particular places (Hayfield 1985: 406-419). Neither does Kilmurry consider the places in which pottery was being consumed (Kilmurry 1980: 170-175). The focus of this thesis on landscape, and the ways in which the practices surrounding the production and consumption of material culture can inform archaeologists about the ways in which landscape was structured during the tenth century, necessitates a different approach to the discussion of trade and exchange.

The social construction of place in the landscape becomes important to this discussion because it affects the activities which occur within a place and thus the character of the movement towards and away from that place. The above discussion demonstrated that the consumption of pottery during the late Anglo-Saxon period was primarily domestic. Furthermore, while the use of pottery in tenth century Lincolnshire was wide-spread, it was not a prestigious item, and as Kilmurry (1980: 170) has suggested, might have been traded as an extra item in addition to the main load of trade. Therefore, this thesis is interested in the ways in which the production and consumption of pottery structured place and mobility within the landscape. The remainder of this chapter will begin a discussion concerning the trade of pottery and its influence on the social understanding of place and mobility within the landscape. These issues will be more fully addressed in Chapter IV with the analysis of the Lincolnshire pottery collections.

From the discussion in Chapter II, it is clear that trade and movement were regulated within late Saxon society. Towns were where most of the trading occurred, under the eye of witnesses and town reeves (Attenborough 1922: 115, 135). Travellers and traders were required to register with the local authority, a practice common to Anglo-Saxon society in general (Attenborough 1922: 79). Financial transactions made by manorial inhabitants were also recorded (Whitelock 1968: 399). Domesday suggests that *locale* influenced the cost of some items such as salt, which was dearer to those living outside the hundred or shire (Douglas and Greenaway 1953:

871). Domesday also indicates that movement in and out of towns was also taxed as was the loading and unloading of goods at ports (Foster and Longley 1924: 215). Place and region were important to the social practices of trade.

Towns were foci of trade and craft production. It is, therefore, not surprising that pottery production was located in the town, nor would it be unexpected if much of the trade in pottery occurred in the towns, either to townspeople or to traders hauling loads between town and manor. The practices surrounding production and exchange of goods within the towns, increasingly became a source of differentiation of towns from other settlements. It is difficult to characterise the trade in rural locales. Indeed, the law-codes attempted to regulate trade over twelve pence to markets within towns. This was aimed at substantial transactions. Later sources indicate that small-goods traders, such as pot-sellers, travelled through the countryside (Kilmurry 1980: 171). Certainly traders were moving through the landscape as indicated by the grant of toll-revenues and market taxes to Wærferth by Æthelræd and Æthelflæd (Whitelock 1968: 498). The question becomes to what extent was pottery traded outside of the town, to where, and how did the social understanding of place, territory and mobility influence this movement.

Traders would have traveled by foot, by horse or by cart pulled by oxen. Indeed, the research done by Langdon (1986: 26, 49, 114) indicates that before the thirteenth century, oxen were primarily used for traction, especially during the Anglo-Saxon period when horses were used for riding and luxury beasts rather than for hauling loads. The Cheshire Domesday indicates that people did use pack horses and foot travel, as well as cart and ox, for transporting salt (Douglas and Greenaway 1953: 871). However, if pottery was, as Kilmurry suggests (1980: 170), an extra item to the main load of other perishable produce, then an ox and cart would be the most likely method of travel. Langdon calculates that an ox and cart could travel 2 km per hour as opposed to twice this for horse and cart. While horses were able to travel faster than oxen, they were only able to carry half the load that oxen were capable of hauling (Langdon 1986: 162-3; 1987: 56). These rates were influenced by weather conditions. Records from the thirteenth century note that a consignment travelling from London to Norwich, in winter weather using horses, was only able to achieve 12 miles or 20 km per day (Stenton 1965: 256), emphasising the difficulties the seasons could present to travellers. Stenton further notes that a messenger on a horse was able to travel at least 30 miles per day (Stenton 1965: 255), again demonstrating the differentiation in travel time produced through varying methods of travel. Perception of distance was dependant on the means with, and the seasons in, which one traveled.

This fluid perception of distance was true also of water-transport. Tides and currents greatly affected the travel time needed to go between places. Indeed, while it only took 2 days for scholars to travel by boat from Torksey to York in 1319, a distance of approximately 120 km; it took the same group 2 days to go along the Witham from Boston to Lincoln, only 60 km (Barley 1936: 15-6). Indeed, Johnstone (1980) calculates that an average sized barge (approximately 6 tons) 'could cover 10 kilometres in a day, while a big team might double that distance. Downstream, when the river helped the haulers, the day's travel could go up to as much as 35 kilometres' (1980: 168). Leighton suggests that Frederic Barbarosa traveled between Sinzig and Aachen at 30-40 miles per day or 50 - 65 km per day (1972: 177). All these sources indicate, that without the aid of strong tides and currents, boat travel was able to cover approximately 4 km per day.

Travellers in Lincolnshire used both river and road travel. While the county is perceived as flat today, from the drainage programmes of the seventeenth to nineteenth centuries, tenth century travellers would have been presented with a landscape of upland hills and ridges, along which ran the *stræts* and *herepaðs*, and of low lying fen and marsh through which flowed the rivers. The movement of people from town to village along these routes structured the landscape.

The ways in which pottery is able to inform archaeologists about this movement is one of the foci of the next chapter. While the use of the Roman road and river system is unquestioned, the extent to which rivers and Roman roads were used in the transportation of pottery remains open to debate. Current knowledge of local paths between settlements is limited for the early medieval period despite the detailed work of Russell (1984). Thus, Chapter IV is aimed at addressing the extent to which the Roman road and navigable rivers were used in the pottery trade. Through an exploration of the movement of traders - whether merchants or farmers - the ways in which they perceived their territory and the places they traveled to and from will be further discussed.

Summary

The developments in the understanding of pottery production and consumption in the Anglo-Saxon period through this century have meant that archaeologists are able to discuss issues such

as social identity and geographical orientation. The production of pottery is incorporated into the social definition and perception of the place where it is made. It becomes embedded into that community. Similarly, the distribution of pottery reflects the social geography of the region. Travel is directed movement towards one place and away from another. How those places are understood within society, impacts on what pottery is traded and used in those communities. Furthermore, political and geographical boundaries structure the regions and directions in which travel and trade occur.

In order to address these issues, it is important to understand the context in which the pottery was produced and traded. This must include the general developments and characteristics of pottery during the period. Many of the arguments of social change within Anglo-Scandinavian society rest on a definable break at the end of the Anglian period with the Viking Invasions. The pottery reflects this in terms of its form, production technology and the place in which it was manufactured. Through examination of the pottery and the kiln site, one is able to place them within Anglo-Scandinavian society. A discussion of both the general trends occurring in Anglo-Scandinavian pottery production and the specific places in which the pottery was produced is necessary for this contextualisation of the pottery trade within Anglo-Scandinavian England. Above all, one must not lose site of the potter, the trader and the user who enacted the social movements which led to the deposition of pot and kiln for the archaeologist to uncover.

CHAPTER IV

CERAMIC LANDSCAPES

EXPLORING SOCIAL GEOGRAPHY THROUGH MATERIAL CULTURE

'Space is constituted through social relations and material social practices'
(Massey 1994: 145).

'People's experience of the land is based in large measure on the particularity of the social, political and economic relations within which they live out their lives, while at the same time their individual actions form part of the way in which these relations are constructed and changed' (Bender 1993: 246).

'To avoid further despair, we accept [these difficulties] and proceed with courage, looking first at the theoretical ideal and then at what may be practical in particular circumstances' (Orton et al. 1993: 167).

Human landscapes are constructed through social practice. This theme was discussed throughout the previous chapters with the focus first on social theory, then on the historical landscape of the tenth century and, finally, on pottery production during the Anglo-Scandinavian period. When approaching landscapes the emphasis is on human action, on how people interact with their environment. The use of the term 'environment' is not meant simply to evoke images of trees and vegetation. Instead, it is concerned with communities and individuals who live in a landscape of socially constructed meanings and interpretations (Ingold 1993: 156). The river is not just a river but a cultural boundary which has political and economic implications. Indeed, people tend to orientate their movement away from boundaries and towards those places with which they share cultural affiliations.

How people interpret their territorial landscapes impacts on how they perceive travel. In the global community of the twenty-first century, many cultural boundaries are easily crossed, but the tourist paraphernalia of kilts, leiderhosen, and berets which clothe the national dolls are reminders that political boundaries are enforced by social adherence to a common understanding and representation of cultural identity. This orientation of movement and social identity is apparent today in Canada where the northward-looking ribbon of population just

above the U.S. border, takes its identity from a largely unpopulated North and culturally frowns on cross-border shopping, despite individual participation in this event (Shields 1991: 164-66). Social perception of territory structures population mobility and interaction. This social orientation towards territorial affiliation patterns material culture. The Anglo-Scandinavian sculptural traditions in Lincolnshire, with their emphatic stylistic differences between the territories of Lindsey and Kesteven, demonstrate territorial orientation and cultural affiliation towards a socially defined landscape (Everson and Stocker 1999). People invest in statements of identity, such as those church founders in the tenth century who erected stone sculpture to memorialise their contribution to landscape and community after their death.

The social construction of landscape has been predominantly addressed through the study of ritual and monumental landscapes (Ashmore and Knapp 1999; Llobera 1996; Tilley 1994). These studies have been able to focus on the social geographic agendas which emphasise memory, social identity and order, as well as social transformation (Ashmore and Knapp 1999: 13-9). However, the association between material culture and the social structure of space (Barratt 1987: 8; Massey 1994: 145) includes the production and consumption of artefacts as well as monuments. Social understanding of settlements, of boundaries, of orientation and mobility are all part of these production and consumption activities. Through studying the patterns of material culture, archaeologists are able to approach the larger issues of space, place and social action within the landscape.

The study of landscape emphasizes those aspects of society such as the seasonality of movement (Ingold 1993: 163), the visual representation of power in henges or burial monuments (Bender 1993; Thomas 1993), and the signalling of territorial identity (Fisher 1988; Scull 1993; 1992). While many studies are based on visualization of socially constructed landscapes, such as the ritual arrangement of barrows and stone circles, others are concerned with the social distribution of material culture. All emphasize the individual and community across the levels of social interaction. Indeed, when reconstructing the individual within the landscape, it is not the ealdorman or aristocrat which is chosen, it is the herdsman, the traveller, and the farmer (Blair 1994: 146; Carver 1988: x). It is appropriate, therefore, that the artefact chosen for this study of the Anglo-Scandinavian landscape of Lincolnshire is pottery, an item used in towns and manors, berewicks and sokeland.

Pottery is a ubiquitous artefact on sites in tenth century Lincolnshire which makes it appropriate for studying settlement and trading strategies as a vehicle to approaching cultural landscapes. As previously discussed (Chapter I), social landscapes are structured through the production

and consumption of material culture, the patterning of which archaeologists recover through excavation. The examination of pottery production and consumption is particularly applicable to research into human movement and settlement organization within the landscape. Production and consumption practices vary depending upon the place and activities which occurred there. The development of the town and manor during the late Saxon period can be investigated through the analysis of pottery distributions. This shift from the middle Saxon estate to the late Saxon manor and town is bound up in a change from tributary to feudal relations (Chapter II). Pottery production and consumption reflect these changes, most noticeably, with the focus of production and trade within the emerging towns and the interaction between these settlements and the developing rural hinterlands.

Analysis of material culture is important in elucidating the artefactual patterns created through social practice. This chapter focuses on the analysis of pottery production and consumption in tenth century Lincolnshire as an avenue for addressing the social construction of place and territory as well as social concepts of mobility. It accomplishes this by combining statistical methods of analysis with techniques developed using GIS. The data used for this study have been gathered from previous projects and reports, primarily the East Midlands Pottery Project (EMPP). This chapter discusses the quality of pottery data and other information needed to successfully address past landscapes through social practices associated with the production and consumption of material culture. It also considers the current analytical techniques available for this study and comments on areas of future research. Further discussion of these issues will comprise the final chapter (Chapter V).

Approaching the Landscape: Visualising the Past

This thesis explores the landscape and social practices of the Anglo-Scandinavian inhabitants of tenth century Lincolnshire. Much of this investigation is based on visual exploration of pottery production and consumption practices. While Thomas is rightfully wary of the tendency for the distribution map to become the end result of research (Thomas 1993: 30), it, and other forms of pattern recognition, are essential to the study of archaeological landscapes. The importance of visualisation is noted by Gregory when he quotes an unreferenced commentator: 'geography ... is to such an extent a visual discipline that ... sight is almost certainly a prerequisite in its pursuit' (1994: 16). Humans predominantly interpret landscape

through visual means, and any analysis of landscape, whether survey or post-excavation, needs to incorporate the visual into the research. This is achieved through statistical analysis and spatial representation using GIS.

GIS applications are effective in archaeological research because of their ability to handle spatial data. GIS allow archaeologists both to make associations between the environment and material patterning and to graphically display the results. Indeed, it is through the visual analysis of material culture that archaeology gains much of its knowledge. In order to understand how people in the past lived and moved through their landscape and within their communities, archaeology needs to incorporate visual analysis of spatial data. Archaeology is involved with the reconstruction of past societies, the buildings in which they lived, the roads they traversed and how they saw their surroundings. Visualization of the past therefore becomes one of the primary methods employed in archaeological research.

The use of GIS as a tool for analysis and visualization of social practice has been explored by archaeologists over the last decade and a half. Lock and Harris (1992), in one of the most comprehensive volumes of archaeological research using GIS, discussed the development of spatial analysis through the techniques of mapping, statistics and digital analysis. They explored the use of GIS within archaeology noting that 'GIS is an analytical engine that can use digital mapping as just one of several methods of displaying results from a wide range of analytical procedures' (Lock and Harris 1992: 88). Indeed, GIS allow the integration of statistical analysis, spatial visualization and contextual inquiry. Reilly further discussed the importance of data visualization through the use of GIS, by which 'multi-dimensional data can be brought within the range of human experience and cognition' (1992: 148). This has formed the basis of archaeological investigation using GIS.

The combination of statistics and GIS in this thesis accomplishes a balance between the strengths of these methods. Indeed, space is not represented readily through statistical analysis. Statistics is engaged with the reduction of data patterns to a few fundamental variables, either through conscious selection of specific variables, or through mathematical equations (Cooper and Weekes 1983: 241). This process removes the data from its context, isolating specific variables for analysis. This is especially useful for the researcher who is interested in the relationship between such issues as the importance of distance to artefact distribution (regression analysis) or in the similarity between sites based on assemblage composition (cluster analysis). However, other variables, such as direction and geographic location, are difficult to introduce into the equation. By displaying these results through GIS techniques,

spatial and other data can be incorporated into the analysis. Indeed, one of the great advantages of GIS are the spatial display of data. Through interactive querying of database information stored within GIS, the distribution map becomes an important tool for exploratory analysis. While GIS incorporate statistical analyses within its programming, the user-interface is not as approachable as that used by Windows-based programs such as SPSS. Therefore, SPSS was used in this thesis for the statistical analyses and, where possible, the results were displayed using GIS.

The post-processual movement has often declared the analysis of distribution maps and statistical techniques to be too reductive (Yoffee and Sherratt 1993a: 4). There is a fear of losing the people, the communities and individuals of the past, in the dots and formulas of pattern analysis. Once again, Bourdieu's assertion that 'theory without empirical research is empty, empirical research without theory is blind' (Bourdieu 1988: 744-5; cf. Jenkins 1992, 10) must be restated. Theory is about the agenda, approach and interpretation of human society. However, its foundations must be securely grounded in data from which to develop its ideas and understandings of past cultures.

This awareness of a distinction between theory and data analysis has been particularly discussed by those using computer applications in archaeological research (Gaffney and van Leusen 1995). Computers, so much a part of the 1960's scientific revolution, are still often seen as deterministic, and as part of the hypothetico-deductive school of research which stresses the interaction of cultural systems rather than social practices of actor and agency. Llobera (1996) draws attention to this issue when he states that 'an archaeological study which incorporates environmental information is not condemned to determinism (or *vice versa*). Determinism is the product of our interpretation as reflected through the way we use our information' (1996: 613). The same could be said about the use of the words 'empirical' and 'empiricism'. The use of empirical data within research does not denote empiricism. Empiricism is an approach to data interpretation. It is not the use of data itself.

This thesis, as outlined in Chapter I, explores of the social understanding of landscape through the analysis of pottery distributions. This differs from many landscape studies which focus on monuments rather than artefact analysis. Projects which address monumental or ritual landscapes have physically situated the archaeologist within the landscape (Llobera 1996; Boaz and Uleberg 1995). These have employed techniques such as viewshed analysis which allow sites and *locales* to be visually perceived and explored. These techniques of representation - from 3-D modelling to 2-D mapping - have been successfully adapted to discuss cognitive

landscapes.

Exploration of past landscapes through the analysis of artefacts involves the development of other techniques which are not as readily available. Instead of concentrating on a specific site or *locale*, the region has often been the focus of distribution analyses. Thus, the act of situating the archaeologist within the landscape is more abstract, dealing not so much with modelling the visual impact of *burhs* and manors, as with the movement between those places. Indeed, the development of cognitive approaches to movement has been a large part of this thesis. Human mobility is dealt with directly through the analysis of artefact distributions and the social practices which produced those patterns. Perception of distance, territory and place structure the trade and consumption of material culture. It was this concentration on social structures of mobility and movement which made the use of GIS in this project so appealing.

GIS applications were primarily developed to deal with the multi-faceted spatial constructions of the late twentieth century. Complex structures, such as networked street plans to aid hospital services (Walsh *et al.* 1995) and hydrological watershed models (Matson *et al.* 1995), have been constructed through the use of GIS. These systems are able to manage and assess large amounts of spatial data. However, archaeologists rarely have the detailed knowledge of the cultures they study to recreate such elaborate systems. Nor do they ask the same questions of a GIS that those involved with twentieth century projects ask. Indeed, the archaeologist is often interested in obtaining the information that is normally entered into modern day GIS. The social practices which GIS are designed to model and manage are already embedded within the pattern of material culture. Thus, GIS analyse a static pattern - not the processes which led to it. The tenth century traveller has already queued and paid his toll at the gates of Lincoln. The impedances and restrictions are already incorporated in the archaeological record. This means that GIS applications must be adapted to elucidate and identify patterns of social interaction rather than to construct systems facilitating the administration of human movement and the management of natural resources.

Thus, archaeological GIS need to be adapted to address different agendas from those which they were originally designed to do. GIS are not inherently cognitive, and techniques must be designed which address social questions (Gaffney and van Leusen 1995: 372). As previously discussed, this thesis examines the ways in which people perceived places and territories and how they negotiated and interacted with their landscape. Techniques which address place, mobility and region need to be employed in order to address these issues through the analysis of production and consumption practices.

Differences between practices of consumption within settlements can be elucidated through the use of statistical methods such as cluster analysis. The application of statistical techniques to approach settlement identity are well known (Hodder and Orton 1976; Shennan 1988). Using GIS, the resulting patterns can be displayed geographically, allowing other cognitive structures, such as territory, to be included within the analysis. The visualisation of past social action within GIS require the use of its database and analytical features. The manipulation of these techniques and the evaluation of their effectiveness formed a significant part of this thesis.

Indeed, while places are understood through the activities which are practised there, they are also structured by their location within the landscape and the ways in which people negotiate that landscape in their daily routines. Human mobility has most often been addressed through GIS using cost-surface analysis (van Leusen 1999; Marble 1996). Cost-surface analyses are usually performed on particular *locales*, rather than entire regions, as they involve the reproduction of surface topographies in order to investigate probable routes and rates of travel across the landscape. This thesis is interested in how known routes of travel (Roman roads and navigable rivers) were used and perceived by tenth century society, and how movement along these routes structured social perception of place and territory. It has, therefore, developed methods using route-way analysis in GIS in conjunction with statistical techniques, such as regression analysis, to address these concepts. This uses vector-based applications rather than raster-based simulations of a landscape surface.

Furthermore, this thesis explores ways of mapping cognitive landscapes. Two of the largest problems with GIS, and the other analytical techniques used here, are their linearity and 'binary' nature. Where social theory wants to incorporate the relativity of travel time, to include the last push of a caravan to a good resting place, GIS draws a line around a 'day's travel'. Indeed, the techniques which fuelled the processual movement must be continually adapted in light of current research agendas stressing the importance of the social understanding of social practice. While these techniques are still perfectly valid and important for exploring the patterns of data, it is necessary to be aware of their 'abilities' in our interpretation of the results.

Thus, while the use of GIS and statistics within this thesis is invaluable, both their effectiveness and the robustness of the data need to be critically assessed. An important aspect of this thesis is the development of ways of approaching landscape and social practice through artefact analysis using such tools as GIS and statistical analysis. It is further interested in provoking debate into the ways in which archaeological methods of data collection and analysis can be improved to address past understandings of landscape.

The Reconciliation of Data

The data used for the pottery analyses in this thesis is predominantly derived from the EMPP database (Vince and Young 1991). As Hayfield's typology was developed from visual rather than microscopic and thin section analysis, it is difficult to transfer the data from this typology to the EMPP without re-assessing the pottery itself. Time and money constraints prevented a detailed reassessment of pottery codes developed by Hayfield. Therefore, Hayfield's data was incorporated by Vince and Young into the EMPP database through the comparison of pottery descriptions. Information from sites excavated on a commercial basis was added by Young as part of contracted assessments of the data. However, as Blinkhorn notes 'contract archaeology renders any analysis beyond fabric, chronology and form (or, in some cases, merely dating features from the pottery) an expensive luxury which may result in the loss of the tender to a rival who utilises such a methodology' (Blinkhorn 1997: 114). Indeed, the conditions for the continued recording of medieval pottery in the EMPP database have not been ideal. Nevertheless, the additions to the database are invaluable, going beyond form, chronology and fabric to an assessment of the amount of pottery and additional notes on other features such as decoration.

The EMPP database coverage is quite extensive. This is demonstrated on a map showing the entire EMPP database of sites against those with late Saxon material (*Figure 67*). This map is important for demonstrating to what degree the late Saxon distribution of pottery is a product of excavation strategies as opposed to tenth century social practices of movement and consumption. For the most part, the late Saxon sites are widely dispersed throughout Lincolnshire, complimented by a more extensive distribution of non-late Saxon sites. Thus, in the analyses below, one is able to assess the late Saxon sites as a representative distribution within Lincolnshire.

