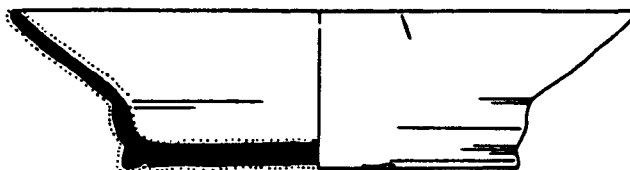


MEDIEVAL POTTERY FROM NORTH LINCOLNSHIRE

by

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VOLUME II



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## CHAPTER 4

### ANALYSIS AND DISCUSSION

- a) Introduction.
- b) The regional traditions.
- c) Regional development of pottery manufacture, typology and forms.
- d) Regional traditions; a geographical assessment.
- e) Marketing and distribution models.
- f) The possible influence of river and coastal trade on the region's pottery industries.

CHAPTER 4ANALYSIS AND DISCUSSIONa) Introduction

Chapters 2 and 3 of this thesis were principally concerned with cataloguing the evidence from the region's stratified and unstratified assemblages. This chapter uses that information to discuss some of the wider themes of pottery development and distribution within the region. In section (b) each regional tradition will be the subject of critical assessment in terms of chronological, spatial and typological developments. Section (c) seeks to examine the validity of pottery typology in conjunction with the wider aspects of pottery technology. There will also be some discussion of pottery forms in terms of their origins, functions and lifespan. The remaining three sections will deal principally with the pottery distribution evidence in terms of: regional traditions (d); marketing (e); and finally, (f) a brief study of the region's evidence for coastal and river trade during the medieval periods. The pottery evidence rarely proves conclusive for any of the above themes, and the research on each theme cannot claim to be exhaustive, especially in terms of background historical research. However, it is hoped that the investigation may demonstrate ways in which the basic pottery evidence can be orientated towards wider aspects of medieval studies within the region.

b) The Regional traditions

In Chapter 1 it was reported that the various fabric types identified in North Lincolnshire had been organised into a

series of regional traditions on the basis of similar fabrics and forms. Each fabric was given a brief tabulated description, grouped within its tradition. These groupings were used as the basis for the sorting and cataloguing of the pottery from the unstratified and stratified assemblages of chapters 2 and 3. In the following pages, each tradition will be more fully discussed, using the information contained in the previous chapters. Discussion centres, in each case, on three principal considerations; date range, distribution, forms and manufacture. Although this discussion is intended to concentrate on fabric produced in the region, several of the more important imported fabrics have been included for completeness, such as Cistercian wares, Nottingham wares and Stamford wares. These fabrics are treated in a more abbreviated and generalised manner, reference being made to other, more detailed, studies.

#### i. Date range

A small table heads each of these sections. This is designed to serve as an instant visual guide to the chronological range of each of the fabrics within a tradition. Solid lines indicate periods of probable production and hatched lines periods of inconclusive or possible production. In this respect they summarise the more detailed evidence contained beneath them. However, they are only guides and should not be used as the definitive statements on each fabric's date for future comparative purposes. It cannot be emphasised too strongly that despite the large number of stratified groups from the region, the dating of most pottery fabrics, and even the groups themselves, remains very fragile.

## ii. Distribution

Hilary Healey was the first person to study the distribution of fabric types in Lincolnshire in any detail (Healey 1975). However, her work was quantitatively biased towards the south of the county and her resulting maps were organised on the simple basis of presence or absence. It was one of the initial intentions of this research to develop upon her work by dating the fabric types and quantifying the fabrics present on each site.

The present distributional study was based upon the unstratified assemblages using the sherd counts tabulated in chapter 2. Although the same information is also presented for the stratified groups in chapter 3 it would be inappropriate to include them in this part of the study, for almost all the unstratified assemblages represented random surface accumulation, often taken from several parts of a particular site. In this respect their very randomness offered a degree of consistency which was lacking from the smaller number of stratified sites. Excavation usually involved the investigation of a very small part of the site, perhaps confined to a single building or plot. Typical of this was the excavation of part of the Epworth manor complex, associated with the wealthy Mowbray family. The impressive range of continental imports found there was unlikely to be representative of the village as a whole. This bias may have extended to forms, the same manor site producing an overwhelming proportion of fineware forms. Comparison with the much lowlier plots at Middle Lane, Hedon reveals a rarity of imports and a much higher proportion of coarsewares. As fine-

wares and coarsewares were usually of different fabrics a distribution bias would have occurred. At Thornholme Priory and other monastic sites, there may have been bulk buying of pots, as of other commodities, and the resulting site assemblage, though large, might not accurately reflect the ceramics on sale at the local markets of Appleby or Broughton. In the light of these and other examples it seems more objective to base the distributional study on a single, random category of information. A simple comparison between the site and group tables of chapters 2 and 3 will provide any required correlation between the stratified and unstratified assemblages from any given area.

The quantity of any given fabric is usually only significant when compared against other contemporary fabrics. For example