The fenland regions to the north and south of Witham, stretching down towards Cambridgeshire and Norfolk, are also notable by the lack of pottery sites recorded within them. The twentieth century county division of South Humberside is also clearly seen on this map along the north coast of Lindsey where there are few sites recorded. As previously stated, the EMPP was only able to cover Lincolnshire before financial concerns caused the project to remain up-to-date in Lincolnshire through the private efforts A. Vince and J. Young. Thus, many of the South

Humberside sites were not included within the EMPP typology and database.

Stamford ware is known primarily from two kiln excavations: the Stamford Castle site (Mahany forthcoming; Kilmurry 1980) and the Wharf Road site (Mahany *et al.* 1982: 90-9; Kilmurry 1980). It is also common on excavations around the city (Kilmurry 1980: 90-129). Stamford ware is one of the most recognisable wares produced during the early medieval period and has the largest geographic distribution of any late Saxon pottery. Kilmurry's BAR report on Stamford ware (1980) and the publications of the excavations in Stamford (Mahany *et al.* 1982) have made Stamford ware well known. However, the closure of the Stamford Unit in 1987, and the unpublished Castle Site report, has meant that there is no complete record for Stamford ware (Miles forthcoming). Furthermore, this data was collected before the EMPP codes were developed and put into practice. Therefore, Stamford as a whole is unable to be directly related to Torksey and Lincoln.

In order to represent the production of Stamford ware in this thesis, the above sources have been consulted and compiled into figures suggestive of Stamford ware production and consumption in the late Saxon town (Appendix I). However, these figures are estimates only and should not be used as an accurate measure of Stamford ware production. Sherd count rather than vessel count has been used as it is the base level of recording across reports. Thus, the Stamford collection was not used in the analyses. Instead, it was included in appropriate maps through a sherd count comparison with the pottery sherd and vessels counts from Lincoln. The Stamford ware sherd count was converted into a hypothetical vessel count for representational purposes only.

This thesis also uses fabric-based data collected by Healey where possible. The data recorded by Healey (Appendix I) is accurate simply to the level of sherd count and therefore is only useful for presence/absence analyses and to indicate which sites should be evaluated in future research. This has meant that the Fenland data was used only to suggest general settlement distributions rather than being included in the statistical analyses. Thus, Holland is under-represented as a territory and the focus is turned towards the interaction between Kesteven and Lindsey. Furthermore, that data which was recorded by Healey has only been useful as an indication of the degree of disparity between the amount of early medieval material recovered in Lindsey, as contrasted with that of Kesteven and Holland where she is based. This disparity is not great as the EMPP coverage is quite extensive. Nevertheless, this demonstrates the need for the completion and continued implementation of projects such as the EMPP.

Data from published site reports outside of the county were used for comparison with the data from Lincolnshire (*Figure 68*). Unfortunately, without the standardised East Midland pottery database, which the EMPP was aimed at providing, there is a limited amount of data which can be applied in detailed inter-county analyses which would be of interest to this thesis and fundamental for future research. Use and knowledge of the EMPP codes is limited to Lincolnshire, and even within the county is not fully adopted. Until a standardised pottery code is disseminated and implemented, such cross-county projects will have to remain future research agendas. It is regrettable that a low importance is placed on the expertise of finds specialists who would provide the infrastructure for such a standardised pottery code which could be utilized so profitably in research (Mellor 1994: 28-31).

Furthermore, no standard of data quality has been developed or employed either in recording strategies or in published reports (Mellor 1994: 20-1). Data organisation has ranged significantly: from a notation indicating that a ware was present, to calculated estimated vessel equivalencies (EVE's) (Hayes and Lane 1992; Lane 1993; C. Loveluck *in litt*). This is primarily due to the commercial nature of most archaeology and the lack of financial resources to provide EVE's and weight calculations. However, published site reports still use sherd numbers rather than EVE's (Mainman 1990; Dallas 1993). This suggests that behind this commercialised nature of archaeological recording, there is also a need for a mandate detailing a quality standard for data enforced by an authority. While this would be ideal, there is little prospect of this occurring without a general change of attitude towards the value of heritage.

This lack of standardization of recording at the level of accuracy needed to perform comparative analyses of assemblages is problematic. Sherd counts are the predominant method of recording. Sherd counts contain two biases: the amount of fragmentation of vessels and the size of the pot. A large Torksey storage vessel would be over represented in an assemblage otherwise comprised of small LKT cooking pots. Different site formation processes (such as ploughing) also dramatically effect the number of sherds represented in an assemblage. Furthermore, some vessels break more easily than others, thus, under- and over representing types. The use of sherd counts in statistical analysis measures the site formation processes and the size of a vessel rather than the number of vessels (Orton *et al.* 1993: 168-71). A comparison between assemblages can also be based on an analysis of the weights of the pottery types per site. While weight measures are still biassed towards the heaviness and size of the vessel, they do eliminate the bias of fragmentation inherent in sherd counts. Therefore, weight can be used to measure the proportion of pottery in different sites, although it is unable to compare the amounts of pottery within a site (Orton *et al.* 1993: 169). Indeed, it is only when the vessel equivalencies

are measured or estimated (EVE) that these biases are removed. This is accomplished by measuring the rim of a vessel as a fraction of the whole and calculating the number of vessels by adding the fractions together (Orton *et al.* 1993: 171-2).

While the EMPP data was recorded to the number of sherds per vessel, no EVE's have been calculated except in the Flixborough project (Appendix I). Furthermore, while there was a category for the weight included in the original EMPP database format, weights were not subsequently entered. Thus, EVE's are not calculable and the measures of the vessel must remain at a maximum estimated vessel number as originally entered in the EMPP database. The maximum estimated vessel number records the number of sherds which can be associated with a particular vessel. Each entry in the database, therefore, represents one vessel and notes the number of sherds associated with this vessel. While this has allowed statistical analysis of pot numbers to be done, the measurements are not as robust as EVE's and some of the between-site and within-site breakage biases which characterize sherd counts remain. The termination of the EMPP project, and the subsequent commercial nature of the ceramic recording, has meant that this valuable resource has not been realized to its true extent. There is variation between the amount of data recorded at each site as well. Internal residues have been commented on in detail for such sites as Flaxengate, Lincoln or Flixborough, but this level of recording does not exist for the entire database.

While the EMPP database is somewhat problematic, other data recording is even more so. It is impossible to integrate fully other information from published site reports such as Coppergate, York (Mainman 1990), Fenland Project (Hayes and Lane 1992; Lane 1993) and other relevant reports published in the East Anglian Archaeology series (EAA) (Appendix II). The lack of standardisation in typology and the frequent use of sherd counts means that these were only used for presence/absence comparisons. Where amounts of pottery are compared, it has been noted that the percentages are based on sherd counts rather than vessel counts. Despite these difficulties, the exploration of these assemblages is important, particularly so if it is able to highlight the importance of a standardized recording methodology which is employed throughout pottery studies. Indeed, as Orton *et al.* have noted: 'to avoid further despair, we accept [these difficulties] and proceed with courage, looking first at the theoretical ideal and then at what may be practical in particular circumstances' (1993: 167).

Archaeological inquiry into the social construction of place in the landscape is always faced with the knowledge that the patterns of material culture are as much archaeologically created as they are a product of past social practice. Topographies of consumption representing the

social practices involved with production and consumption activities, are also topographies of archaeological consumption. They are patterns of archaeological work and activity as much as they are patterns of past social practice. This is especially true when considering non-urban places in the late Saxon period since relatively few monasteries or developing manorial settlements have been excavated. Indeed, there have been a few funded excavations such as Goltho (Beresford 1987) and Flixborough (Loveluck 1997; 1998) which have investigated the rural landscape of Lincolnshire in the Anglo-Scandinavian period. Instead, excavation has been dependant on commercial activities making it difficult to discuss the archaeological relationship between manorial settlements. Commercial mitigation is rarely able to recover a representative sample of the site. Indeed, the majority of the sites contain less than 10 pots. It is therefore unclear whether this was due to the extent of archaeological assessment or to genuine lack of activity. Therefore, one must be content with the assertion that, while there is no current evidence for a focal settlement such as a manor, future research may uncover an important high status site.

In order to alleviate some of the discrepancies between archaeological recovery of ceramic culture, data has been grouped according to settlement rather than the individual site (Appendix II). This further allows the focus to be on places rather than on excavations, following the research agenda outlined in Chapter I. The development of individual sites is important for the understanding of past social practice. Indeed, the questions which are most useful are those which consider how a focal or manorial settlement defined itself in relation to other manorial and urban settlements as well as to its territorial and geographic location. This thesis has concentrated on the published reports of large-scale excavations (Chapter II) to provide the archaeological depth needed for a discussion of settlement and place. Indeed, many of the excavations were not extensive enough to fully assess aspects of rural society, suggesting areas for future research. Documentary and historical sources provided further commentary on late Saxon social practice and geography (Chapter II, V). The combination of archaeological, historical and geographic research has established a basis from which to investigate the Anglo-Scandinavian landscape of Lincolnshire and to highlight avenues for future research.

Pottery and Landscape: Ceramic Analysis and Social Space

Themes of movement and mobility in the landscape are explored through an examination of the

use of navigable rivers and Roman roads in the trade and distribution of pottery. This section concentrates initially on the importance of distance to the trade and consumption of pottery and the ways in which social perception of distance can be represented. It then addresses the use of roads and rivers in the tenth century and relates this to the distribution of pottery. While later medieval studies have addressed the interaction between roads and rivers in human movement across the landscape, little has been done for the early medieval period, although this is being redressed (Symonds 1998; MacDonald forthcoming). Indeed, previous studies in pottery have not fully explored the means of transportation due to their primary focus on typological development (Hayfield 1985; Coppack 1980; Kilmurry 1980). Therefore, little is understood about the ways in which trade occurred through the landscape. This section addresses the ways in which pottery was transported through the landscape and how this participated in the construction of place and community within the Anglo-Scandinavian landscape.

The next section explores the discourse between settlements through the use of GIS and statistical analysis. It focuses on the development of town and manorial communities and the ways in which they interacted. Indeed, the integration of urban and rural consumption patterns within pottery studies has been identified as a topic which needs further research (Mellor 1994: 7,9). Other analyses have focussed on characterising the distribution of pottery (Vince 1985; Hayfield 1985; Kilmurry 1980). This thesis is concerned with the ways in which the distribution of pottery can inform archaeologists on the social discourse which existed between various settlements. It concentrates not only on the character of the distribution, but draws the discussion into how settlement identity was expressed geographically through the trade in pottery. For the purposes of organisation this section is divided into two subsections which focus on urban and rural consumption.

Finally, the extent to which the trade and movement of pottery was structured through territorial identity is assessed. While the regionality of pottery has often been noted (Kilmurry 1980: 156; Hayfield 1985: 404-5) these studies have not linked it to the social expression of territory. This has removed the pottery trade from its social context which limits the amount of information which can be gained about past societies. By linking pottery distributions to generalised models, the importance of territory, place and mobility is often lost due to the difficulty of reintroducing these themes into the discussion. Thus, the practices of pottery production and consumption are positioned firmly within their social context.

~Human Mobility~

Chapter I discussed the importance of mobility to the construction of space and place within social landscapes. It suggested that human movement across the landscape participated in the construction of place and territory. The places to which people travel, the reasons and activities associated with that travel, contribute to how a place is perceived and identified. Similarly, the orientation of the movement of people, the directions in which they most often travel, are often associated with territory. Travel within a territory is often encouraged through such restrictions as border crossings and tolls which hinder movement across territorial boundaries. Therefore, the ways in which people move and travel structure the social understanding of settlement and territory.

Investigation into human movement through the landscape is structured by the analyses of pottery distributions as a way of characterising social concepts of movement. For the late Anglo-Saxon period, a large portion of travel was associated with trade, the itineraries of the nobility, or the movements of armies. Pottery is able to say little about military manoeuvres. However, in addition to its obvious involvement in the movement of traders - whether middlemen or others travelling to market - pottery distributions may also reflect aristocratic movement, in that those places with large amounts of pottery might also have hosted large numbers of people. Unfortunately, with the lack of historical information concerning itineration in Lincolnshire, as well as the difficulty in discerning the social practices associated with aristocratic progresses through the landscape, the extent to which royal mobility influenced the movement of pottery is difficult to assess. Therefore, one is left with a combination of aristocratic, merchant and individual mobility which to varying extents was responsible for the distribution of pottery.

Pottery was being consumed at particular places because of their social and geographical location in the landscape. Places are structured through the social practices which take place within them. Their geographical position - near a road, on a hill, by a river - influences these practices and thus the identity of that place. Through exploring the relationships between tenth century mobility and those places in which pottery was consumed, one can further investigate the ways in which the merchant, the thegn, the fisherman and the ceorl understood travel.

Discussing human mobility in the past is always problematic. The reconstruction of past route-ways and past modes of transport is never precise, especially when there is no textual information supporting the use of a particular river or road. Indeed, the changes in the route systems, the alteration of river passages, the use and disuse of roads, the erosion or reclamation of coastlines are topics which can only fully be explored through multidisciplinary landscape surveys of clearly defined environs. Without such opportunities, researchers must rely on the present understandings of past route-ways.

The exemplary work of Edwards and Hindle (1991; 1993; *Figure 5*) on the use of medieval rivers was explored as a basis for earlier late Saxon navigability in Chapter II. While this research does not directly address the late Saxon period, it is still one of the best references for early medieval navigability simply due to the lack of comparative source material for the Anglo-Saxon period. The tenth century coast-line was also addressed in Chapter II with reference to work on the Domesday distribution of settlements (Darby 1971) and other research on the early medieval salt industry (Rudkin and Owen 1960; Hallam 1960; Owen 1984).

As with the river systems, it is difficult to reconstruct many of the roads which would have been used between settlements within a small locale. Most of the information on road systems lies with the place name scholar who is able to identify the types of roads from Anglo-Saxon writings (Hooke 1981; Gelling 1984; Chapter II). The only readily identifiable roads are Roman, the *herepaths* and *stræts* of the Anglo-Saxon period (*Figure 10*).

Therefore, without the benefits of such an intensive landscape survey, an almost impossible undertaking for a region the size of Lincolnshire, this research integrates the information from Edwards and Hindle (1991; 1993), Barley (1936) and other studies which consider the use of Lincolnshire rivers and coastline in the medieval period. Where possible, reference to archaeological surveys such as the Fenland Survey (Hayes and Lane 1992; Lane 1993) has been incorporated. Preliminary investigation into the distribution of pottery also suggested possible extents of navigability. Indeed, there is some debate as to whether the Car Dyke was navigable or whether it was only used as a drainage sewer (Everson and Stocker 1999: 9). However, both the proximity of pottery finds and the later information gathered by Edwards and Hindle (1991: 131) as well as Barley (1936: 17) indicate that it provided a route of transportation (*Figure 69*). Furthermore, the distribution of pottery also suggests that the Bain was used to transport pottery from Tattershall up to Horncastle. Thus, both the Bain and the Car Dyke are included in the distribution of navigable rivers.

The Roman road network is the only system of roads known for Lincolnshire, along with some prehistoric routes. However, despite the amount of knowledge pertaining to these roads, there is still some doubt as to their distribution. Information here was compiled from Margary (1973), the Ordnance Survey (1973), Stafford (1985: 10), and Sawyer (1998: 17) (*Figure 70; Figure 71; Figure 72*). Sawyer includes the largest number of Roman roads in his map compiled by Vince and Oliver (1998: 17). However, many of these are fragmentary and only the road along the eastern extent of the Wolds is used for the analyses below, which are concerned with the connectivity of the routes. The road extending from Caistor to North Kelsey was also not included by Sawyer (1988: 17) although both the Ordnance Survey (1973), Margary (1973: 192) and Stafford (1985) all include it. Due to the prominence of Caistor and North Kelsey in preliminary research into the pottery distributions, this road is integrated into the analyses. Margary also suggests that the Stixwold- Saltfleetby road may have extended southwards through Woodhall Spa and North Kyme meeting up with the Sleaford road (Margary 1973: 242). This extension is included in the analyses in order to determine whether a road was used along this axis during the tenth century.

The following analyses are focussed on two themes: the perception of distance and the location of travel. The first section is interested in the routes which people used to travel and the relationship of places to transportation routes. Ways of representing perceptions of travel held by the tenth century inhabitants of Lincolnshire are further developed through these analyses. The second section explores the importance of distance to the distribution of pottery. It suggests ways in which the cognitive understanding of distance can be represented, as well as used in traditional analyses such as regression analysis.

Routes of movement

Travel occurred via roads and rivers. In order to characterise how each of these routes was perceived by tenth century society, the association between tenth century pottery sites and navigable rivers and Roman roads was explored. This was based on a comparison between sites with late Saxon pottery and other non-late Saxon pottery sites held within the EMPP database. The proximity of both sets of sites - the late Saxon and the general distribution - to both Roman roads and navigable rivers is plotted on a number of bar graphs plotting the numbers, percentages and cumulative percentages of sites at each kilometre from both roads and rivers.

There does not appear to be any strong association of late Saxon sites with navigable rivers (*Figure 73; Figure 74*). This is different from the general distribution of sites where there is a fall off of sites from the rivers. Indeed, only 25% of late Saxon sites are within 5 km of a river, where as 57% of the overall EMPP distribution of sites is within the same distance from a river. This difference is similarly observable at 10 km from a river where the 85% of general distribution is located within this distance, as opposed to only 42% of the late Saxon sites (*Figure 75*). Despite the lack of association between rivers and late Saxon sites, those with the greatest number of vessels are generally within 5 km of the rivers.

This is very different from the road distributions where both the general and late Saxon distributions demonstrate a fall off from the roads (*Figure 76; Figure 77*). The late Saxon sites appear to have a stronger association to the roads than do the overall sites. Indeed, 80% of late Saxon sites are within 5 km of a Roman road while 67% of the general distribution of sites lies within this distance. Similarly, 93% of late Saxon sites as opposed to 86% of the general EMPP sites are within 10 km of a Roman road (*Figure 78*).

These graphs indicate that there was a much greater association between roads and the distribution of pottery than with rivers. Regional travel appears to be more strongly linked along roads rather than rivers. This differs from the hypothesis that Edwards and Hindle had concerning the importance of rivers to transportation, especially in Lincolnshire (1991: 124; Chapter II). However, the region appears to have been more important to trading practices during the tenth century than in later centuries (above; Vince 1985: 34-38). Indeed, rivers might have been primarily used for interregional travel, such as the King's Men using the Trent to reach York (Foster and Longley 1924: 11). A similar suggestion concerning the transportation of produce in the fourteenth century was given by Uhler who proposed that grain was taken overland to the nearest navigable river and thence to a customs port (Uhler 1977; cf. Edwards and Hindle 1991: 124). Langdon certainly asserts that the relationship between road and river travel was more complicated than Edwards and Hindle suggest. He notes that seasonality, the upkeep of waterways and river flow affected the use of rivers (1993: 3-6). He further implies that roads were used with much more frequency than sometimes thought (Langdon 1993: 4-6)

The Roman roads figure highly in the exchange of pottery in Anglo-Scandinavian Lincolnshire. Indeed, those sites with the greatest amount of pottery tend to lie along these routes (*Figure 79*). The distribution of Lincoln wares clearly demonstrates this, especially along the Foss Way towards the east coast of Lindsey. However, other sites along Ermine Street, and the roads

running parallel to it, also illustrate the importance of the road system to the distribution of Lincoln wares (*Figure 80*). Nettleham, Goltho and Panton indicate the importance of the Foss Way for the exchange of pottery. Indeed, Goltho has the largest percentage of non-Lincoln pottery (9% Stamford and 7% Torksey), while Nettleham has 6% Stamford ware, and Panton is represented completely by Lincoln wares¹. The relative absence of Torksey ware along this road is intriguing, especially with sites so close to Lincoln, a large consumer of Torksey ware. Furthermore, Torksey ware has been found at Haugham, Ketsby and South Ormsby, along the eastern Roman road leading into the Wolds from the Foss Way. These three sites are comprised of a variety of wares, predominantly Lincoln wares, which represent approximately 3/4 of the assemblages. Stamford ware and Torksey ware form the other 1/4 of the assemblages. Unlike the varied assemblages at Ketsby, Haugham and South Ormsby, Aylesby, further along the road near the coast almost completely consists of Lincoln wares except for a small amount of Early Stamford ware. Nevertheless, that Torksey ware was being traded along the Roman road farthest to east of Lincoln, but not extensively closer to the town along the most direct route to those places, raises an interesting question as to the nature of the Torksey ware trade.

Indeed, the other Lindsey sites with a high trade in pottery along the Roman roads from Lincoln are all represented by Torksey or Torksey-type ware (*Figure 81; Figure 82*). Hackthorpe, a larger site along Ermine Street, has 1/4 Torksey-type ware. Torksey-type ware represents approximately 1/3 of the assemblage at Fillingham located on the upland path alongside the Ermine Street. Further along Ermine Street and off along the road to Caistor, North Kelsey has an unusually high amount of Torksey-type ware (81%). Indeed, the assemblage looks more like a kiln site with its varied but small amounts of Lincoln, Newark and Stamford wares. The assemblage at North Kelsey is further contrasted by Caistor 8 km along the road which has a varied, but more balanced, representation of Lincoln wares (81%), Stamford (4%) and Torksey (13%). Interestingly, Caistor does not have any Torksey-type wares at all.

However, while the Torksey and Torksey-type wares travelled along the Roman roads predominantly north of Lincoln, the main axis of trade was along the Trent up to Flixborough and West Halton and down through Newark and down towards Repton. In fact, one potter from Torksey appears to have made his way from Torksey to Newark in the early tenth century and to have built a kiln there (*J. Young pers com*). While Newark is not represented by large amounts of Torksey ware, the social movement from Torksey of potters and their pottery

¹ See Appendix I for percentage tables of the wares at those sites discussed in the text. These sites have 10 or more vessels.

traditions does demonstrate the importance of the Trent for the distribution of Torksey wares.

The other waterway which was vitally important to the Torksey-ware trade was the Fosse Dyke. While there is some debate over the navigability of the Fosse Dyke in the tenth century (Chapter II), a large number of pots travelled from Torksey to Lincoln. Indeed, Lincoln is the highest consumer of Torksey ware. Whether or not these pots proceeded to Lincoln via the Fosse Dyke, which is the most likely scenario considering the position of Torksey at the mouth of the dyke, or via the Roman road to the north of Torksey, is unknown. However, this thesis indicates that a strong trading connection existed between these two towns.

Crowland also participated in a coastal/riverine trade. As previously noted, Crowland exhibits a surprisingly Lincoln oriented assemblage for a site so close to Stamford (69% Lincoln wares; 23% Stamford ware and 7% Torksey-type ware). Crowland was only reached by water. With the relative ease of access to the Wash and Witham, this might be the avenue by which the Lincoln wares were transported.

The Witham was an important river during the Anglo-Scandinavian period both as a transport route from the Wash and North Sea and as a social boundary between Lindsey and Kesteven (Chapter II). It is not surprising to see a high consumption of pottery along its banks. These settlements are all on the Lindsey bank. Indeed, marsh and fen lined the southern bank of the Witham until Tattershall which undoubtedly made substantial settlement difficult as well as undesirable (*Figure 6*). Both Cherry Willingham and Fishtoft had considerable amounts of pottery. The assemblage at Tattershall had a varied range of pottery, as one might expect of a settlement at the tidal extent of the Witham, and which was near the branches of the Sleas and Bain. Each of these sites is predominantly represented by Lincoln wares. At Cherry Willingham, the assemblage of pots mirrors Goltho in its range and percentage of wares, with Lincoln wares comprising 74%, Torksey ware 13% and Stamford ware 2%. Tattershall, like Sleaford, has a relatively high percentage of Stamford ware (22%). However, since nearly three quarters of the pottery found at both Cherry Willingham and at Tattershall was produced in Lincoln, one must conclude that a strong trading association occurred between Lincoln and these sites. This trade along the Witham is further recognised through the assemblage at Fishtoft, which almost completely consists of Lincoln wares (92%), and has a small percentage of Stamford ware (8%).

The assemblage at Wainfleet All Saints, at the edge of the northern fens and the Lindsey coastline, demonstrates that pottery from Lincoln also travelled to coastal sites. Wainfleet is

predominantly represented by Lincoln wares. The other ware found was Stamford ware. Stamford ware does appear to have been engaged in coastal trade. This is reflected in the Kirton (27%) and Wainfleet (20%) assemblages as well as in the general Stamford distribution which extends along the Wash and also near Saltfleetby (*Figure 83*). From the Wash, the Stamford trade continues along the Roman road to places such as Ketsby, Haugham and South Ormsby, indicating the interrelationship between road and water transportation.

The traders of Stamford ware used the Roman roads in a similar way to those exchanging Lincoln wares. Indeed, Baston is a close parallel to Goltho with its proximity to Ermine Street and extensive amounts of Stamford ware (81%). Newton also participated in trade along the Roman roads with 63% Stamford ware. Grantham presumably utilized the Roman roads for its trade with Stamford. The predominance of Stamford ware (79%) and the small representation of Lincoln wares (21%), demonstrate the close ties this place had to Stamford.

Trade along the Ermine branch to Sleaford deserves more discussion. The inhabitants of Sleaford were consuming a relatively balanced range of wares. Indeed, the Lincoln wares (49%) and Stamford ware (27%) ratio at Sleaford was unusual in Kesteven. While Stamford ware only comprised 16% of the pottery consumed at Lincoln, it represented almost 1000 pots, far in excess of any other place. Indeed, trade between Lincoln and Stamford and the amount of pottery used in the town indicates that a large quantity of regional and interregional trade occurred in the town markets.

The location of Sleaford on the branch of Ermine Street where it crosses the Slea facilitated the use of both road and river transport to and from this place. Indeed, the assemblages located along the Slea to Tattershall emphasize the importance of the Slea to Sleaford's trade and communication. Quarrington and Kirkby la Thorpe on either side of Sleaford along the River Slea, are both represented by a predominantly Stamford assemblage (Quarrington 67%; Kirkby la Thorpe 73%) with a small number of Lincoln vessels (Quarrington 33%; Kirkby la Thorpe 27%). Haverholme, along the Slea, is unusual. The significant amount of Lincoln pottery (78%), implies that the Slea was used as an avenue for trade with Lincoln and Lindsey. This becomes even more apparent when the general Stamford distribution is examined (*Figure 83*). There is a clear association of sites running along the Slea to Tattershall and up the Bain to Horncastle. The similar percentages of Stamford ware, and indeed of all the wares at Tattershall and Horncastle, suggest a connection between these two sites along the Bain. While the Bain is not included in list of navigable rivers compiled by Edwards and Hindle (1991), the scattering of Stamford ware along the Bain does imply that this river was indeed used for

transport.

While this description of the trade of wares is helpful for introducing the distribution patterns of pottery production in Torksey, Stamford and Lincoln, it does little to demonstrate these geographically. Visual analysis and representation of artefact distributions are essential to the understanding of these patterns of social practice. The representation of the percentages of the Lincolnshire wares given in *Figure 80* is helpful in this regard. It is able to illustrate the general tendencies explored in the text above enabling the researcher to comprehend the patterns within the distributions. However, it does little to address movement between places. Indeed, the map presents a static view of the result of trade rather than characterising the practices which created it.

One of the aims of this thesis was to explore ways in which social practices in the landscape could be conceptually addressed through the analysis of artefact distribution patterns. The development of cognitive mapping techniques must include representation of movement between places and explore the ways in which mobility structured the social understanding of the landscape. In order to express this, maps were created which demonstrated the amount of pottery travelling from the place of production across the landscape to where it was eventually consumed and discarded (Symonds 1998).

These maps are designed not to show the actual usage of route-ways but to illustrate directions and frequency of travel. It would be impossible to directly associate the movement of particular pots with specific routes. Nor is this the aim of the exercise. Instead, this technique and the analyses below, address the social understanding of transportation routes and explore the ways in which human mobility along them structured social perception and understanding of landscape and settlement.

The amount of pottery moving along the most direct route from the place of production to the settlements where it was consumed was calculated using NETWORK applications within ARC/INFO. Sites were included in the analysis if they were within 5 km of a river or of a road. These sites were then linked to the network (of roads or rivers). Each route - from the place of production to the place of consumption - was traced and recorded the same number of times as the number of vessels in its assemblage. The frequency of movement along each section of the route was then calculated and associated with that section (Symonds 1998: 284-6). It is this frequency of pottery movement which is displayed on the map.

These maps were designed to represent two aspects of human mobility. The first was to visually link places of production and consumption where a large quantity of goods was moving from one to the other. It is argued that frequent movement between two places condenses the perceived distance between them. Through emphasising this frequency in bold vibrant colours, a cognitive understanding of distance is represented. The second, and related aim, was to address communal interaction within the landscape. This was necessarily biased towards the relationships between towns and their connections rather than between those of the rural settlements, as pottery is particularly associated with this movement.

The first impression given by the map of Lincoln wares, is large scope of movement within Lincolnshire (*Figure 84; Figure 85*). However, many of the frequencies along the route-ways do not indicate a significant amount of movement. This is especially true for the rivers and coastline. The map of river frequencies clearly indicates that the Witham and Trent were the main thoroughfares for the trade of pottery. The map of road frequencies demonstrates a different orientation of travel along the Foss Way towards Goltho as well as along Ermine Street and the parallel roads attached to it. A larger amount of traffic appears to be travelling along the roads. Indeed, more sites with large vessel counts are located beside the roads than along the rivers.

The movement of pottery from Lincoln towards the coast, instead of towards Torksey and the Trent, emphasizes the regional orientation of the trade of Lincoln wares within Lindsey. This directional movement suggests a possible association between the trade in pottery and the trade in salt produced along the Lindsey coast. While it is impossible to determine whether there was a direct link between the two trades, the eastern emphasis of the Lincoln ware trade does imply at least an indirect connection.

The other avenue of movement of Lincoln wares is towards Sleaford. The association between Sleaford and Lincoln is intriguing. Lincoln wares do not appear to have been extensively traded within Kesteven, and the link to Sleaford raises some question concerning the settlement at Sleaford. As noted above, Sleaford has an unusually diverse and even representation of the ware groups produced in Lincolnshire. The unique character of the Sleaford assemblage will be further addressed in the cluster analyses below. While it is not a town, it also does not have the flavour of a rural manor.

The maps of the frequencies of Stamford ware along roads and rivers also indicate a general movement throughout Lincolnshire (*Figure 86; Figure 87*). However, the main axis of

Stamford trade appears to be to Lincoln either along Ermine Street or the Car Dyke. While the number of sites along the Car Dyke suggests that there was movement along this route, it is more likely that Ermine Street was the route used to reach Lincoln from Stamford. While Stamford ware was widely traded across late Saxon England, its regional focus is emphasised by the low frequency of movement outside of Kesteven. While Stamford wares appear to be travelling to Lincoln, they do not continue along Ermine Street or the Trent to sites north of the town. The Lincoln map did not incorporate a similar movement south towards Stamford. This is presumably due to a distribution of data rather than pottery. Indeed, without access to the Stamford data collections, the associations between Lincoln and Stamford can only be assessed by the assemblages in Lincoln.

The other orientation of movement is towards the coastal settlements along the Wash. This route, along the Welland to the Witham, had more traffic than the frequencies along the Car Dyke suggest. This infers an association between the salt trade and the movement of pottery, as implied by the Lincoln assemblages. This orientation of movement towards the coast also argues for the use of Ermine Street and the road parallel to it for the transportation of pottery from Stamford to places such as Sleaford, Grantham, Baston and Lincoln. It would be faster to travel directly by road from Stamford to Lincoln than to go via the rivers.

The map of the frequencies of Torksey ware pottery along the rivers and roads demonstrates the importance of rivers to its trade (*Figure 88; Figure 89*). Unlike Stamford and Lincoln, Torksey is located beside a river rather than having direct access to road communication. Indeed, the prominent movement of Torksey ware appears to be along the Fosse Dyke to Lincoln. While this was apparent in the pie-graphs of the pottery distributions discussed above, this map emphasizes the movement between these two towns, suggesting that the distance between them was conceptually small. It further implies that Torksey was supplying Lincoln with pottery rather than interacting with Lincoln as a separate borough in its own right. This is also suggested by the documentary sources which name Torksey as a suburb of Lincoln (Foster and Longley 1924: 13).

The other main axis of trade in Torksey ware was along the Trent towards Flixborough and the Humber. Indeed, documentary sources, such as Domesday, indicate that the Trent was used in interregional travel (Foster and Longley 1924: 11). This orientation of trade along the Trent is also supported by the large assemblages at Newark and Repton, not included on the map of river frequencies. It would be interesting to explore further the relationship between Torksey ware and the Trent. Certainly Newark and York, both producing Torksey-type wares, are

reached via the Trent, suggesting that this river was not only important to the trade of Torksey ware but also to the identity of Torksey itself.

These maps demonstrate high frequencies of movement towards the coast and between the towns. The concentration on the frequency of pottery travelling along routes, rather than location of its consumption, addresses the orientation of the pottery trade. It illustrates the social connection between sites such as Torksey and Lincoln as well as suggesting wider involvement of the pottery trade with other trade in goods such as salt. It highlights unusual directions of trade, such as that of the Lincoln wares towards Sleaford. Upon reflection of the connection between Lincoln and Stamford, it may be that Sleaford participated in the interaction between these larger settlements which might account for its unusual ratio of wares. Furthermore, the possible road extending across the Witham above Tattershall, which Margary proposed (Margary 1973: 242), does not seem to have been used. This implies that, while the raised ground might have facilitated a route across the Witham at this point, it was not commonly crossed at this point. While this mapping technique is not derived from any extra data than that presented in the pie-chart distribution of pottery in Lincolnshire, it emphasizes movement of pottery, rather than assemblage composition, allowing discussion to include concepts such as social orientation and community interaction. These concepts introduced here will be further developed in discussions below and in the next chapter.

Perceptions and representations of distance

In order to consider human mobility through the consumption of pottery, it is important to establish the extent to which pottery was travelling around Lincolnshire. This is readily established through the use of scatter and regression plots. Scattergrams are very useful for illustrating the relationship between two variables, an independent (along the x axis) and a dependant (along the y axis) (Shennan 1988: 114-119). However, while scattergrams demonstrate the shape of the relationship, they do not characterize the main trends very well. Regression analysis executes a least squares calculation between all the points and plots a line which best fits all points. The slope of this line is also calculated. The greater the slope the more the dependant variable is reliant on the independent (Shennan 1988: 121-126). Thus, when plotting the number of pots/site against the distance from the source, regression establishes the degree to which distance influences the amount of pottery found at each site.

In the following analyses, only the rural sites were used to focus on the ways in which pottery was consumed within the hinterland. The exclusion of the urban sites in these analyses was also prudent due to the large amount of pottery found on these sites, which obscures the results of the regression analysis through the large variance between the amounts of pottery. Not only is the graphic display of the scattergram distorted through the relative clumping of sites with lower quantities of pottery, but the urban outliers significantly affect the least-squares results of the regression.

The regression of Lincoln wares demonstrates part of this effect simply by the initial inclusion of Goltho (*Figure 90*). Here, the slope of the regression line is equal to 0.052. This almost straight line indicates that distance was not important to the distribution of Lincoln wares. However, the value of the scatterplot to graphically demonstrate the relationship between the quantity of pottery and the distance travelled is obscured by the difference between the amount of Lincoln wares at Goltho and that at the other settlements. By excluding Goltho from the equation, a clearer result is shown (*Figure 90*). This time, the regression line does not slope, as it has an r-squared value of 0.000. However, the scatterplot does not indicate any observable trend towards the number of vessels increasing with distance, which, with the low r-squared value, suggests that the amount of pottery was not influenced by the distance of these sites from Lincoln.

The regression of Stamford ware similarly demonstrates a low r-squared value of 0.0197, the regression line slightly sloping upwards to the left (*Figure 91*). Distance from Stamford did not influence the number of vessels at each site. The underlying scatterplot demonstrates that most of the sites with Stamford ware had low vessel counts. Furthermore, except for Baston, those sites in close proximity to Stamford were not consuming high numbers of Stamford ware. This is most likely due to the low coverage of sites in the EMPP database surrounding Stamford, rather than a representation of low rural interaction with the town. Nevertheless, the scattergram and regression line indicate that there is no clear fall off of sites with large amounts of pottery from Stamford.

The scatterplot of Torksey ware indicates that it was traded in even smaller amounts than Stamford, there only being 5 sites with more than 10 vessels of Torksey ware in their assemblages (*Figure 92*). Like both Lincoln and Stamford, the pottery from Torksey was not dependant on distance for trade. The r-squared value of the regression was 0.004. Perhaps the most noticeable difference between the scatterplot of Torksey ware and those of Stamford and Lincoln ware is the small amount of pottery found at most sites. This was also noted in the

geographical display of the Torksey ware distribution (*Figure 81*).

The regression results indicate that distance did not affect the trade in Torksey, Stamford or Lincoln pottery. This is quite significant given the emphasis of previous studies on regional pottery distributions in the late Saxon period (Kilmurry 1980: 171-175; Hayfield 1985: 406-419; Vince 1985: 36). There is an underlying assumption based on historical and archaeological inference that the trade during the late Saxon period was oriented around a particular town whose market supplied the local hinterland (Hodges 1989a: 164). Distance from the market town is often considered to be the determining factor in the placement of these towns and markets and influential in the trade of goods. The regression of wares within Lincolnshire demonstrates that distance was not nearly as important as other social phenomena such as territorial orientation which affected the amount of pottery used within settlements.

However, before abandoning the concept of distance as a contributing factor to the trade in pottery, it is important to realise the underlying concepts of the regression analyses above. Distance was calculated as a Euclidean measurement from the production site to the settlements where it was recovered. This calculation ignores the social conception of distance which was structured by travel along the rivers and roads. People did not travel 'as the crow flies', but rather used routes which did not always take them directly to their destination. The representation of distance in kilometres further isolates the perception of distance from the analysis. Distance is often conceptualised in terms of the time it takes to travel from one place to another. Twentieth century understanding of kilometres is based on automotive transportation which obscures the translation into temporal units of travel such as hours or days. The nature of the distances used in the regression equations above may conceal the social importance of distance through the artificial calculation of those distance measurements. In order to represent perception of distance within the regression equation, the distance must be measured along the rivers and roads and a concept of time introduced into the equation.

This has important implications for the use and perception of transport during the late Saxon period. There has been much general discussion over the primacy, or interrelationship, of river and road transport (Edwards and Hindle 1991; 1993; Langdon 1993; Barley 1936; Sherratt 1996) in the past. Recent accounts, such as that by Edwards and Hindle (1991; 1993), discuss the inter-relation between these two mediums of travel. It is not surprising that the Roman towns, many of which became the late Anglo-Saxon towns, were situated along road routes and navigable rivers. Access to transportation was vitally important for their identity as towns, as places of administration and trade, and as places where people travelled to and from. Indeed,

many of the social practices carried out in towns are associated with the act of travel.

Concepts of distance are structured through the time it takes to travel from one place to another. Thus, the means and speed by which one travels becomes very important to perceptions of distance and travel. The ways and routes with which people travel can compress or inflate distance: the multi-lane expressways of North America shrinking the distance between major centres of population, the small windy roads of the Yorkshire Dales stretching the distance between villages. Perception of distance is very much dependant on where one is situated and how the community understands travel through the landscape. This perception of distance and travel is more easily addressed today with our knowledge of speed limits and other traffic control measures. Our understanding of travel in the past is limited, especially for those periods, such as the Anglo-Saxon period, where few or no records survive. For the most part, this exploration of travel is based on information from the medieval period.

Indeed, the extents of navigation, as previously noted, have been derived primarily from the work of Edwards and Hindle (1991; 1993). The speed with which one travelled these rivers is more difficult to determine. Current knowledge of river-craft is limited for the Anglo-Saxon period. The Graveney boat (Fenwick 1978) is one of the best examples of the type of boat that was used during the tenth century. However, it was probably used in cross-Channel trade rather than for internal travel. Furthermore, speed of travel was not included in the report which focussed on the structural elements of the boat. There are a few references to travel time along rivers in the medieval period. Stenton notes that scholars travelling from Cambridge to Boston used the fenland rivers to the Wash and then the Witham, Trent and Humber rivers to reach York. It apparently took these travellers 2 days to go from Boston to Lincoln, a distance of 60 km (Barley 1936: 15-6). The time from Torksey to York was also recorded as 2 days but this time the scholars travelled 120 km. The speed at which one travelled from Torksey to York was obviously dependant on the tidal flow which must have increased the speed substantially. A Continental example comes from the coronation of Frederic Barbarosa who travelled at a speed of 30-40 miles per day along the Rhine from Sinzig to Aachen, a distance of 60 miles (Leighton 1972: 177). From these suggestions regarding the speed of river travel, a rate of 4 miles per hour was used on the assumption that a full day's travel lasted approximately 8 hours.

The variable conditions of water transport are difficult to address with the small amount of data available for rivers in the tenth century. The issues such as river flow which would have affected the speed of transport have been discussed above and in Chapter II but have not been included in the analyses below. It would be erroneous to include such amorphous details into

techniques which give more veracity to the data than it is able to support. Therefore, this thesis has used a non-complex digital representation of the river and road routes. This too is problematic in that it does not account for tidal extents and current flow as well as land topography, which would have affected the ease of travel. These items are able to be included in the GIS. However, the advantages such accuracy would have had would be undermined by the lack of understanding concerning mode and rate of transport as well as tenth century rates of river flow. The analyses below are aimed at suggesting a need for greater understanding of transportation rather than presenting an intricate representation of transportation in the tenth century.

A clearer understanding of distance and travel is gained from records relating to terrestrial movement. Langdon suggests that it was not until the thirteenth century that horses were used extensively for cartage (1987: 56; 1986: 49, 114). Instead, the cart and ox were the main method of transporting large amounts of goods. This meant that the average speed of travel was 2 miles per hour. Horse and cart were able to increase this speed by twice this amount. As riding animals, Stenton suggests that the horse could easily reach up to 30 miles per day (Stenton 1965: 255). In addition to the oxen and cart, Domesday notes the use of both pack horses and human carriage in the Cheshire entry for the salt-works at Middlewich (Douglas and Greenaway 1953: 871). Furthermore, horses were used to transport people around the manor as indicated by the *Rectitudines Singularum Personarum* (Douglas and Greenaway 1953: 813-817). Despite the obvious use of horses during the Anglo-Saxon period, Langdon suggests that they were primarily luxury animals, and that the ox and cart was the prime method of transporting goods (Langdon 1986: 26).

Due to the lack of information for travel times during the late Anglo-Saxon period, the models of the river and roads routes used to derive the distances between sites did not attempt any complex representations of movement. The facility with which computer simulations realise assumptions or projections based on insufficient data makes it vital that the representations produced by such methods are not conflated unnecessarily. Furthermore, the additional information which is gained by such models is not that great. The investigation of the transportation network below did not attempt any cost surface analyses. The discrepancy between methods of travel is too great to make such accuracy useful. Nor did it include tidal movements or water currents. Again, the data needed to support such inferences is not available. Instead, the models simply used the Roman road network and the navigable rivers noted by Edwards and Hindle as well as the River Bain from the Witham to Horncastle based on the number of sites along that waterway. The speed of travel was based on the ox and cart

and horse and cart calculations done by Langdon (1987: 56).

The coordinates used for the temporal analysis of the pottery distributions were derived by using the Pythagorean Theorem to calculate the end point, given the origin (the kiln site) and a point along the same vector (the original site) (Appendix III). Thus, the alignment from the kiln site to the settlements was retained. Thus, the direction of movement between sites was maintained. The resulting maps visually demonstrate the distance distortion inherent in the geographical maps. While obviously a combination of road and river travel would have been used to reach some sites in order to minimize the travel time, these maps illustrate that some sites were indeed farther away from the production site than readily apparent on a geographic map.

The maps demonstrating the distortion between the geographical and temporal distances along roads (*Figures 93-8*) show a significant difference between measurements. Indeed, while Roman roads are often considered to be direct routes from one place to another, these maps indicate that the 'directness' of these routes is relative. Certainly, in comparison with the temporal distance stretching which occurred along rivers (*Figures 94, 96, 98*), the distance along roads was clearly shorter.

While variation between Euclidean and travel distance is apparent from the maps indicating the distortion between the two, they do not account for cognitive understanding of these distances. Perception of distance is structured by the time it takes to travel from one place to another. Travel speeds along rivers was at least twice as fast as that along roads (see above). Thus, the distances along rivers is conflated in relation to the measurements along roads. In order to explore the cognitive perception of the distance between sites, the geographical background to these maps was removed. Instead, temporal measurements were added to reflect the number of days travelled along either river or road.

The clustering of sites within one to two days travel is clearly demonstrated from the cognitive map representing the amounts of Lincoln wares according to distance and time measurements along the Roman roads (*Figure 99*). Most of the sites with large numbers of vessels are located within or along the edge of the one to two day division. Indeed, a day's travel was an important concept held by the inhabitants of Lincolnshire. It structured their movements through the landscape, drawing those settlements within a day's journey of Lincoln, conceptually closer to the town.

Furthermore, the orientation of travel within Lindsey and towards the coast is articulated on this map. Lincoln wares were not travelling north along Ermine Street towards York. Instead, the distribution of sites implies a regional focus for the movement of pottery. The importance of territory is explored in more detail below. However, from this map, it is apparent that most of the pottery trade for Lincoln wares was concentrated within Lindsey.

The Witham-Trent river corridor was important to the movement of Lincoln pottery along the rivers (*Figure 100*). Indeed, while distance did not greatly influence the trade of pottery along rivers, it does appear to be associated with particular routes, which, interestingly, are apparent on this map. This argues that the Fosse Dyke was maintained to navigable standards during the Anglo-Scandinavian period. Furthermore, this map suggests that the Car Dyke was also frequently used, more so than the frequency maps implied. However, much of the cluster along the Car Dyke could be accounted for by the Slea. Finally, the extent of travel along the coastal edges of the map demonstrates that, while roads were structuring most of the movement throughout Lincolnshire, rivers were still an important avenue for travelling long distances.

Movement along the Rivers Witham and Trent, via the Fosse Dyke, is further apparent from the cognitive distance map of Torksey ware along rivers (*Figure 101*). Torksey ware is clearly moving directly to Lincoln along the Fosse Dyke. Newark is not included on this map. However, its inclusion would have demonstrated the importance of the Trent for the distribution of Torksey ware. Indeed, Torksey appears to be exporting a great deal of its pottery along rivers in a similar fashion to the Oxford shelly wares which were distributed along the Thames towards London (Vince 1985: 31).

The riverine orientation of the Torksey wares is supported by the lack of patterning on the cognitive map of Torksey ware along the Roman roads (*Figure 102*). While the distribution is concentrated within the northern area of the map, it does not show a concentrated movement along particular routes. Neither does it appear to have been structured by distance, unlike that of distribution along rivers, which appears to be clustered around Torksey. This scattering of Torksey ware along the roads suggests that this was a secondary mode of movement. The main focus of mobility for Torksey ware was along the rivers.

Stamford ware does not appear to be as constrained by distance as do the Lincoln or Torksey wares (*Figure 103*). The cognitive map of Stamford ware along the Roman roads implies that Stamford ware was distributed throughout the county. However, the concentration of its movement was along Ermine Street (and the road running parallel to Ermine Street) towards

Lincoln. Indeed, the predominant influence of the trade of Stamford ware appears to be a temporal distance of approximately three days. This suggests a regional distribution within Kesteven. Nevertheless, Stamford ware does not appear to be significantly traded within Holland.

This lack of Stamford ware within Holland is also apparent on the cognitive map of temporal distances along rivers (*Figure 104*). Instead, the coastal Witham-Trent corridor is once again clearly visible in this map. While the rivers are not transporting large amounts of pottery, there was significant movement along these routes, as indicated by the travels of the Cambridge scholars in the thirteenth century (Barley 1936: 15-6). Distance does not appear to have greatly affected the riverine distribution of Stamford ware. Like the Lincoln wares, distance was more important to travel along roads.

These maps demonstrate the perception of travel held by traders rather than by single messengers. Indeed, the cohorts of traders moving with their oxen and cart would have understood distance much differently from the messenger on his horse who was able to cover 30 miles in a day rather than 16 miles (Stenton 1965: 255; Langdon 1987: 56). This contrast is readily apparent on the temporal map. Indeed, most of Lincolnshire was able to be covered within a day by horse, whereas it could take up to 3 or 4 days using a cart and ox.

The variable understanding of distance is readily apparent through this non-geographical representation of distance. However, much of the population would not have been travelling at any great speed. While the *geneat* was accustomed to travelling and carrying messages by horse-back, and horses were available to some people on the manor (Douglas and Greenaway 1953: 813-817), most people would not have used horses extensively (Langdon 1986: 26). Travel along the roads would have been accomplished at a relatively slow pace and riverine travel, although at least twice as fast as ox and cart, was also not extremely rapid. From the analyses above, it appears that the day was an important measurement of distance. Indeed, those sites with large amounts of pottery plotted within the 2 day band of travel are situated close to the delimiting line between the 1 and 2 day estimations of travel. This may suggest that the measurement of a day's travel was underestimated in the analysis. More importantly, however, it demonstrates that there was more movement to and from towns to places located within approximately 8 hours travel of that town.

In order to readdress the issues of distance and mobility, the distances along rivers and roads were recalculated to be used in regression analyses. This was done in ARC/INFO by measuring

the distance to each site along rivers and roads. The number of days (8 hours of travel) to reach each site was calculated in order to represent a conceptual understanding of the distance into the analyses. Regression plots were then formulated for Lincoln wares, Stamford ware and Torksey ware along both roads and rivers.

The Lincoln ware regression suggested that the distance of sites from Lincoln along the Roman roads was more important to the number of vessels on each site than the previous Euclidean measurement had implied (*Figure 105*). The r-squared value increased to 0.0125 from the previous 0.0052, demonstrating that distance did influence the amount of pottery found on sites. It further indicates that those sites with large numbers of vessels were within approximately one days travel of Lincoln.

The underlying pattern of the scatterplot was clarified when Goltho was removed (*Figure 106*). This demonstrates that the large number of sites with less than 10 vessels is significantly influencing the regression line. The pattern of sites with more than 10 vessels implies that distance was important to the amount of pottery at these settlements, something that was not evident on the previous Euclidean plot.

Indeed, when sites with more than 10 vessels are selected, the slope of the regression line is calculated at 0.1595 (*Figure 107*). Distance from Lincoln does appear to impact on the trade of large amounts of pottery. Furthermore, it is clear that temporal distance influenced the amount of Lincoln pottery used at each of these settlements. The majority of sites calculated within two days travel of Lincoln border the edge of the one day limit. This demonstrates the importance of social perception of distance. Indeed, those sites bordering the one to two day delineation may simply have been considered 'a long day's travel'.

Distance is not as important to the amount of pottery moving along rivers (*Figure 108*). Indeed, the r-squared value for the Lincoln wares is 0.000. Furthermore, the sites are not clustered within 1 day's travel as they were along the roads. Instead, the majority of sites with large amounts of pottery are within two to three days travel. However, due to the greater extremes of travel speed along rivers, the time needed to travel those distance might be conflated. When Flixborough is excluded from the regression calculation to clarify the pattern of sites (*Figure 109*), the scatterplot indicates, once again, that distance does not seem to influence the distribution of pottery along the rivers. Nor does this change when one considers only those sites with large numbers of pottery (*Figure 110*). Indeed, on both plots, the r-squared values are extremely low.

The movement of Stamford pottery along roads also was affected by distance, although it is not as apparent on this regression plot as it was for the Lincoln wares (*Figure 111*). This is due to the sparse coverage of sites near Stamford. The slope of the regression line was 0.0437, an increase from the slope of the line using Euclidean distances 0.0197. Stamford ware circulated over a much larger area than the Lincoln wares. However, most of the sites with large numbers of pottery appear to be located within two to three days of the town.

This is clarified when sites with less than 10 vessels are removed from the scatterplot (*Figure 112*). Indeed, there is a distinct clustering of sites along the two to three day divide, again suggesting that the delineation between the number of days is too abrupt and that social perception of distance affected the distribution of pottery. The slope of the regression line is 0.1269, further implying that distance was important to the distribution of Stamford ware along roads.

Turning to the regression of Stamford ware along the rivers, large amounts of pottery do not appear to have been traded along the rivers and coast (*Figure 113*). This is demonstrated by Baston, whose large numbers of pottery significantly distort the underlying scatterplot. When Baston is removed from this calculation, it becomes apparent that only four sites within 5 km of a river were consuming large amounts of Stamford ware (*Figure 114*). This is in comparison to the eight settlements with more than 10 vessels in close proximity to the roads. However, as with the scatterplot demonstrating the importance of distance to the trade of Stamford ware along roads, there is a clustering of sites within two to three days travel from Stamford.

Torksey ware was not engaged in the extent of trade that either the Lincoln or Stamford wares were. This is demonstrated through the regression plot of Torksey ware along both rivers and roads (*Figure 115; Figure 116*). While there was clearly more travel along the roadways, the distances along the rivers is unusually clustered within a day's travel of Torksey. This illustrates the importance of the Trent and the Witham to local trade in Torksey ware. Regional trade, however, appears to have occurred along the roads more generally. Indeed, while the *r*-squared value of each regression line does not suggest that distance was important to the amount of pottery, the close clustering of sites along the rivers close to Torksey does imply that the position of Torksey, at the meeting of the Foss Dyke and the River Trent, was important to its trading relations along rivers.

The use of distances along roads and rivers makes the regression analyses more sensitive to the

importance distance had on the number of vessels at each site. When Euclidean distances were used in the regression analyses, the results indicate that the distance from the production site was not very important to the general distribution of pottery. However, when the distance measured along the rivers and roads is used, this is not the case. Indeed, distance was important to those sites with significant amounts of pottery, as demonstrated particularly by the Lincoln wares. This suggests that those sites, often proximal to roads, were conceptually oriented towards the town.

In order to further research the perception of distance along the routes of travel, the difference in temporal distance and geographical distance was plotted. This was done to explore ways in which archaeologists can investigate cognitive understandings of past landscapes. Perception of distance is integral to how people move through the landscape. Present-day cognition is based on fast-moving traffic along rail-lines or dual carriage ways. This remapping of temporal distances translates tenth century mobility into a common twentieth century understanding of distance - a day's travel. From this remapping, the assemblage patterns can be reexamined using a distance measurement conforming to tenth century travel.

~Settlement Interaction~

Places are understood by the social practices which occur within and around them. These social practices, framed by the material culture employed to enact them (whether a twentieth century Wall Street business suit or a medieval coulter used by a cottar), define the places and *locales* in which they are enacted. The abrupt appearance of urban material culture in the late ninth and tenth centuries signalled that these emerging settlements were being defined as distinct places within the late Anglo-Saxon landscape. While these towns cannot truly be called 'urban' until the eleventh century or later, it is important not to ignore their urban characteristics. One of the most visible differences in these settlements is the large amount of pottery produced and consumed within them. Indeed, it is in the pottery craft that many transitions from the middle Saxon to the late Saxon period can be observed (Chapter III). The movement of the production of pottery to within the town walls, the change in production techniques, the standardisation and increasing specialisation of ceramic wares, all demonstrate developing urban social traditions in a landscape previously associated with production practices occurring on the villa, minster and wic sites. The emergence of the town signalled a fundamental alteration in the structure of early medieval society. However, while the town may be the most observable manifestation of

this alteration, it is not the reason, or even *a* reason, for the changes occurring from the turn of the tenth century. Instead, the town is a product of a shift in social practices, of a redefinition of the way activities were structured throughout the landscape. Its development cannot be divorced from the social changes occurring in a developing rural hinterland of manors and monasteries, shires and parishes.

Manorial development in the late Anglo-Saxon period is directly linked to the development of feudalism, the rise of a landed aristocracy with increasing control over their own lands in terms of production and parochial activities. During the late Anglo-Saxon period there is a shift in activities which focussed on an itinerant tributary kingship located in the *villa regalis*, to a feudal aristocracy involved in more privatised land tenure practices centred around manorial and town relations (Chapter II). The development of towns with their dependancy on rural agricultural practices was an integral part of the emergence of manors, divorcing them from the more self-sufficient *villa regalis* of the middle Saxon period. The increasingly feudal aristocracy, which exercised their authority in town and manor alike, further invested in the ecclesiastical landscape with the parish church. Towns and manorial settlements were engaged in an interdependent relationship.

Insight into the development of manors and other rural sites in Anglo-Scandinavian Lincolnshire must rely heavily upon archaeology. Historically there is little information regarding Lincolnshire as a whole, and even within the late Anglo-Saxon corpus of writings little is known about day-to-day manorial practices. Furthermore, there has been little archaeological inquiry into the late Anglo-Saxon manor (Chapter II), regarding what archaeologically constitutes a manor or other focal settlement. Investigating the consumption practices of these places allows communication between settlements to be addressed, as well as geographic location and territorial identity (above). Pottery was an ubiquitous artefact during the Anglo-Scandinavian period, used extensively in domestic practices. It therefore provides an excellent medium for addressing the social construction of place in the rural landscape.

The general distribution of pottery in Anglo-Scandinavian Lincolnshire was discussed in Chapter III in relation to the social practices of pottery production and consumption. The change between Anglian and Anglo-Scandinavian settlement patterns was explored, suggesting that there was a general shift in settlement during the ninth century. However, as sites such as Flixborough demonstrate, archaeological understanding of the movement of places is poorly understood. While both middle and late Saxon pottery are not often found together on the same site, the number of sites where they do occur together suggests that social understanding of

place was important to the continuity of the site. Settlement at Flixborough appears to be moving across the site, the excavations there indicating the edge of the Anglo-Scandinavian settlement (Loveluck 1998: 148). Linwood, a place whose name denotes a long association and inhabitation of that place (Sawyer 1998: 22-3), is also represented by both Anglian and Anglo-Scandinavian pottery. Furthermore, the Fenland Survey suggested that Anglo-Scandinavian sites were situated on firmer ground along the fen edge, rather than being spread throughout the fenland (Hayes and Lane 1992: 215). Those Anglian sites along the fen edge often had Anglo-Scandinavian pottery on them as well. Indeed, the shift in settlement between the middle and late Saxon periods is not clearly understood and remains an important topic for future research.

While continuity between middle and late Saxon sites was obviously occurring, it paled beside that occurring through the tenth and eleventh centuries. There was an entrenchment of the population, encouraged by the investment in the parish community (Chapter II), rooting the communities more firmly to settlements and locales. Indeed, most tenth century sites continue into the eleventh century and beyond. Pottery assemblages indicate a duration of settlement and an interest in maintaining the manorial settlement pattern. As was discussed in Chapter III, there is a general shift in settlement during the ninth century. This is observable in the fenland where habitation moved off the fens to settlements along the western edge (Hayes and Lane 1992: 148; *Figure 117*). The tenth century villages were located along the spring-line at the margin between fen and upland. Along the eastern edge of the fens, habitation moved to the higher silt-lands and the boundary between fields and fen, as well as fields and sea, were demarcated by banks (Lane and Hayes 1993: 69).

Furthermore, investment in settlement continuity from the tenth and eleventh century is demonstrated by the association between tenth and eleventh century pottery on most sites (*Figure 118*). Approximately half of the total number of tenth and eleventh century sites have pottery from both centuries. The sites with only tenth or eleventh century pottery equal approximately one quarter of the total number of sites. This means that in each century, seventy percent of the sites have a pottery assemblage spanning both centuries. While there is settlement movement during the Anglo-Scandinavian period in Lincolnshire, the majority of the sites are inhabited throughout both centuries.

This is strikingly different from the distribution of middle Saxon pottery sites, which is deceptively sparse, as indicated by the more generous results of the Fenland Survey (Hayes and Lane 1992; Lane 1993; *Figure 119*). The large amount of pottery from Flixborough also demonstrates the comparative lack of information concerning the use of pottery in the Anglian

period in the rest of Lincolnshire. These projects show that information concerning Anglian settlement can be recovered from pottery evidence and that the current representation of settlement from pottery is misleading. Indeed, in a recent doctoral thesis, Ulmschneider notes that it was difficult to say much about Anglian habitation in Lincolnshire from the pottery evidence due to the lack of published and recorded finds (1998: 31, 47). However, sites such as Flixborough (Loveluck 1998: 148), Cottam (Richards 1997: 236-8) and Goltho (Beresford 1987) suggest that there was a general movement of settlement during the ninth century, although perhaps remaining within a specific locale. Flixborough appears to continue into the tenth century just to the northeast of the middle Saxon settlement (Loveluck 1998: 148). The extent to which these shifts in settlement location represented a conscious movement of place has yet to be addressed. To the inhabitants of Flixborough, the movement of buildings towards the northeast may not have influenced their perception of the settlement. However, the establishment of a new moated manor at Goltho during the ninth century signals a change in attitude towards that place.

While it is difficult to characterise the change in settlement patterns from the middle to late Saxon period from the distribution of pottery, there is an entrenchment of settlement in the landscape during the tenth century. In Lincolnshire, this coincides with the development of open field systems, except in Holland where a dyling organisation using wide rows of ditches was adopted (Lane and Hayes 1993: 69). Furthermore, there is an increased use of stone in buildings such as churches during the 11th century (Sawyer 1998: 165). This practice is extremely evident in Lincolnshire where the widespread building of parish churches was originally accompanied by stone sculpture (Sawyer 1998: 155-7; Everson and Stocker 1999: 78; Boddington 1996: 67). The practice of erecting stone buildings during the tenth and eleventh centuries indicates a rising interest in the stability of place and locale within the landscape, a practice which is further demonstrated by the pottery distributions.

Towns were the settlements where this investment in place is most observable. However, in many instances, towns were an extension of rural social practice. Lords held land rights in both types of settlement (Hinton 1977: 75-6; Chapter II). Investigation of York and London suggest that the manorial holding of blocks of land also occurred in towns (Hall 1988a: 130; Dyson 1978: 201-2). The ownership of these *haga* could be accompanied by rights of market or harbour (Whitelock 1968: 451, 498). Indeed, the fisherman, represented in Alcuin's Colloquy, would have paid a toll to a lord to sell his fish in the town (Mitchell and Robinson 1986: 177; Foster and Longley 1924: 215). The movement of resources into the town is further demonstrated by the animal resources brought to the town (O'Connor 1994: 144-5; Bourdillon

1992: 130). Towns were also militarily supported through requisitioning support from the rural population (Abels 1988: 74-5). Communication between town and manor was an important part of daily practice, the social understanding of place and space being constructed through the interaction between urban and rural communities.

The urban consumption of pottery

The first impression of urban consumption practices during the tenth century is the enormous amount of material found in excavations. Despite the difficulties in describing an early medieval town as fully 'urban' (Chapter I), the consumption of material culture in these settlements is unparalleled on rural sites. This material culture is produced through the numerous production activities which occur in towns ranging from minting to leather-working and pottery. Documentary sources imply that the aristocracy exercised control over town-based activities (Whitelock 1968: 384, 451, 598; Chapter II). Indeed, towns are an important expression and focus of aristocratic power. The foci of activity in towns are demonstrated through the production and consumption of pottery within these settlements.

Production of pottery within towns often was associated with one ware being produced in a number of workshops (Chapter III). This is certainly true for Torksey and Stamford, although there were a number of different fabric traditions contained within the Stamford production (Kilmurry 1980: 34-42, 45-6). Lincoln was unusual for the number of pottery traditions operating within its walls, although LKT represented the major ware produced until the late tenth century when LFS began to emerge as the prominent ware (*Figure 120*). The variety of pottery was partially due to both sandy and shelly tempers being used within Lincoln (Chapter III). Pottery traditions also migrated to other towns, as can be seen with the Torksey potter moving down the Trent to Newark, the Stamford potter travelling to Nottingham and Derby (Coppack 1980: 217-8, 275) and the Lincoln potter establishing his craft in Horncastle (J. Young *pers com*). While pottery production, often of a single ware, is associated with town life in the late Anglo-Saxon period, each town has its own particular practices which give a unique flavour, or identity, to that town.

This focus of production activities is mirrored in the consumption of pottery. Many of the wares produced in Lincoln do not have an extensive trade outside of the town. Indeed, LG, LSLS, LSH and SNLS are rarely found outside the city (*Figure 121*). Instead, there appears to

be an internal trade within the town which begins during the late 9th century with the LG production. LG appears relatively early in the late Saxon sequences and just over 100 pots have been found within the city. However, it only appears at Cherry Willingham, Flixborough, Goltho and Thornton-le-Moor outside of Lincoln. The other non-shelly wares, LSLS and SNLS, were also traded more predominantly within Lincoln than at sites such as Sleaford, Cherry Willingham, and Goltho. Both wares were traded along the main transportation routes.

These sand tempered ware horizons were on either side of the LKT production. Indeed, LSH - a shelly ware- was the only competitor for LKT during most its production. Furthermore, it has been suggested that LSH perhaps resulted from an experimental or accidental mix of temper and clay by LKT potters (J. Young and A. Vince *in litt*). However, while LKT was traded extensively within the region, LSH remained primarily within the city (*Figure 122*). Indeed, of approximately forty sites contained LSH in their assemblages, only five of these have ten or more vessels. This is in comparison with LKT which was found on approximately one hundred and thirty sites, sixteen of which have vessels numbering ten or more. Furthermore, the sites with large numbers of LSH were all represented by a significant amount of LKT. LKT was the predominant ware being traded within Lincolnshire while LSH was mainly being traded within the city and on sites where LKT is already present.

Corresponding to the decline in LKT during the latter part of the tenth century, the new shelly LFS tradition and the sandy SNLS production appeared at the end of the tenth century (*Figure 120*). LFS was traded regionally while SNLS was more often found within Lincoln, albeit in greater numbers than LSLS in the preceding century (*Figure 123*). LFS was recovered from seventy-five sites, seven of which had ten or more vessels. This is a less extensive distribution than the preceding one of LKT. SNLS was contained within approximately ten assemblages only one of which was greater than ten vessels. Both these wares indicate a decline in trade within the county but continue to demonstrate a difference between rural and urban consumption patterns.

In addition to the Lincoln wares, the people of Lincoln are also trading heavily in Torksey and Stamford wares throughout the late ninth to eleventh centuries. Indeed, early Stamford ware is traded in the same numbers as the LG industry operating at the same time. Together, Stamford ware and the Torksey derivatives account for approximately one third of the pottery consumed within Lincoln. Other industries such as Nottingham ware, Leicester ware and Derby ware are also found within Lincoln, although far less frequently than the Lincolnshire products (*Figure 183*).

While the general ratio of vessel forms are similar throughout the landscape, towns were consuming a larger variety of forms. This is most clearly seen in the use of crucibles within the town. Crucibles account for 5% of the pottery assemblage within Lincoln (*Figure 124*). Stamford crucibles were highly valued as can be seen from the high numbers of vessels found at Lincoln. York also had an extensive trade in Stamford crucibles. Indeed, crucibles were the primary Stamford ware traded within the tenth century at York. It is only at the turn of the eleventh century that other Stamford vessels made a significant appearance at York (Mainman 1990: 467-469). The trade in crucibles was indicative of the growing craft traditions within the town which were involved with non-ferrous metal production. Metalworkers were trading specifically for Stamford crucibles due to their high refractory nature (Bayley 1992: 754). It is unfortunate that the database for the excavations at Stamford has not been compiled. Indeed, while crucibles are a part of Stamford production (Kilmurry 1980: 28), they are not quantified (Kilmurry 1980; Mahany *et al.* 1982). No crucibles have been recovered from Torksey, which is probably due to the predominance of kiln-sites excavated at Torksey. Indeed, the nature of domestic occupation at Torksey still needs to be determined archaeologically.

It is difficult to characterise the variety of vessel forms at Stamford and Torksey due to the lack of excavation of non-pottery producing sites. In Lincoln, other forms, such as Torksey 'ginger' jars, globular lamps and pedestal vessels, were found. Towns were consuming a wider variety of forms than rural settlements. However, this variety was still only a small percentage of the large investment in cooking pots, pitchers, bowls and dishes. Indeed, the greatest distinction between rural and urban consumption of pottery was the sheer number of pots consumed within the town. This demonstrates the large investment in trade by the inhabitants of the town, a practice which increasingly distinguished them from rural communities. This accords with the research on pottery consumption patterns in London, where there was a significant increase in the variety of pottery in London between the tenth and eleventh centuries, as well as a recognizable difference between urban and rural assemblages during the tenth century (Vince 1985: 38, 42).

The variety and the amount of pottery consumed by the people of Lincoln were not found at Torksey (*Figure 182*). Indeed, despite the high number of kiln sites, Torksey had approximately half of the amount of pottery that Lincoln did. While Stamford and Lincoln products appear at Torksey, they certainly do not represent the same percentage as the non-local wares at Lincoln. This drastic difference in consumption patterns is conflated by the non-domestic nature of the sites excavated. Indeed, the pottery assemblage found at Torksey conforms more to that of the Silver Street kiln site than it does to towns such as Lincoln and York, with less than one quarter

of non-local wares being represented (*Figure 182*). Nevertheless, from the relatively sparse distribution of Torksey ware, it appears that this town, while attaining Domesday borough status, had a separate identity among the emerging urban settlements of the Danelaw. While, the majority of the pottery consumed at Newark was produced there, approximately a third of its pottery consumption was in non-local products (*Figure 180*). The larger percentage of non-local ware suggests that Newark had similar, if less intensive, trading and production practices as did Lincoln. Indeed, if a domestic site was excavated at Torksey, this town might correspond better to the other urban sites.

The developing craft traditions within towns participated in an urban trade as well as in a more regional distribution of their wares. This extensive internal trade distinguished the town communities from rural sites. While there was little difference between the variety of forms found on urban sites during the tenth century - with the obvious exception of crucibles - the large amount of pottery that was consumed within the town was distinctive. Furthermore, the imports from other towns are indicative of an interregional trade in which the towns were participating. This is particularly clear with the exchange of Stamford crucibles during the tenth century, a trade which further emphasizes the importance of the craft communities within the towns.

The rural consumption of pottery

The high urban consumption of pottery in the tenth century is contrasted with that of rural sites primarily through the sheer volume of pottery which is found within towns. Manorial consumption, while demonstrably high at such sites as Goltho and Flixborough is still only about a third of the amount found at Lincoln and Stamford. Most sites are represented by fewer artefacts than Goltho and Flixborough since they do not have the advantage of a research-funded excavation. Indeed, most of the settlements are represented by less than 10 vessels (*Figure 75*). Due to the variation of excavation size and location within present day settlements, some of these sites with fewer than 10 pots may have had higher levels of consumption than is clear from present knowledge. It is, therefore, important, as noted above, to focus on the characteristics of those sites which do demonstrate high pottery consumption patterns. Regardless of the variation between the rural sites, they are engaging in different social practices than those from within the towns. The different levels of pottery consumption are thus indicative of diverse lifestyles and social practices.

In order to address the ways in which social practice structured the rural landscape, the consumption of pottery will be examined through an exploration of the assemblages. This will be accomplished through a number of statistical techniques ranging from scattergrams to cluster analysis and multidimensional scaling, as well as using distribution maps generated through GIS. These techniques are used to explore the characteristics of the assemblages and to suggest the ways in which rural sites are differentiating themselves within the landscape, both from other places within the hinterland as well as from the emerging urban settlements where the pottery is primarily produced. This will lead into the subsequent sections on territorial identity and community interaction, allowing discussion to focus both on particular places, as well as more general trends throughout the landscape.

A primary archaeological distinction between settlements is their size and the amount of material associated with them. Admittedly, this is partially dependent upon the size of excavation and whether it was designed to target particular features. However, it is also a social phenomenon produced by activities and practices which occurred in the past. Therefore, one of the first steps in gaining an understanding of the diversity of sites within the landscape - both socially and archaeologically produced - is to look at their demography. This was done here by creating a stem-and-leaf diagram which graphed the cumulative number of sites according to vessel count. This was aimed at assessing variation between sites according to size of assemblage.

The resulting graph demonstrated a number of trends in the amount of pottery at each site (*Figure 75*). There is a sharp fall-off from those sites associated with small numbers of vessels. This fall-off curve ends at those sites with approximately 10 vessels. This was chosen as an appropriate distinction between settlements with small numbers of pottery and those with a larger quantity of vessels. The rest of the graph characterises those sites with a high quantity of pottery. There is a clump of sites which has between 10 and 34 vessels which were grouped fairly closely together with no large increments in vessel count between them. This changes when the vessel number jumps from 34 to 43. The number of sites attached to each vessel count is more variable as the number of vessels increases. The only observable groups are those sites with between 43 and 77 vessels. Sites with greater than 77 vessels are sparsely stretched from approximately 100 to 6000 vessels and represent those places where extensive excavations have occurred.

This diagram suggests that there are approximately 3 trends in the data. Those sites with 9 or less vessels represent the majority of sites. There are then a number of sites with approximately

10 to 35 vessels which can be said to have a moderate amount of pottery. Sites with large numbers of vessels were defined as having more than 35 vessels. This is the largest range of sites, and at its far end, encompasses the research excavations where extensive material has been recovered. The large number of sites with small vessel counts is partially due to the commercial nature of the excavations. However, it also suggests social differentiation between settlements. Without further research and excavation based on a local landscape study, the degree to which the range of pottery between sites reflects past social action rather than archaeological recovery methods is difficult to determine. The Fenland Survey was instrumental in demonstrating the current lack of archaeological knowledge concerning rural settlements (Hayes and Lane 1992; Lane 1993). More surveys such as the Fenland Survey need to be done in order to further our understanding of the social organisation of landscapes.

The gap between the 10-35 vessel range and that of the 35+ grouping suggested a social differentiation between these two groups. The grouping of sites with more than 35 vessels is distinguished from the middle grouping (10-35 vessels) both through the amount of pottery associated with them as well as a large variation in ware types (Appendix D). While some of the sites within the 10-35 vessel range are represented by a variety of wares, this is not common across the grouping. The 35 and above group has a wide range of vessel numbers from 46 at Fishtoft and Nettleham to Baston and Goltho with 329 pots and 913 vessels respectively. This extreme variation is predominantly due to the different extents of excavation. Most of the settlements have between 50 to 100 vessels. There are a few outliers such as Goltho, where the 913 vessels reflect the large-scale excavation which occurred there. Flixborough is the only comparable excavation to Goltho, although only 135 vessels out of over 4000 are late Saxon. The difference between the size of excavations is a bias inherent in the database. This highlights the need for excavation extents to be included within the finds database. This information would have been extremely useful in characterising the range of vessel quantities across the settlement. Once again, the small number of large scale excavations further emphasizes the need for more extensive rural excavation strategies.

The importance of variation and the number of vessels to these assemblages was explored using cluster analysis. Investigation into the variation between assemblages was accomplished through the combined use of statistical techniques (multidimensional scaling and cluster analysis) and geographic representation using GIS. SPSS was used to perform the statistical analyses. While ARC/INFO certainly includes statistical algorithms, they are not as flexible as those within SPSS. The primary aim of the clustering methods was to identify trends across and between assemblages in order to explore the social practices which were involved in producing

those assemblages. As previously noted, the majority of the settlements are represented by less than 10 vessels, many of which may be the result of archaeological methods of recovery led by commercial needs, rather than a representation of past social diversity within the landscape. This makes the larger sites difficult to characterize statistically due to the weighting of the numerous smaller sites, obscuring the variation between the sites with larger vessel counts. Therefore, the clustering was performed on those places represented by more than 10 vessels. This means that the exploratory statistics are aimed at analysing social differentiation between settlements where people were involved in a higher consumption of pottery.

Multidimensional scaling and cluster analysis are related techniques and are often used in combination. Both techniques are exploratory and focus on the nature of variation between multivariate sets of data (Cooper and Weekes 1983: 299). One of the primary advantages of multidimensional scaling is its graphical display of the spatial clustering of data. This can be done through two or more dimensions, allowing the researcher to visualize the proximity between sites. However, while this technique presents a good graphical display of data it does not characterize the individual sites very well. Instead, it concentrates on the overall shape of the distances between data. In contrast, cluster analysis is valuable for its productions of charts and dendrograms illustrating the linkages between the groupings of sites.

Cluster analysis categorizes individual sites into groupings based on levels of similarity. However, as Baxter rightly notes, 'cluster analysis is not a single method; it is a generic term for a wide range of techniques' (Baxter 1994: 140). There are two basic forms of cluster analysis: hierarchical and non-hierarchical (k-means). Hierarchical cluster analysis is a rigid classification method which 'can impose unwarranted structure on a set of data. An individual, once within a cluster, stays there' (Baxter 1994: 147). There are a number of different algorithms used to perform hierarchical cluster analysis (Baxter 1994: 141-7; Shennan 1988: 212-225). Ward's Method was used here. It has a more robust clustering method, which is based on the recalculated variability of groups through an error sum of squares calculation, or 'the total sum of squared deviations or distances of all points from the means of the clusters to which they belong' (Shennan 1988: 216). Through this method, the clusters remain as homogenous as possible and they are grouped together in the way that produces the least amount of variability within the group as a whole (Shennan 1988: 216; Baxter 1994: 142). K-means cluster analysis is based on a predefined number of groups (k) and the optimal clustering of individuals within these groups. K-means clustering runs through a defined number of cluster simulations to provide the best result for the defined parameters. However, unlike the hierarchical technique, k-means analysis allows the reclustering of individuals if, as the group

centre changes, they more appropriately belong in another cluster (Shennan 1988: 225-6). These two methods can be used together (as they are here), the hierarchical suggesting the number of clusters to be defined for the k-means analysis (Baxter 1994: 147).

The varied assemblage characteristics across this group of sites (Appendix I) suggests that consumption practices varied between places. The initial variation between sites was explored through multidimensional scaling in SPSS (Appendix III), using the percent of Anglo-Scandinavian vessels at each settlement together with the total number of vessels per settlement. Using percentages reduces the variation caused by the extremes in pottery numbers across the sites. This allows the focus to be on the relative distribution of pottery on a site. By including the total number of vessels per site, the size of the assemblage is included as a single variable rather than affecting the whole sample. The distribution graphs suggests some variation in the data. The 3-D spatial distribution of sites suggests at least two groupings of sites (*Figure 126*). The one exceptional outlier is Lincoln, which produces a denser cluster of sites in the graph. Therefore, the towns (Lincoln, Newark and Torksey) were removed from the sites assessed to further examine the distribution (*Figure 127*). This resulted in a graph where two, perhaps three, clusters are visible.

These graphs demonstrate a number of clusters within the data. In order to explore how the inclusion of vessel counts affected this distribution, they were removed (*Figure 128, Figure 129*). The data was then reassessed by the MDS algorithm, both including and excluding town settlements. The MDS graph for the data which included towns, clearly indicates that there were two clusters of sites. This is supported by the graph excluding towns which shows one main cluster and a smaller one off to the right. The predominant cluster is slightly scattered, possibly implying further distinctions within it.

While multidimensional scaling is useful for visualising the variation between sites, it does not easily characterise the similarities between particular sites. This is more adequately done through clustering techniques (Appendix III). This was accomplished in two stages. The first stage was to perform a hierarchical cluster analysis on sites with and without vessel counts. Indeed, while the inclusion of towns within the MDS equation resulted in denser clusters, they did not greatly affect the overall pattern. Instead, there was more variation between the inclusion or exclusion of vessel counts. Therefore, this distinction was explored through hierarchical clustering methods.

The second stage was aimed at producing distinct clusters which could then be explored

geographically. Through examination of the hierarchical cluster results, a range in the number of clusters was chosen to run through the K-means cluster equation. This excluded towns from the data on the basis that their position within the clusters had been sufficiently explored through hierarchical analysis.

Hierarchical clustering was performed using Ward's Method on the percentage of ware types across those sites with more than 10 vessels. When the quantity of vessels per site was included, the results (*Figure 130*) were very definitely skewed towards the numbers of vessels at each site, a demography already explored through the MDS and geographical distributions.

Excluding the vessel quantity per site gave more intelligible results (*Figure 131*). There appears to be two basic groups based on the predominance of Stamford ware or Lincoln wares in the overall assemblage (Appendix I). The Stamford ware grouping focuses on Baston, Grantham, Newton and Quarrington, with Kirby la Thorpe more loosely associated. The Lincoln cluster appeared to be divided into two basic groupings, with a number of internal divisions. Wainfleet All Saints, Foston, Goltho, Haugham and Haverholme are grouped with the closer grouping of West Halton, Ketsby, Cherry Willingham, Nettleham and Panton. The clustering of these sites is predominantly based on the large amounts of LKT associated with them (approximately 35-55%). The remaining group has even more internal variation with two main clusters, the first associated with Hackthorn, Aylesby, Lincoln, South Ormsby and Caistor; and the second with Crowland, Tattershall, Horncastle, Sleaford, Repton, Kirton and Flixborough. This association also appears to be based on the amount of LKT on these sites which lay between approximately 20-30% with an internal division between the first cluster (*Hackthorn et al.*) with approximately 25-30% LKT and the second group (*Crowland et al.*) which had a much wider diversity of LKT percentages. The outliers to these two internal groupings were Torksey, with its large number of Torksey-ware, at one end, and Newark and North Kelsey, with large amounts of Torksey-type ware, at the other. The hierarchical clustering therefore was grouping sites on the percentage of the predominant ware. While this did little to address the internal variation of the groups, it did demonstrate that LKT was the predominant ware traded in Lincolnshire. It further suggested an association between those settlements where LKT was not prominent, such as at Baston, Torksey or North Kelsey.

Turning to the k-means analysis, a low number of groups (8-10) were chosen on the basis that the hierarchical clustering did not demonstrate a large number of fragmented groups but did display some internal variation and a few outliers from the three predominant clusters (Appendix III). The kiln sites, Lincoln, Torksey and Newark, were excluded from this analysis

in order to further explore the relationships between rural settlements.

Clusters generated by the k-means analysis are based more on the internal variation of the assemblages rather than focussing on the predominance of one ware (Appendix III; *Figures 132-4*). This was done by first including the number of vessels per site to determine how the quantity of pottery affected the distribution of clusters. Goltho, Baston, and North Kelsey were constantly in a single grouping by themselves. The variety of the assemblage and quantity of pottery at Goltho immediately sets it apart from the rest of the distribution, as does that of Flixborough. Similarly, the large assemblage of Stamford ware found at Baston is also unique. North Kelsey has a singularly high amount of Torksey-type ware explaining its solitary status.

Clustering further exists between sites which are predominately balanced between a large percentage of LKT and LFS. Aylesby, Hackthorpe, Fillingham and South Ormsby are grouped together in both the eight and nine cluster results. When ten clusters were specified, both Fillingham and South Ormsby are replaced by Nettleham, another site with a similarly high LKT/LFS ratio. This group is balanced by the Stamford ware grouping of Grantham, Newton, Quarrington and Kirton which was identified as a separate class throughout the cluster analyses. Indeed, these sites are primarily represented by Stamford ware, like Baston, but are not as large as Baston and therefore were clustered in a distinct group.

The other set of settlements which stands out contained Caistor, Cherry Willingham, Crowland, Ketsby, Sleaford and Nettleham (although Nettleham is included with the Aylesby grouping when ten clusters are specified). The rationale for this grouping is balanced between the variety of assemblage and the amount of pottery found at each of these sites. Indeed, the inclusion of Nettleham in this group appears to be primarily based on the number of vessels rather than the diversity of assemblage.

The final grouping is closely associated with the large grouping originally identified by the hierarchical clustering. It is comprised of Foston, Haugham, Haverholme, Horncastle, West Halton, Linwood, Panton, Tattershall, Fishtoft and Wainfleet All Saints. Foston, Panton, Wainfleet All Saints and Fishtoft are separated from this group when ten clusters are stipulated. This is primarily due to the large percentage of the assemblages being balanced between LKT and LSH making a useful distinction from the other sites which but for their amounts of pottery, would likely have been classified within the Caistor cluster.

Removing the amount of pottery from the clustering equation helped to clarify some of these

relationships (*Figures 135-7*). North Kelsey and Kirton are distinguished as solitary assemblages; the unusual Torksey-type percentage at North Kelsey is once again identified. The Stamford grouping of Grantham, Newton, Quarrington and Kirton persists with the addition of Baston. The LFS/LKT set of Fillingham, Hackthorpe and Aylesby also remains. The LKT/LSH cluster of Fishtoft, Wainfleet All Saints and Foston is joined somewhat unusually by Crowland which has a more balanced variety of wares than the rest of its group. Flixborough and South Ormsby are well grouped with their general diversity of wares. A balance of Stamford, Torksey (-type) and the Lincoln wares LFS and LKT is expressed through the largest grouping of Tattershall, Linwood, Horncastle, Haugham, Haverholme, Sleaford and Goltho. The appearance of Linwood and Haverholme in this grouping is notable due to lack of Stamford ware at Linwood and a similar lack of Torksey (-type) ware at Haverholme. However, the large percentage of LKT and the balancing percentages of the other wares appears to be the reason for their inclusion. West Halton, Panton, Nettleham, Cherry Willingham and Ketsby are classified together on the strength of the high percentage of LKT at each of these sites which masks the variety of Torksey(-type) and Stamford wares at Cherry Willingham, Ketsby and West Halton. Inclusion of Caistor within this set is intriguing due to the variety of wares at Caistor. However, the relationship presumably lies on the equal split between LFS and LKT at both of these sites.

The geographical distribution of the sites for the k-means analysis where size was included in the variables, clearly demonstrates the Kesteven distribution of the Stamford clusters (*Figures 138-40*). Other clusters are not as obvious in their distribution. The Caistor grouping with its larger number of pots is distributed throughout Lincolnshire as was the LKT/LSH group of Horncastle *et al.*. The only Lindsey distribution appears to be associated with those sites containing a majority of LKT/LFS wares.

The clusters generated by the k-means analysis (excluding the quantity of pottery) also illustrate a clear distinction between territorial distributions, especially with the Kesteven Stamford ware grouping which did not change significantly when the vessel quantity was excluded (*Figures 141-143*). Furthermore, those sites with more Lincoln wares such as Cherry Willingham and Ketsby are located within Lindsey. There is still a distribution of predominantly Lincoln wares stretching across the Witham. However, this grouping is less cohesive than the similar Lindsey/Kesteven distribution of Lincoln wares represented by the clusters which included vessel size. Indeed, there is more internal variation when the vessel count is excluded, and the Cluster 8 (excluding vessel count) fragments into a number of groupings when 10 clusters are specified. This greater number of clusters is not clearly defined geographically, however.

Indeed, the 8 clusters, with its more definitive Lindsey-Kesteven divide, is more informative.

From these various cluster analyses a number of trends become apparent. There is a definite grouping of settlements containing large percentages of Stamford ware within Kesteven expressed through the Grantham, Newton, Quarrington, Kirton and Baston axis. Those sites represented predominantly by Lincoln wares are correspondingly focussed within Lindsey. However, the Lincoln ware clusters are less territorially distinct than the Stamford grouping, extending into Kesteven with settlements such as Crowland, Foston and Sleaford. This distinction is greater when the number of vessels is included in the cluster equation, indicating that the amount of pottery was important to its territorial distribution.

Geographical differentiation between Lincoln and Stamford assemblages is clearly demonstrated throughout the cluster analyses. Other groupings between sites, where the quantity of vessels is included, do not maintain the same cohesion when vessel quantity is not one of the variables. While the variation between assemblages was demonstrated in the k-means analysis, the reasons for these groupings are not clear. The importance of LKT, especially in those assemblages within Lindsey was illustrated by the hierarchical cluster analysis, although this analysis was not as sensitive to the internal variations between assemblages. Furthermore, the firm inclusion of Lincoln within a hierarchical cluster suggests that the internal variations between assemblages, the relative amounts of Torksey or Stamford ware within a Lincoln assemblage, are not that distinctive.

These analyses demonstrate that the most extreme differences between rural and urban assemblages was their size and the relatively low urban consumption of interregional wares such as those from Nottingham and Leicester. The cluster analyses were not sensitive to the range of interregional wares found at Lincoln. Instead, this was demonstrated by the graphical analysis of the data. There does not appear to be any substantial variation in the consumption of different forms. Indeed, the ratio between the number of pots and bowls remains fairly constant with the pots maintaining a majority of 3:1 over the bowls. Although this presents a rather sports-like view of the situation, it does imply that these assemblages were primarily domestic and not related to a variety of specific practices located on different sites.

What the cluster analyses did demonstrate was a territorial difference between assemblage composition. While this is the topic for the next section, it is important to highlight the territorial affinity being expressed through the pottery trade in both Lindsey and Kesteven. This was especially evident in the Kesteven clustering of Stamford ware, as well as the virtual

absence of Torksey ware in Kesteven except on sites where Lincoln wares were present. The number of sites with only the Lincoln or Stamford wares present was also substantially higher in the associated territory. Territory appears to be one of the strongest influences on assemblage composition.

~Territorial Identity~

Throughout the Anglo-Scandinavian period, Lincolnshire was being transformed from the kingdoms of Lindsey and those within Kesteven and Holland, to the Five Borough territories of Lincoln and Stamford, and then to an amalgamated shire stretching from the Humber in the north to the Welland in the south (Chapter II). This reflected the shift between the Mercian hegemonic overlordship of the Anglian period, to the Anglo-Scandinavian control over the boroughs, and finally, to a national merging of territory under Wessex leadership at the turn of the eleventh century. Territorial organisation was part of the social and ethnic identity of the leaders and inhabitants of these regions. Throughout the Anglo-Saxon period of Britain, territory had been strongly linked to kin groups and social identity, associating *locales* with particular lineages or individuals.

The scant political references in the *Anglo-Saxon Chronicle* for Lincolnshire in the tenth century point to a strong perception of territorial identity, especially in Lindsey which is singled out from the Five Boroughs in 1012 (Whitelock 1968: 223). Indeed, it appears from both the textual and archaeological evidence that Lindsey retained social connections with the Norse kingdom of York and Scandinavian leadership in general. Early Norse sculpture is found in Lindsey linking it with the Scandinavian socio-cultural traditions north of the Humber. This association with the kingdom of York is further expressed in Lindsey through its division into the Scandinavian land arrangement of *þriðings*, later fossilized as *ridings*, an arrangement only shared by Yorkshire. Stamford and Kesteven, on the other hand, were politically allied with Wessex early in the tenth century, an association which was also reflected in the sculptural traditions of the period (Everson and Stocker 1999: 86-7; Chapter II). Territory continued to be important when in 1014, the men of Lindsey supported Cnut against Æthelræd (Whitelock 1968: 224).

Territorial identity figured strongly in Anglo-Saxon social practices. While the middle Saxon tributary organisation was dissolving in the face of feudal relations during the late Saxon period,

territorial identities continued to be articulated. Indeed, middle Saxon kingdoms were often transformed into shire counties under the Wessex administration during the tenth and eleventh centuries. Superficially, Lincolnshire appears to be an exception to the continued importance of territorial *locale* in the late Saxon period with the integration of the territories of Lincoln and Stamford. The other Five Borough territories became shires in their own right. However, the continued expression of the middle Saxon kingdoms of Lindsey, Kesteven and Holland lasted until the twentieth century.

As discussed in Chapter II, Lindsey has always figured significantly in what documentation there has been for the middle Saxon period. Indeed, it was a kingdom and bishopric under the Mercian kings. Less is known about Kesteven and Holland, although the Tribal Hidage, which lists Lindsey as a kingdom, also notes the territories of *Bilmiga* and *Gyrwa* which are suggested to be within southern Lincolnshire (Davies and Vierck 1974: 235). Pottery is able to say little about the middle Saxon organization of these places. Indeed, besides a general petrological division between Northern and Southern Maxey ware traditions (J. Young and J. Wilkinson *in litt*), there is little ceramic differentiation which can be made. Nor is there a great deal of middle Saxon pottery on which to comment, either in territorial divisions, or in site continuity (*Figure 119*). Furthermore, the topic of the Anglian divisions of Lincolnshire and the East Midlands does not appear to have been recently explored despite an otherwise extremely interesting volume dedicated to discussing *Pre-Viking Lindsey* (Vince 1993b). Therefore, it is difficult to address the territorial groupings and identities articulated within Lincolnshire during the Anglian period and compare them with those being expressed by the Anglo-Scandinavian population.

With the strong territorial identity being signalled by the Lindsey covers (Everson and Stocker 1999), it is not surprising that the territory of Lindsey is also recognisable through the trade and distribution of pottery in the tenth century (*Figure 15*). The Lincoln wares were traded throughout Lincolnshire but appear to have been primarily traded within Lindsey. It is important to remember that this distribution is skewed with regards to data collection. South Humberside has less pottery due to its modern political separation from Lindsey and Lincolnshire and the resultant differences in site typologies (Hayfield 1985). The area below Lincoln is sparsely covered. This area has a high military presence and less archaeology has been recovered here. Although this area is also less heavily populated at Domesday (Chapter II; *Figure 7*) and perhaps coincidentally represents a valid distribution. Closer to Stamford, the pottery has been primarily assessed by Healey as has the fenland data. Unfortunately, her typologies are not able to be incorporated with the EMPP information for more than

presence/absence analysis due to the low level of comparison possible between data sets (above).

As the cluster analysis (above) illustrates, this focus of trade within Lindsey becomes more apparent when the number of pots are added to the distribution (*Figure 80*). The internal trade and consumption of pottery is very visible within Lincoln, emphasising the developing urban nature of this town. Sites such as Goltho, Nettleham, Caistor and Flixborough also indicate substantial trade with Lincoln, especially when considered without the high levels of consumption of pottery within Lincoln (*Figure 144*). Indeed, there are only five sites within the territory which presumably are oriented towards Stamford which have more than ten pots produced in Lincoln: Sleaford, Crowland, Baston, Evedon, and Foston. Furthermore, when the 73 sites with only Lincoln wares are displayed regardless of size, only 11 of these are situated within Kesteven and Holland and none have large numbers of vessels (*Figure 145*). This demonstrates that the practices associated with the distribution of Lincoln pottery were participating in the construction of the social perception of Lindsey as a distinct region.

The Torksey ware trade also appears to have been primarily trading within Lindsey, although it was also strongly associated with settlements along the Trent (*Figure 81*). Unfortunately, its sparse distribution offers little comparison with the wider distribution practices of the Lincoln and Stamford industries. Indeed, very few of the sites are represented solely by Torksey ware. However, Torksey and Lincoln wares are more often paired than Torksey and Stamford (*Figure 146*) and these with one exception are found within Lindsey. This suggests that Torksey and the Lincoln wares are participating in the same regional trade within Lindsey.

Stamford ware is the most widely traded ware of the late Saxon period. Indeed, it has been found in places such as Trondheim and Aberdeen (Kilmurry 1980: 160-1). The fine white fabric of the untempered pots and their colourful glazed and red-painted designs distinguish these vessels from other less elaborate wares. Stamford crucibles have a greater refractory ability and are therefore able to withstand higher temperatures than other fabrics (Bayley 1992: 754). It is, therefore, not surprising to see a general distribution of Stamford ware throughout Lincolnshire (*Figure 83*). This distribution dates from the late ninth to the eleventh century, and is less precise than other wares which did not have as extensive a production life. Indeed, while some pots can be dated more precisely than this wide date range, most are only identifiable as Stamford ware or Developed Stamford ware which dates from the twelfth to thirteenth century (J. Young *pers com*). Thus, the more uniform 'Lincolnshire' trade in Stamford ware spans the Five Borough organisation and the amalgamation of these territories into the shire of Lincoln.

It is difficult to address a shift in social identity and mobility from the Five Boroughs territory of Stamford to a unified Lincolnshire, in a similar manner to that of Lindsey because of this vague date range for most of the pottery. Indeed, a distribution map of EST and those pots of ST which have been identified as tenth and eleventh century indicates that while EST was traded throughout Lincolnshire, however sparsely, tenth and eleventh century Stamford ware was located primarily in Kesteven, except at Lincoln and Torksey (*Figure 147*). However, due to the lack of sites where tenth and eleventh century Stamford ware can be distinguished, this does not clearly demonstrate a regional Kesteven distribution of Stamford ware during the tenth century. It only hints at the possibility that Stamford ware had a corresponding territorial distribution to that of the Lincoln wares in Lindsey. Unfortunately, the lack of sites, especially with the wider distribution of EST, makes it difficult to construct more of an argument for a Stamford-Kesteven distribution than has already been made.

Nevertheless, those sites which have a higher consumption of pottery are located within the territory of Stamford. While there is a more uniform distribution throughout Lincolnshire, sites with more than 10 Stamford ware pots are located south of the Witham with the exception of Lincoln and Torksey, which because of their town status would be expected to have a more extensive consumption of pottery. Furthermore, of those sites where Stamford ware has been the only ware recovered, 9 were found in Lindsey whereas 20 were located in Kesteven (*Figure 148*). On none of the sites within Lindsey were more than 10 vessels recovered. While Stamford ware appears to have been traded throughout Lincolnshire during the tenth and eleventh centuries, it is predominantly traded within the Five Borough territory of Stamford.

The territorial identity of the territories of Lincoln and Stamford appear to be structuring the movement of pottery within the region. Indeed, those sites primarily trading in Stamford ware were located within Kesteven, as the geographic representation of the K-means cluster results demonstrates. Although Lincoln wares were more predominant in Lindsey, they were traded south of the Witham in greater numbers than Stamford ware was in Lindsey to the north. Further inquiry into the distributions of the Lincoln, Torksey and Stamford wares indicates that this differentiation extends to those sites with fewer than 10 pots. Indeed, those sites which are only represented by either Lincoln or Stamford kilns also indicated that territorial differentiation was important to trade. Torksey ware, with its more limited trade within Lincolnshire, demonstrates a Lindsey based distribution when combined with Lincoln wares. Territory was being articulated not only through the sculpture erected in parish churches but also through the trade of pottery produced in the towns, the focal settlements of the region.

Pottery and Landscape: The Social Practices of Production and Consumption

The social practices surrounding the production and consumption of pottery in tenth century Lincolnshire have been studied through the use of statistical analysis and interactive display of ceramic patterning using GIS in Lincolnshire. The combined use of these techniques has allowed both the isolation of particular factors such as distance and assemblage composition to be analysed and interpreted within geographic space. While statistical methods are valuable for their ability to recognize trends in the data, they are not designed to incorporate multiple sources of data which are valuable to the discussion of place. Statistical methods do not characterize geographic relationships very well. This is where the elegance of the distribution map lies, in its ability to present multiple sources and forms of information across the landscape. GIS has allowed an interactive exploration of the distribution of material culture through the Anglo-Scandinavian landscape using its underlying database capabilities. This allows distributions to be queried and displayed, providing the visual component necessary for a landscape study.

These analyses demonstrate the importance of pottery to the archaeological understanding of Lincolnshire in the tenth century. Trading practices can be especially sensitive to structures of territorial identity. The use of techniques such as cluster and distribution analysis demonstrate the articulation of territory within Lindsey and Kesteven at this time. They establish that Stamford ware, although found throughout Lincolnshire (and beyond!) was predominantly consumed within Kesteven. Indeed, the largest percentage of Stamford ware within Lindsey on sites with a significant number of pots is at Tattershall (22%). The absence of large numbers of Stamford ware vessels within Lindsey is not mirrored by Lincoln vessels traded within Kesteven and Holland. Sites such as Haverholme, Foston and Crowland have large percentages of Lincoln wares. The resistance to cross-border trade appears to lie with Lindsey rather than with the territory of Stamford.

While the most vigorous trade within Lindsey lies with wares produced within Lincoln, it is also most strongly associated with the Torksey ware trade. Torksey ware does not have a wide distribution of wares. Most of the wares appear to be travelling down the Fosse Dyke to Lincoln. Elsewhere, it is predominantly found in association with Lincoln wares, rather than Stamford wares, suggesting a common practice of trade between the two production centres.

This association between Lincoln and Torksey is intriguing. One of the original aims of the analyses was to explore the association between rural and urban settlements. This evident association between two of the Seven Boroughs, located on either side of the Fosse Dyke, was unexpected and will be further explored in Chapter V.

The other axis of trade from Torksey is along the Trent from Flixborough to Repton. While the Horncastle potters are moving within the same territory, the potters from Torksey travel down the Trent to Newark, creating a daughter industry on the Nottingham side of the Trent. Torksey's association with the Trent is poorly understood, and until further research based on current knowledge of kiln typologies from both Torksey and Newark is undertaken and recorded in other areas of the East Midlands, the strength of Torksey's association with Lindsey will be unclear.

The most limited place of pottery production within Lindsey was at Horncastle. Although HLKT does not have an extensive distribution during the tenth century, the movement of potters from Lincoln to Horncastle during the tenth century further strengthens this territorial association of shell-tempered vessels with Lindsey. The Horncastle production of LKT-type wares is also firmly distributed within Lindsey.

The importance of regional locale also appears to be articulated through other pottery distribution patterns (Chapter III). York was primarily producing and consuming York ware throughout the tenth century, with an increase in Torksey-type ware (also presumably produced in York) and Stamford ware during the middle to the late tenth century. Other wares (such as shelly and gritty wares) were reaching the town, but these were in small quantities. Nottingham (Nailor 1984), and Leicester (Hebditch 1967) were also participating in an urban-based production and regional distribution of pottery. These wares appear to be linked to a geographic locale. Indeed, the trade of Thetford ware was firmly linked to East Anglia. Thetford ware rarely reached Lincolnshire, and it is primarily associated with Norfolk. While shelly wares are found on some sites within Norfolk, it is suggested that they originated from the Cambridgeshire St. Neot's production rather than from Lincoln or Horncastle. Unfortunately, these shelly wares have not been assessed by Cambridgeshire or Lincolnshire pottery specialists, and this identification with Cambridgeshire rather than Lincolnshire must remain supposition (Dallas 1993: 125).

The differentiation between places based on the percentage of wares within an assemblage was not that significant within each territory as demonstrated through the cluster and distribution

analyses. Indeed, there is little differentiation between urban sites such as Lincoln and manorial sites such as Caistor either in distribution of wares or vessel forms. While urban sites are participating in a trade in crucibles and do have a wider range of alternative vessels such as globular lamps, the ratio between pots and bowls remains a relatively standard 3:1.

These results are similar to those demonstrated by the London consumption of a shelly ware produced in Oxford (Vince 1985). Until the turn of the eleventh century, London was primarily consuming a ware termed London Local Shelly ware. However, during the late tenth and early eleventh century, there is a sharp shift (perhaps originally caused by the burning of Oxford in 1009) where non-local ware consumption significantly increases. Furthermore, urban assemblages begin to differ significantly from those found outside the town (Vince 1985: 42). During the tenth century, rural consumption of pottery mirrors town consumption to a significant degree (above). This regional internalization alters during the eleventh century with a general increase in foreign and interregional trade.

This thesis was further able to explore the associations between rural and urban communities through the use of regression analysis. Integration of conceptual mapping techniques indicates that distance was influential to the amount of pottery at each site. This is especially true for the Lincoln wares which have a more extensive coverage of data. The results from the analysis of Lincoln wares would presumably be echoed by that of Stamford had both territories had the same quality of data. Furthermore, the cognitive approach used with these techniques demonstrates the importance of a day's travel to the trade of goods produced in towns. This temporal association between towns and rural settlements will be addressed in Chapter V.

The emphasis in the analyses on the perception of travel during the tenth century was further able to discuss the use of roads and rivers in transportation. Through graphing the proximity of late Anglo-Saxon sites against the overall coverage of the EMPP data set, it became clear that Roman roads were preferred over rivers in the transportation of pottery. This has important implications not only for the social practices associated with travel but also with the communities located along these routes. The association between large amounts of pottery and the Roman road system would undoubtedly have influenced the social definition of those places. This is also related to the distance these places were from the towns and will be further explored in Chapter V.

Furthermore, while other studies have addressed the nomenclature of route-ways (Hooke 1985; Gelling 1984), there has been little attempt to associate these meanings with the use of these

routes in any material way. Later documentary research has used court and trading records to explore the relationship between the use of rivers and roads in medieval trade and travel (Edwards and Hindle 1991; 1993; Langdon 1993). Unfortunately, such detailed records are non-existent in the late Saxon period. Therefore, it is through the association between transportation and material culture that such topics are able to be addressed. The clear affiliation between the distribution of pottery and the use of the Roman road network during the tenth century for trading practices establishes an archaeological understanding of the importance of these routes. It is also suggestive of a difference between regional and interregional travel in terms of the use of roads and rivers. It has been previously determined that the pottery trade primarily occurred within territorial boundaries. The extensive use of Roman roads in this practice is therefore representative of regional mobility rather than interregional trade. However, the documented use of rivers to transport messengers in Domesday (Foster and Longley 1924: 11) and their association with the Viking campaigns illustrates the significance of rivers to interregional movement. This suggests further avenues of research which would be aimed at addressing inter-regional mobility.

Although the ubiquity of pottery is extremely valuable for archaeological inquiry into past landscapes, it can also be a drawback when addressing issues of social complexity. This is especially true in areas which lack intensive landscape surveys targeted at investigating the use of a locale over time. These analyses demonstrate that it is difficult to investigate community variation across the rural landscape with the current information available and the uniformity of the pottery distributions. While the distribution of pottery is sensitive to territorial boundaries, without further understanding of rural landscape, it is difficult to address the construction of locale which figures so largely in the historical research of the period. Instead, the most fruitful analyses are those which deal with movement to and from the towns and the development of locale in relation to that movement. This highlights the need for future landscape surveys which are focussed on a particular locale as well as excavations of late Saxon sites other than manorial complexes.

This chapter has explored the articulation of territorial identity through the trade and consumption of pottery. Territorial identity is clearly established through the distinctive distribution of Stamford and Lincoln vessels as well as through the ancillary trade in Torksey and Horncastle wares. This chapter has further demonstrated the importance of roads to regional travel and trade, an association which no doubt was influential in the social perception of those places. Despite the regional emphasis on pottery distributions, it is evident that towns were participating in an interregional trade, although primarily consuming regional and local

goods. Indeed, the urban trade in crucibles was one way in which these town communities, with their emphasis on craft production, were distinguished from rural sites. However, there is little other differentiation in pottery consumption between towns and their hinterland, reflecting the still developing urban characteristics of these places. Social interaction between such places as Lincoln and Torksey can be discerned. In this chapter, emphasis was placed on integrating traditional methods of pattern analysis with cognitive approaches to landscape. Visual and graphical techniques were used to explore the social construction of landscape. While many advances have been made in social landscape studies of monumental sites, little has been done on distributions of material culture. This chapter helps to redress this balance by developing techniques, which can be used in future research to address landscape and social practice, through the analysis of artefactual distribution. Unlike most previous artefactual analysis, this thesis has not focussed on the development of local and regional typologies, and instead, has been concerned with the ways in which patterns of material culture can inform archaeologists about past landscapes. This exploration of landscape and material culture will be further contextualised within a larger understanding of late Anglo-Saxon society in the next chapter.

CHAPTER V

LANDSCAPE AND SOCIAL PRACTICE

IN TENTH CENTURY LINCOLNSHIRE

'And in spite of that crowd, and the highways, and the artillery ranges (with their fluorescent or semiluminous targets), my sense of antiquity, my feeling for the age of the earth and the oldness of man's possession of it, was always with me. A vast sacred burial ground, bounded by the sky - of what activity those barrows and tumuli spoke, what numbers, what organisation, what busyness in these now virtually empty downs' (Naipaul 1987: 24).

'Land is an end in itself and not a mere means of existence and work is not a way of living but a way of life.' (Bourdieu 1979: 103).

The Anglo-Scandinavian landscape of Lincolnshire was inhabited by individuals and communities who constructed the places in which they lived; the roads down which they travelled; the markets where they traded; and the fields where they grew their wheat and grazed their livestock. The daily movements of people, their interactions and activities, structured the landscape, forming patterns of association, of memory, a context through which to interpret the places in which they lived and the people with whom they communicated. Much of this was done through the manipulation of material culture: the building of stone churches, still used today at places like Stow; the production of coins in Lincoln which travelled to, and were exchanged later in a market at York for a bolt of silk; the building of a wall which defined a distinction between those who lived within the town, and those who lived without; those who paid tolls, and those who did not. Material culture was an integral part of the discourse between people and the landscapes which they constructed and inhabited.

While much of the tenth century landscape of Lincolnshire is visible today, it is not always intelligible. It is a palimpsest of continued social practices leaving echoes of past lives and societies in the reuse of Roman roads, the habitual use of the stone church at Stow, the continued settlement and naming of the place called Ketsby. Social practice is understood through the memory of past action; the production of individual and communal identity; the collective acknowledgement of authoritative structures; and through the recursive transformation of these practices (Ashmore and Knapp 1999: 13-9; Chapter I). Late Saxon towns became associated with markets, not only through the laws laid down by Æthelstan

(Attenborough 1922: 135), but also through the perpetuation of market practices, structuring the places in which they occurred, becoming part of the social perception of the towns at the turn of the first millennium. The continual association of practice and place within the landscape allows the knowledge of such places and practices to be understood by society. As Giddens notes 'all human action is carried on by knowledgeable agents who both construct the social world through their action, but yet whose action is also conditioned or constrained by the very world of their creation' (Giddens 1981: 54; cf. Barrett 1987: 8). Thus, the eleventh century traveller to Crowland would have understood his passage as a transition from mundane to monastic landscape by the boundary crosses erected around the isthmus (Stocker 1993: 106). He would have interpreted this transition through previous social knowledge and perpetuated this understanding through his action and interpretation of his surroundings. Indeed, the production of locale, of place, is understood by the activities which occur there from the building of roads, to the ploughing of fields, to the mysterious liturgies of the Church.

Material culture is used to structure social practice, to construct meanings of territories and places and to form perceptions of space and landscape. The patterning of material culture through human agency can therefore be used to investigate past social practices (Chapter I). While much of the individual action and knowledge has been lost through time, the collective understanding which structured the patterns of production and consumption of material culture can be recovered. Indeed, it is often through the variations in the manufacture of artefacts that individuals come to be rediscovered by archaeologists. The thumbing technique used to decorate Torksey ware vessels can be traced to the potter at Newark, suggesting the movement of a person trained at Torksey to a new location along the Trent (J. Young *pers com*). The impressions of the feet of a pig at a similar Torksey kiln reveal the curiosity of a small farmyard animal following the potter who left his heelprints in the clay (Barley 1982: 275). The use of templates on stone sculpture suggests, if not an individual, a craft tradition operating within a locale of settlements (Bailey 1980: 240). However, the individual is rarely so apparent and must be read into the more general knowledge of social practice gained by investigation into material culture.

The contextualisation of archaeological, historical and geographical knowledge concerning the social landscape of Anglo-Scandinavian Lincolnshire has been a main component of this thesis. This was especially important due to the narrow focus on the production and distribution of a single artefact, pottery. A number of themes were addressed which focussed on the social construction of place and territory in tenth century Lincolnshire and the ways in which place and territory structured human movement across the landscape. This thesis was further

concerned to address the ways in which the developing towns and hinterlands interacted. Much archaeological research has centred on the emerging urban settlements of the tenth and eleventh centuries (Haslam 1984; Hill 1988; Biddle and Hill 1971; Hodges and Hobley 1988). In these studies, the rural landscape has often remained a blank background upon which the towns were inscribed. The emergence of towns is not an isolated occurrence, but part of a wider social shift in practice occurring throughout the landscape (Esmonde Cleary 1993: 6; Roskams 1996: 264).

Interaction between settlements was explored through geographic and statistical analysis. Other pottery analyses have focussed on the distribution of pottery as representative of the extent of influence which the town exerted over its hinterland. This thesis was concerned, instead, with how the assemblages of pottery were involved in the social construction of place. Therefore, it did not simply describe pottery distributions but also investigated the different groups of assemblages through statistical and geographic analysis (Chapter IV). These results were then incorporated within an historical understanding of settlement development within Anglo-Scandinavian Lincolnshire, as well as the late Saxon period as a whole. This meant that social perception of towns and manorial settlements were explored through the practices associated with the trade of pottery.

These two themes were further expressed through investigations into the social understanding of mobility in the landscape. These explorations focussed on the use of transportation routes and related movement along these routes with cognitive understandings of distance. Previous studies have assumed that the Roman road network, so visible even today, was extensively used in the past (Kilmurry 1980; Hindle 1976). Rivers have also been considered either as a complimentary system or as alternative route-ways to roads (Barley 1936; Edwards and Hindle 1991; Kilmurry 1980; Vince 1985). This thesis was interested in exploring the relationship between the rivers and road systems through the trade in pottery. It demonstrated the use of these routes through artefact distribution (*as per* Vince 1985). It explored the interaction between road and river routes. Furthermore, it assessed the use of Roman roads in the transportation of pottery. It also linked the use of these routes with the definition of place and the construction of territory in the landscape. Transportation was further correlated to distance through a map expressing the distances in travel-time of cart and boat. This allowed the travel through the landscape to be contextualised and communication between settlements further explored.

The articulation of territory was investigated in this thesis through the geographical and statistical analysis of pottery distributions. This differed from other pottery analyses which

identified the regionality of pottery distributions but which did not link those regions with territorial identity. Instead, the historical understanding of territorial developments (Chapter II) was incorporated in the GIS with statistical and distributional analysis of pottery. This situated the movement and consumption of pottery within the social geography of Anglo-Scandinavian Lincolnshire and allowed it to be linked to the social construction of territory.

The ways in which landscapes could be explored, and represented, using current technology formed an important part of this thesis. GIS were used to provide visualisation tools as well as interactive analytical techniques used in exploring the distribution of pottery. The focus of this thesis on addressing landscape through the production and consumption of artefacts was one of the reasons GIS were chosen. The use of GIS provided an interactive medium through which historical and archaeological understanding of the past could be explored. GIS applications allowed mathematical analyses of assemblages to be located within the landscape. Through GIS, the landscape could be contextualised within a historical and archaeological framework. However, its applications had to be modified in order to represent cognitive understandings of landscape (Chapter IV). GIS applications have begun to incorporate more cognitive approaches such as neural networks (Gibson 1993; Barceló *et al.* 1994). Their potential for visually representing cognitive landscapes is still being realised (Gaffney and van Leusan 1995).

The interpretation of past social practice is a dialogue with present day practices of excavation and recording opportunities and methodologies. Indeed, the landscape of the past is very much a landscape of today. Archaeological understanding of landscapes is constructed from a patchwork of evidence, from the excavation of artefacts to the reading of historical documentation to ethnographic analogies of social practice. This contextualises past landscapes within present understandings of place and space allowing informed readings of past landscapes. However, the archaeological landscape of excavation will always remain incomplete, and the ability of the archaeologist to reconstruct past social practices is limited by the quality of data available. Archaeology is rarely able to dictate the terms of excavation and analysis. Instead, it is often done at the behest of commercial firms interested in future development. This increases the importance of a standardised methodology of excavation and archaeological recording, allowing the glimpses gained by small archaeological excavations to be integrated into a wider understanding of the past.

Urban Transitions

The appropriation and development of settlements, where 'the works of giants' (Mitchell and Robinson 1986: 238) still dotted the skyline, must have made a significant impression on the people living in the former eastern extents of Mercia during the later half of the ninth century. Topographical analysis of towns (Dyson 1978: 201; Baker *et al.* 1992: 67) suggests that the development of these places was structured by aristocratic control over the sake and soke of blocks of land with the emerging town. These blocks were then divided into tenements, into urban *haga* named presumably for the hedged demarcation between plots, where craftsmen were encouraged to take up practice (Hall 1988a: 130; Vince 1988: 90). The inspiration for these towns certainly existed in the ninth century landscape, in the fortified *vills* of Mercia (Haslam 1987: 76), in the coastal and riverine trading ports (Hodges 1989a: 80-104) and, indeed, in the Roman fortifications that would have still been monumental at the turn of the tenth century. Many of the elements which were comprised in the urban communities existed in the settlements of the middle Saxon period. However, it was the combination of social practices, so obviously encouraged by royal enforcement of trading and minting restrictions, as well as through the regulation of tolls and dues (Whitelock 1968: 384, 489; Foster and Longley 1924: 11) which defined these places as towns.

The development of towns during the late Saxon period cannot be divorced from the rural landscape. Indeed, the aristocracy held land in both town and manor, the plots often associated one with other in the wills of the proprietors (Hinton 1977: 75-6). The increased social differentiation between town and manor was based in the practices which occurred in the towns, and in the changing relationship between lord and land (Stafford 1985: 34-5; Blair 1994: 140). Towns were foci of administrative and mercantile activities in a landscape where places of government were shifting from meeting places (located near semi-natural features such as stones, trees and barrows) to inhabited settlements. The emergence of the town signalled not only a change in land tenure practices structured around a larger aristocratic population, but a transformation of society.

Indeed, when one discusses landscapes of memory, the late Saxon landscape is difficult to characterise in terms of such large temporal periods as the British Iron Age (Barrett 1999). The changes can be measured over generations rather than centuries and millennium. Still, the growth of towns often associated with the re-appropriation of Roman *civitas* was conceptualised

by the late Anglo-Saxons as a re-inhabitation of *enta geweorc* - 'the works of giants' (Mitchell and Robinson 1986: 238). Indeed, a reduced use, or avoidance, of monuments in the landscape does not necessarily mean they were not socially recognised and remembered (Barrett 1999: 258). Indeed, the re-inhabitation of Roman structures by the late Anglo-Saxons has been linked to a conscious association by the Anglo-Saxons with the powerful ideology which Rome still held in the late ninth and tenth centuries (Carver 1987: 56).

However, whether emulation of Rome was one of the motivations of Alfred the Great in his construction of the burhs of Wessex, the development of towns in the late Saxon period was predominantly a response to the changing practices of social order and those activities which defined particular settlements. Towns were increasingly reliant on the surpluses produced on the manorial settlements to support their population of craftsmen and administrators. These craftsmen formed a large part of the identity of the town and inhabited the *haga* owned by lords to whom they owed rent. The topography of the town, at first, large open plots of land, quickly became defined by rows of streets and tenements as more people came to live within its walls. The identification of towns with crafts and markets was largely encouraged by the nobility and leaders of the society. Indeed, the archaeological evidence of the Danelaw towns demonstrates this early implantation of craftsmen, such as potters, whose presence structured the identity of the town communities and participated in the transformation of the late Saxon landscape (Chapter II).

Amongst these developing craft tenements, the potters were erecting their kilns and digging pits for clay or rubbish. The kiln-yards would have been situated close to a supply of water, and perhaps, downwind from most of the town to minimize the amount of smoke drifting over the rest of the settlement (Adams Gilmour 1988: 173; Miles *et al.* 1989: 198). The procurement of clay from nearby sources would have been a routine practice of the potter, as would the gathering of oak, poplar and hazel branches to fuel the kiln (Miles *et al.* 1989: 186, 194; Kilmurry 1980: 63, 67). During the late ninth century, the potters would have first dug the large pits needed for the kiln base, perhaps conversing in a Frankish or Low Country dialect, having arrived from the Continent on a Danish ship not so long ago (Kilmurry 1977a: 183-4). As the centuries progressed, these kilns would become more elaborate. The bases began to be lined with stones (rather than clay) to increase their stability, and internal furniture (such as baffle bars and raised pedestals) were added to increase air flow during firing (Barley 1982: 372; Miles *et al.* 1989: 186; Kilmurry 1980: 86). These first kilns rarely lasted very long. Indeed, the first Lincoln kiln built by the Silver Street potters was likely in use for only a few years before the strange rectangular kilns were built in the early tenth century (Miles *et al.* 1989:

194). The brief production of red-painted ware at Stamford also demonstrates the short life of these first pottery industries, as does the equally brief production of sandy and gritty wares at Lincoln during the late ninth century and early tenth centuries (Kilmurry 1980: 131; Miles *et al.* 1989: 222). Instead, it was later in the tenth century, with the establishment of predominant ware types that the investment in kilns increased.

The use of similar tempers, throwing and decoration techniques can be used to trace the establishment of new workshops by members of a particular kiln-yard. Indeed, the broad thumbing used on vessels from the Torksey kiln and that found at Newark demonstrates the movement of potters from the town of Torksey along the Trent to Newark (J. Young *pers com*). Perhaps this may have been linked to the development of Newark, the 'new work' along the Trent. Potters from Lincoln appear to have moved to Horncastle, establishing a daughter industry of the main Lincoln ware, LKT which outlasted its progenitor (J. Young *pers com*). Nottingham potters have also been traced to Stamford, demonstrating the expansion of the Stamford industry (Coppack 1980: 217-18, 275). Most of the movement occurred in the early tenth century suggesting an impetus for expanding the pottery trade. It is difficult to say whether this was by craft design or stimulated by aristocratic interest in the development of craft activity within towns. Nevertheless, at the turn of the tenth century, potters located in those towns which were to become administrative and mercantile foci for their regions, were also moving to other, lesser established towns. This not only indicates a degree of craft mobility but also the development of towns in a landscape increasingly structured around the interaction between rural and urban communities.

While decoration is not a common feature on vessels during the tenth century, it was socially meaningful. It is difficult to discern what importance was put on the roller-stamping, thumbing, red finger-painted designs and occasional splash of glaze. These glimpses into the individuality of the potters, the use of the broad side of the thumb or the tip to impress the wavy pie-crust rims, perhaps mean more to the archaeologist than they did to the tenth century inhabitant of Goltho who used the vessel. Alternatively, the rare uses of such designs may have been significant to Anglo-Saxon society, indicating the contents of the vessel (Carver forthcoming) or simply making the vessel more valuable. Decoration does appear have been influenced by fashion, roller-stamping designs being more common earlier in the tenth century and thumbing more apparent on later vessels (Wilkinson and Young 1995: 6; Kilmurry 1980: 142). Whatever their social meaning, these designs were deliberately added by the potters, the stamps and red-paint part of the tool kit which included formers and large pots to hold water (Dallas 1993: 60, 68; Miles *et al.* 1989: 193).

Previous analysis of the vessels produced by these potters demonstrates that they were conforming to a standard range of vessels (Miles *et al.* 1989: 205; Barley 1982: 275). The possible use of pottery sherds for templates was suggested by the results of the Flaxengate excavations (Miles *et al.* 1989: 205). This indicates an investment by the potters, and indeed by the craft community, in production standards. The differences in size and shape would undoubtedly have been recognised by the users of the pots. However, this adherence, whether by potters or minters, to the standardisation of products, also implies a certain amount of expectation by the community for goods which conformed to a specified standard. The standardisation of production further influences craft identity. This social cohesion is demonstrated in the movement of potters with recognisable traditions from one town to another (Chapter III).

The analyses in Chapters III and IV suggested a range of production within towns ranging from those kiln-yards which had an extensive trade outside the town and those whose production mainly supplied the town. This was especially true at Lincoln, where LKT represented the predominant ware exchanged, both within and without the town, while other wares were more often only located within the town (*Figure 121*). This implies a substantial consumption by the town community of the wares produced within the town. Indeed, the large amount of pottery within the town is what distinguishes it most from other settlements. Excavations such as Goltho (Beresford 1987) and Flixborough (Loveluck 1997; 1998) indicate that rural consumption of pottery was much greater than it would appear from most excavations. However, neither of these rivalled the number of vessels within the towns. This was demonstrated through the cluster analyses in Chapter IV where the amount of pottery was shown to be the defining variable when included in the equation (*Figure 130*). When vessel count was excluded from the analysis, towns such as Lincoln were associated much more closely with the rural assemblages (*Figure 131*). However, it must be remembered that these statistical analyses were dependant on the percentages of the major ware groups, rather than emphasising the variety of wares within the towns, a more subtle variation demonstrated through the distribution maps.

The distribution of forms also indicated that people in towns were not consuming a vastly different variety of forms that people on rural settlements, but were rather slightly augmenting their use of pottery with such rare items as costrels and lamps (*Figure 124*). The exception to this were crucibles which were used exclusively in towns. The urban consumption of crucibles demonstrates the concentration of craft activity within the towns. It also suggests a trade of goods exchanged almost exclusively between towns. The extent of the Stamford crucible trade

provides the best example of this, as Stamford crucibles were used by the metalworkers of York as well as Lincoln (Mainman 1990: 467-469)

This implies that while the towns of Lincolnshire were consuming much larger amounts of pottery than their rural counterparts, the urban communities were participating in the same regional trade as the manors. There were obvious exceptions such as the urban trade in crucibles, but for the most part, the towns were primarily interacting with settlements within their territory. This relationship between town and region was also demonstrated with the London assemblages. Indeed, it was only during the eleventh century that a distinctive difference was apparent between urban and rural pottery consumption, London increasingly signalling its separation from rural communities with its large variety of imported wares (Vince 1985: 42).

Towns in the tenth century were communities in transition which were continually developing their own social practices and identities. While the most observable archaeological difference between town and manor in the tenth century lies in the managed tenement plots and the large amounts of material culture associated within urban places, the developments of social practices which distinguished towns from settlements in their hinterland are observable. The increased variety of goods in towns indicates a growing internalisation of production and consumption practices very different from that in the countryside. The collection of social orders, be they connected with Church, market, guild or legislation, stimulated the development of communities which interacted with the hinterland, drawing people and produce towards foci of activity, and interacting with other urban communities, thus, creating a 'town life' which thrived on variety. This transformation of society was structured through the manipulation of material culture: the stones of the church built along the street leading to town, the silver of the penny struck near the market or the pot carried in a wagon heading towards the coast.

Place and Mobility in the Landscape

Perception of the landscape, constructed through the movement of people in their daily routines, structured social understanding of place and territory. Towns were associated with movement, both within their walls and through their gates. Tenth century perception of travel was often directed towards the town. Many roads were termed 'portways' or 'townroads' and are

testimonies to the social orientation towards urban communities. Taking this one step further, the social order, which restricted much of the marketing activities to the town, was also involved in directing movement towards them, influencing the ways in which rural communities were situated and understood. One should not focus only on the towns and their importance in the landscape, but on how that movement towards urban markets and communities influenced the organisation of the rural landscape. It is often forgotten that the carts and wagons were driven down roads, through and by settlements, perhaps resting overnight near a manor where the merchant cohort intermingled with the resident populace.

Mercantile activity was strongly regulated by kings and rulers throughout the middle and late Saxon periods. The laws outlining the relationship between king and merchant suggest that it was one of mutual benefit. Early medieval society was organised around duties and protection given to king and kin. Merchants, through their itinerancy, were unable to take advantage of the structures which governed the more steadfast agrarian societies. The laws which provided witnesses from family and community (Whitelock 1968: 378-9) would not apply to them and, thus, their protection was guaranteed by the king. This is apparent through research into the laws in the seventh century, which noted that the wergild of any stranger largely went to the king and provided for the upkeep of strangers and traders for three nights by local landholders (Sawyer 1977: 150). The late ninth century laws of Alfred further indicated a royal concern for the travelling merchants. Alfred stipulated that traders and their men should declare themselves to the king's reeve (Attenborough 1922: 79; Sawyer 1977: 151). Kings took an interest in the movement of merchants, both to secure the safety of a valuable resource and also to ensure the protection of their territory from other unwholesome travellers such as thieves (Sawyer 1977: 150-1).

Much of the analysis done in Chapter IV addressed the concept of mobility in the landscape and how it participated in the understanding of place and territory. Clustering techniques indicated that tenth century towns were participating predominantly in regional trade (above). This was emphasized in the investigation into the use of roads and rivers at this time (*Figures 73-8*). The proximity of many tenth century sites to a Roman road was undoubtedly important to the structure of the rural landscape. This was especially noticeable in the low correlation of tenth century sites to rivers. Those sites close to rivers were often also associated with large amounts of pottery. However, the much larger percentage of sites proximal to the Roman roads, including many settlements with significant numbers of vessels, indicates that the Roman roads were important to tenth century settlement and mobility. This implies that the regional focus of trade was structured along roads rather than rivers, which may have been more influential

in inter-regional travel and trade, as suggested from the note in Domesday concerning the obligation of the aelderman of Torksey to provide riverine transport for the King's men to York (Foster and Longley 1924: 11).

The Thetford excavations suggested that pottery might have been transported in carts. The churned ground to the south-west of the kilns was interpreted as possible disturbance due to cart loading activities (Dallas 1993: 60). A cart would have been useful not only for traders dealing in pottery, but also for the potters in gathering wood fuel for their kilns. Carts were extensively used in the salt trade and documents, from the agreement between the Bishop of Worcester and Æthelræd and Æthelflæd of Mercia to the Domesday accounts for Cheshire, indicate not only the use of carts or waggon, but that a toll (*wægnschilling*) was levied on each cartload of salt (Whitelock 1968: 498; Douglas and Greenaway 1953: 871). The transport of pottery overland in carts pulled by oxen is easily believable, especially if, as the laws indicate, traders rarely travelled alone but rather in groups under a single leader (Whitelock 1968: 378). Certainly Langdon suggests that oxen were used for traction until the twelfth century when horses became the preferred animal for transportation (Langdon 1986: 49, 114).

Kilmurry has proposed that pottery was unlikely to be the main component of a merchant's load despite such later medieval references to the large consignments of pottery and eleventh century references to pot-sellers (Kilmurry 1980: 170-1). She suggested that the transportation of Stamford ware was linked to the movement of wool rather than the trade in grain proposed for the Thetford ware storage jars (Kilmurry 1980: 170-1). The ubiquitous and domestic nature of pottery during the late Saxon period makes a particular method of trade and transportation difficult to argue, as demonstrated by the trade models discussed by Kilmurry and Hayfield (Kilmurry 1980: 17-1; Hayfield 1985: 408). However, the association between the consumption of pottery and the salt routes demonstrated in Chapter IV (*Figure 85*) implies a possible connection between the transportation of salt and pottery.

The importance of the salt trade from the Lindsey coast to Lincoln is still recorded today in such road names as Saltergate and Salter's Lane (Rudkin and Owen 1960: 84). Traffic would have been relatively frequent along the Roman roads leading from Lincoln to the coast, and one can imagine the hollers of the carters to their oxen as they travel, provisioning the settlements with salt to preserve butter and cheese and to season vegetables (Mitchell and Robinson 1986: 179). This axis of travel from Lincoln to the coast is echoed through the pottery trade as demonstrated by the cognitive maps representing the amount of trade along the routes (*Figures 84-9*). Indeed, much pottery is found along the roads to the salterns at places such as Goltho.

This suggests that the pottery trade from Lincoln may have been oriented around the trade of salt, whether through direct involvement as a container, or as an extra load of goods taken by the salt carts. This further suggests the prominence of places such as Ketsby along the coastal Roman road far from the town of Lincoln from where most of its pottery came (*Figure 79*).

Trade along the Lindsey coast is evident in the distribution of Stamford ware (*Figure 86*). Indeed, the main axis of Stamford trade demonstrated in Chapter IV was either along the Slea to Tattershall, Horncastle and Ketsby or along the coastline (*Figure 83*). This again suggests a link to the salt trade along the Lindsey coast and the existence of customs at Saltfleetby (Foster and Longley 1924: 215) indicates that an active trade existed along this stretch of coastline. However, other than at Ketsby, no large quantities of pottery were recorded along the coastline (*Figure 79*). Instead, it is through the general scatter of pottery that this movement towards and along the coast can be suggested. Despite the importance of salt and its obvious movement inland from the coast during the tenth century, there is no prominent trading site either in the middle or late Saxon periods (Sawyer 1998: 174). The development of the coast and its relationship to the trade in Lincolnshire during the Anglo-Saxon period is an area which should be highlighted for future research.

The significance of Roman roads to trade is further indicated by the distribution of coins in Lincolnshire (*Figure 149*). This clear association between coins and roads demonstrates their importance in regional trade. Indeed, the high quantities of coinage found in Lincoln not only illustrated the position of the town as a focus of mercantile activity, but also implies that the trading practices responsible for the distribution of coinage were linked to travel and mercantile activities emanating from this town. The distribution of coinage also indicates the participation of roads in interregional travel. Unlike the pottery distributions which displayed a regional orientation, the coin distributions extended further along roads, such as Ermine Street, implying a movement across territorial boundaries. While both the coin and pottery distributions are representative of trading practices and travel along the Roman roads as well as the interaction of nearby settlements with these activities, the pottery distribution was primarily directed towards the coast rather than along Ermine Street towards York.

Perception of place in the rural landscape was therefore structured through participation in trading activities with the towns. Proximity, especially to Roman roads, as well as to navigable rivers, was associated with mercantile travel and focal settlements as demonstrated by both coins and pottery. Furthermore, large land holdings also appear to be linked to this pattern of mobility through the landscape (*Figure 150*). Domesday data suggests that those manors with

large areas of sokeland were situated along the roads. This data was derived from the tenth century pottery sites, an assessment of the entirety of the Domesday material exceeding the bounds of this project. Thus, this patterning of Domesday sites, which was both close to roads, and often within a day's travel of a town, must be further explored to determine whether this is a pattern which occurs independently of the pottery distributions. Nevertheless, this association further indicates the importance of mobility to the perception of place within the landscape.

Interestingly, however, the distribution of sculpture did not complement the patterns of coin, pottery and land tenure explored above (*Figure 15*). The distribution of tenth century sculpture compiled by Everson and Stocker (1999) demonstrated that other practices were involved with the social structure of space within the landscape. Indeed, sculpture and its association with parish churches emphasizes the increased inward orientation of rural communities to parish and manor. While the large artefact distributions associated with settlements along the roads and rivers imply the focal nature of these communities, they ignore much of the rest of the populace.

The current lack of knowledge concerning rural communities in the tenth century is readily apparent. The analyses done within this thesis would have benefited from an extensive landscape survey which targeted the interaction and mobility of settlements within a region. Indeed, the social importance of the meeting places, so prominent in the Lincolnshire place names, has been unable to be considered within this project nor has it been adequately addressed elsewhere.

What the analyses in Chapter IV were able to highlight was the current simplification of tenth century settlement. Places such as Sleaford and Horncastle indicate the existence of places which, although not towns, were something other than manorial settlements. Indeed, the movement of potters from Lincoln to Horncastle suggests that Horncastle was associated with production and trading activities otherwise linked with towns. The unusual balance of wares in the pottery assemblage at Sleaford implies that this settlement was also something other than a manorial community.

The existence of these 'proto' towns is also apparent from landholdings recorded in Domesday. Indeed, Horncastle, Caistor and Grantham, all former Roman towns, have some of the largest entries for sokeland concentrated in entries for one or two manors. The manors and most of the sokeland were controlled by the king. While other places, such as Stow and Claxby-by-Alford, have a similar distribution of sokeland, they were held by aristocrats such as the Bishop of

Lincoln and Gilbert de Gand and not the king. Instead, the king appears to have invested in previously former Roman sites. Many towns were established in previous Roman fortresses by kings and other leaders during the late ninth century. This would imply a lengthy royal interest in such previously defended sites. The high numbers of pottery and the varied assemblages at Horncastle, Caistor and Grantham would further argue that there was royal interest in these places.

Geographical analysis in Chapter IV also argued for the uniqueness of Crowland. Crowland was a prominent monastic establishment in the middle Saxon period which was revived to its former splendor with Edgar's Benedictine revival. The continued existence of the monastic life in Lincolnshire during the early tenth century is difficult to discern (Sawyer 1998: 98-9). However, the monastery of Crowland was 'revived' during the mid-tenth century and became one of the great monastic churches of the medieval period (Stocker 1993: 103-4, 106). It is interesting that the large amounts of early mid-tenth century Lincoln wares found at Crowland, not only do not reflect Crowland's location in 'Stamfordshire', but are also not comprised of late tenth and eleventh century material. Indeed, Crowland, with its location along the Welland fenland, should be predominantly trading with Stamford. One would further expect Crowland to have a concentration of late tenth and early eleventh century wares rather than the large percentage of LKT it does have. This tenth century assemblage is the main pottery group found in the excavation, indicating that the later eleventh century occupation of the site was elsewhere. The strong trading association between Crowland and Lincoln during the tenth century suggests that a possible ecclesiastical connection between the bishopric of Lincoln and the monastery of Crowland might have continued into the tenth century. Whatever the connection, the presence of such large numbers of Lincoln wares at Crowland is a subject of curiosity, and a topic for future research.

A further association between settlements was also highlighted through the exploration of the amount of pottery moving along roads and rivers. While most towns appear to have a trade based on interregional trade, the connections between Lincoln and Torksey are somewhat different (*Figures 88-9*). The large amounts of pottery travelling from Torksey to Lincoln indicates a strong connection between these two towns situated on either end of the Fosse Dyke. While there is some doubt about the navigation of the Foss Dyke in the tenth century (*Leahy pers com*), the importance for Lincoln of the location of Torksey along the Trent would suggest that this canal was an important link between the towns. This is further supported by the dredging of and the subsequent construction of wattle-hurdle structures at Brayford Pool in the tenth century (*A. Vince pers com*). Domesday also indicates a strong association between

Lincoln and Torksey. While Torksey qualifies as a royal borough in the survey, it is also called a suburb of Lincoln, as is the manor of Hardwick. Both Torksey and Hardwick contributed a fifth part of the Lincoln geld and those inhabitants of Torksey who also held land in Lincoln had free access into and out of Lincoln (Foster and Longley 1924: 11-13). The documentary, geographic and artefactual associations between Lincoln and Torksey suggest that Torksey derived its borough status from Lincoln and was considered to be a part of Lincoln despite the 17 km between them.

Domesday also provides information concerning the position of Torksey along the Trent. Torksey was a stop-over for the king's messengers traveling along the Trent to York. Trade between Lincoln and York (Chapter II) must often have been directed along the Trent to the Humber and Ouse. This eleventh century connection of Torksey with trade along the Trent was also articulated through the trade of tenth and eleventh century pottery from Torksey. Indeed, the location of Torksey along one of the major medieval thoroughfares was undoubtedly the impetus for the Torksey-type industry at Newark, as well as the large amounts of Torksey ware found at Repton.

Mobility was not only associated with particular routes but also with temporal distance. This was demonstrated through the cognitive distance maps and regression analysis explored in Chapter IV (*Figures 99-116*). The standard regression based on Euclidean distance was not sensitive enough to elucidate the patterns of travel along the rivers and roads. Indeed, the maps which expressed the temporal stretching of distance illustrated that geographical distance was misleading (*Figures 90-2*). This cognitive approach to distribution analysis allowed the discussion to move to perceptions of distance. The importance of a day's travel was especially noted in the distribution of Lincoln wares where those sites with large amounts of pottery were approximately within a day of Lincoln. Furthermore, the Domesday distribution of manorial lands also implies that proximity to the town was an important part of the social construction of place.

The ways in which people move through the landscape are important to how they perceive places. Movement directed towards the towns along the Roman roads as well as the rivers emphasized their focal identity in the landscape. This influenced the ways in which settlements along those routes interacted with the towns and the traffic moving towards and away from them which in turn affected how those settlements were perceived by tenth century society. Communities along the Roman roads consumed much larger amounts of material culture traded with the emerging towns no doubt increasing their prestige and that of their holders within the

wider rural landscape. Settlements which appear to be existing as 'proto-towns', such as Sleaford and Horncastle, are situated in prominent positions along Roman roads and rivers. Temporal distance was important to the orientation of settlements and their communication with towns. The influence which the burgeoning urban communities exerted across the landscape was significant within specific locales, which was, perhaps a factor in the construction of the Danelaw territories which looked towards a single focal settlement.

Territory and *Locale*

Towns during the tenth century were changing from communities oriented towards specific regions, to ones which participated extensively in interregional and international trade. This transformation was part of a larger transition in the landscape. Rural communities were no longer part of large estates held by nobles investing in gift-based social practices. Instead, they were more inward looking, towards parish and manorial *locale*. Settlements became less mobile as building size increased and stone churches and monuments provided stable communal foci. The widespread erection of sculpture has already been explored (*Figure 15*). Added to this must be the emergence of the stone church in many rural communities. This can be seen from a distribution of early medieval church fabric surveyed by Pevsner (1999), where there is no fabric dating from before the tenth century, and a visible increase in fabric during the tenth and eleventh centuries (*Figure 151*). Although churches are often rebuilt, rural churches were rarely subjected to the large scale rebuilding campaigns experienced by the cathedrals and remnants of previous structures are often incorporated within the 'new' structure.

Current understanding of rural settlement composition in the late Saxon period is vague in comparison to that occurring later in the medieval period (Chapter II). Nevertheless, some information can be gained from documentary sources such as the Domesday Survey and other eleventh century sources. The manorial settlements emerging in the tenth century landscape were communities in which there existed multiple rights to sake and soke (Chapter II). Sokeland held by one lord was often found in the same settlement as a manor held by another. Furthermore, this sokeland was held by sokemen who owed rents to a lord (Stenton 1924: xxiv). This multiplicity of land holding extended to shared rights of churches. Indeed, Domesday often lists the ownership of half a church such as in Blyborough where one church appears to have been shared between the Bishop of Durham, Gocelin and Geoffrey de Wirce (Foster and

Longley 1924: 30, 191). Sokeland of Rippingale was shared between both Stainfield and Hacconby by Oger the Breton (Foster and Longley 1924: 163-4). Within each community, numerous social relations were being expressed through the holding of land, church, mill and manor.

The ties between manor and sokeland were often geographically close, creating a communal locale in the landscape. This can be seen through mapping the connections between manor and berewick- or sokeland in Domesday (*Figure 19*). This map was generated using the sites held within the pottery database, rather than from a complete assessment of the entire county entry for Lincolnshire, a project beyond the scope of this thesis. The majority of the manorial associations with berewicks and sokeland were within 20 km of the manor. When this is placed against a map of the wapentakes it becomes apparent that the connections between manors and their associated lands were primarily within the wapentake (*Figure 152*). The cluster of connections in Threo and Winnibriggs suggest that these two wapentakes might have been originally one *locale*. Once again, this highlights the need for more regional landscape surveys targeted at the transition from the Anglian to the Anglo-Scandinavian periods. It would be interesting to investigate the importance of these locales and their orientation towards the meeting places which gave many of the wapentakes their name. The notable exception to this wapentake distribution is Bardney with its extensive landholdings near the Lindsey coast. This demonstrates the unique landholding practices of monastic establishments with their extensive contacts through the landscape. Unlike the *locales* established by manorial settlements, Bardney was exercising its power to hold land long distances from its location along the Witham.

This association with *locale* is also seen in the expression of territorial identity. As discussed in Chapter II, Lincolnshire is unusual for its amalgamation of two of the Five Borough towns within its county bounds: Lincoln and Stamford. Analysis in Chapter IV demonstrated the importance of territorial association to trade and travel. Distribution analysis suggested that Lincoln and Torksey wares were primarily traded within Lindsey while Stamford ware was located predominantly within Kesteven or 'Stamfordshire' (*Figure 80, Figure 83*). This was supported through geographical mapping of the results of the cluster analyses which also demonstrated that both Kesteven and Lindsey were trading primarily within their regions (*Figures 138-143*). Indeed, while both Lincoln and Stamford wares are found extensively throughout the county in small amounts, the focus of the trade was oriented within the territories associated with each town.

This territorial distribution of pottery is echoed by the sculptural traditions in the mid-tenth century (Everson and Stocker 1999: 82-6). There is a distinct regional association exhibited by the location of the Lindsey and Kesteven covers placed in the parish churchyards (*Figure 15*). Indeed, the sculpture is not only articulating local landholding practices but also signalling territorial and ethnic affiliation.

The importance of territory demonstrated by the distributions of both pottery and sculpture indicates that the boundary between Kesteven and Lindsey along the Fosse Dyke and the Witham was likely articulated through other means such as tolls and customs. Travel was closely regulated during the Anglo-Saxon period (above). Through the notifications of travel and trade demanded by the king, mobility was closely overseen by the reeves and witnesses of wapentake and borough. Furthermore, the tolls and dues levelled on trade were an immense source of income for king and noble. The increase in the cost of salt for those people living outside the shire or hundred in Middlewich, Cheshire indicates that boundaries were used to impose taxes on travel (Douglas and Greenaway 1953: 871). This impacted on the mobility of both traders and other travellers moving through the landscape and encouraged travel within territorial boundaries. Internalisation of travel further emphasised territorial identity and directed the orientation of the inhabitants to settlements within a territory rather than ones across a boundary.

The existence of boundary structures is especially apparent when one turns back to the geographical distribution of manorial connections (*Figure 152*). Indeed, there are few connections across the Lindsey-Kesteven border. The most noticeable lack of communication, however, is across the fens. Indeed, there are no manorial extensions of sokeland or berewick-land which exist between Holland and either Lindsey or Kesteven. This indicates that the fens were an important social boundary, isolating Holland from the rest of Lincolnshire. Although habitation and exploitation of the fens have been stressed in recent literature (Hayes and Lane 1992; Lane 1993; Coles and Hall 1998), they also presented a formidable deterrent to communication. Places such as Crowland, Peterborough and Ely were positioned to take advantage of those areas where travel was not dependant on wending one's way through bogs and mires. Furthermore, as the medieval period continued, the fens were increasingly managed by their landholders. The fens in the tenth century were not far removed from the wilderness retreat of Guthlac, filled with mists and spirits.

Territory and *locale* were structured through human movement in the landscape. The manorial connections between berewick and sokeland were primarily oriented towards the wapentake.

Further landscape studies aimed at studying the variation of settlements and other places within the parishes and wapentakes would be beneficial. This project was unable to fully explore the rural consumption of pottery due to the lack of current material concerning manorial settlement and life in the tenth century. However, it was able to discern the articulation of territory through the distribution of artefacts. During the tenth century the Five Borough territories of Stamford and Lindsey encouraged movement within their own borders. This was no doubt emphasized through tolls or taxes levied on travellers as was the case in Cheshire. The tenth century landscape was imbued with boundary structures, from the ditch surrounding the Goltho manor or the crosses around Crowland to the wapentakes and territories often delineated by rivers such as the Witham, Trent and Ancholme.

Landscapes of Deposition

Present understanding of past landscapes is constructed through the production of archaeological landscapes. Discussion of production and consumption practices of tenth century Lincolnshire is dependant on current consumptive practices, on the expansion of towns and cities, the development of roads, gas lines and hydro-electric towers. Most archaeology is commercially oriented, contingent on development plans, rather than research driven projects. Knowledge of past landscapes is primarily comprised of the small amounts of archaeology and post-excavation research funded by developers, who are often more interested in the completion date, than what the pot sherds and bits of metal can say about past inhabitants. The palimpsest of past lives inscribed upon the landscape is continually being uncovered through our construction of landscape and geography.

Despite the predominance of commercially-led excavation, projects such as the EMPP (Young and Vince 1991), Flixborough (Loveluck 1997; 1998) and Goltho (Beresford 1987) have been invaluable to present understandings of Anglo-Saxon landscapes. The CLAU excavations, such as those at Flaxengate and Silver Street (Miles *et al.* 1989; Adams Gilmour 1988; O'Connor 1982; Perring 1981), have contributed tremendously to our knowledge about the emergence of urban communities in the late Saxon period, as have the kiln excavations at Torksey (Barley 1982; 1964) and Stamford (Kilmurry 1980; 1977a). Further excavations and research will continue to add to this knowledge, refining it and altering it with new information. Reviews, such as that on the state of medieval ceramic research (Mellor 1994), are vitally important for

this research. They are able to highlight and discuss the current difficulties in archaeological research and to suggest the ways in which future research can be structured.

Indeed, the importance of the EMPP (Young and Vince 1991) to our understanding of the past is immeasurable. Pottery analysis forms one of the greatest sources of archaeological knowledge. The opportunity to have an entire East Midlands corpus, reviewed and properly recorded, should be encouraged at any cost. Yet the funding to complete this project was not forthcoming and it is only through the continued efforts of A. Vince and J. Young that the present database used for this thesis was made available. It is ironic that many of the aims of the EMPP were reiterated in the recent English Heritage volume on the state of medieval pottery research in Britain (Mellor 1994). Collaboration between units and the support of specialists is vital for the future of archaeology. Without the infrastructure they provide, many archaeological advances are made redundant, the wheel of pottery-typologies being reinvented again, and again (Mellor 1994: 22).

Increased communication between archaeologists will be partially accomplished through the use of computers. Storage and analysis of data within computers demands a rigidity of data standardisation and organisation which rarely exists today (Chapter IV). Furthermore, the ability to amalgamate and process large data sets will enable archaeologists to interrogate the past to an extent impossible before the widespread use of electronic technology. The integration of multidisciplinary information is integral to landscape research. This is especially true for the early medieval period where evidence for past social practice can be limited, both in terms of archaeological and historical information. Information from a wide variety of sources must be integrated into the research. Historical evidence from later time periods is an important information resource, despite the problems associated with structuring arguments around evidence from later sources. While this thesis has focussed on the practices of pottery production and consumption to address past landscapes, it has incorporated the results of this analysis with other archaeological, historical, linguistic and geographical knowledge.

This thesis has focussed on the manipulation and exploration of data through statistics and GIS. Unlike most landscape studies using GIS, this research did not give prominence to easily visualised monumental landscapes using techniques such as view shed analysis. Instead, it was interested in exploring the ways in which artefactual distributions were able to inform archaeologists about the social construction of landscape. Techniques of visualisation and analysis were used in order to elucidate patterns of social action. Furthermore, approaches to representing cognitive understandings of landscape were developed and explored. While a

perceptual geography of tenth century Lincolnshire was able to be investigated (Chapter IV), new techniques such as fuzzy systems and neural networks will continue to develop and be adapted to social geographical research agendas. Representation of cognitive landscapes would have been aided by a more in-depth archaeological knowledge of the rural landscape in the eighth and tenth centuries, which would have allowed more focus on *locales* within the landscape, and on the ways in which tenth century social practice transformed the landscape from that of previous centuries. Better availability and quality of excavation data would also have been beneficial. Nevertheless, the analysis in Chapter IV demonstrate the importance of a cognitive approach to landscape study through its concentration on social understandings of temporal distance, territorial structures and interaction between communities.

The greatest increase in current knowledge of early medieval Britain, has been in the rural landscape. While much previous archaeological research focuses on the emerging towns of the tenth and eleventh centuries with their immense production and consumption of material culture, most of the inhabitants of England lived in the manorial settlements which comprised the developing parishes, hundreds and shires of England. Indeed, the towns were places which existed in response to the changes occurring in other parts of the landscape. There are still many questions concerning the social practices in towns. Knowledge about towns continuously increases due to the amount of commercial development within them. Conversely, information on the rural landscape often needs to be directly addressed through research agendas. Indeed, the issues which have been highlighted as important areas of future research mainly address the rural landscape.

Epilogue

Archaeological landscapes are formulated from the material expressions of social action. This thesis has explored the social construction of landscape through investigating the social practices which produced the distribution of pottery in tenth century Lincolnshire. It accomplished this through exploratory and visual analytical techniques, as well as through contextualising the pottery distribution within a wider understanding of tenth century society and landscape. These analyses focussed on three themes: territorial identity, settlement interaction and human mobility. It investigated how the practices of pottery production and consumption constructed social understanding of place and communication in tenth century

society.

This research agenda was also oriented towards exploring the ways in which artefactual distributions could be used to investigate cognitive understandings of landscape. It took the study of the late Saxon pottery of Lincolnshire beyond previous typological and site based analyses, to concentrate on its regional importance in the cultural landscape. It accomplished this through the analysis of the pottery data in a combination of statistical and geographical analyses, integrated through the use of GIS, as well as by contextualising the pottery distributions within a wider discussion of tenth century society and landscape.

The production and consumption of pottery was an integral part of tenth century society. The habitation of potters in the developing towns participated in the construction of craft and mercantile identities within those settlements influencing the ways in which people understood place within the landscape. The practices of the townspeople, with their mass consumption of pottery and other material culture, their tenement structures, their freedom of the town, their participation in the market, set the towns apart from the manorial communities in the hinterland. Communication was integral to the towns, the Roman roads structuring regional movement towards and away from the markets, churches and walls of urban community. Rivers were used to transport people and goods between regions and were perhaps the primary source of exotic goods such as the silk clothing found in both York and Lincoln.

The movements of traders and other travellers distributed the pottery produced in the kiln yards of the town. Oxen driven carts would have slowly wound their way along the roads east towards saltworks along the coast or north and south along Ermine Street. It would have been a three day journey from Lincoln to the Lindsey coast, although a horse and rider could have made it in a day. Indeed, those settlements approximately a day's journey from the town were much more involved with the urban trade than those further away. These cohorts of carts and oxen would have passed by manorial settlements with their fields and pastures of sheep. The settlements by the roads were accustomed to the traffic to and from the towns, and participated in that trade as well as with the local communities within their parish and wapentake. Travellers would have also travelled to the monastic establishments on their promontories, or to places along the roads, which were not as urban as the focal towns, but still were identified by practices not enacted on more rural settlements.

Travel along the rivers would have been faster at times, if one caught the tidal movements along the large rivers such as Trent and Humber. Weirs and other impedances would have constricted

traffic. Most boats would be travelling towards the towns with messengers or other goods such as fish, cloth and pottery to trade in the town. Taxes and tolls would be levied at the mooring places within the towns by the reeves and other officials.

The late Anglo-Saxon landscape was constructed by past understandings of territory and social orientation. The Anglian kingdoms of Lindsey and Kesteven continued to be articulated in the Five Borough territories of the Danelaw. Former estate associations lingered in the manorial connections linking two wapentakes. Re-inhabitation of Roman structures was encouraged by kings and leaders, perhaps in emulation of past prestige. Indeed, the memory of social identity and order within the landscape structured the social practices of the tenth century. However, it was also influenced by the transformation of society, from the gift-giving practices of the Anglian estate organisation, to the manorial strategies of surplus production and trade with towns. Movement towards and habitation of these settlements was encouraged through laws restricting mercantile practices to town markets and through the establishment of craft communities within the walls. The transition from the Anglo-Saxon kingdoms to the medieval English nation was structured by the tenth century discourse between town and manor; parish and wapentake; and monastery and meeting place. The cultural and ethnic developments in social practice were enacted within the landscape through the actions of people communicating and moving along the roads and rivers, within the manor and market, through the mires of fen or the coastal silts. It is through an investigation of the ways in which material culture was used to structure daily activities that allows the archaeologist to represent the landscape and social practices of people in the past.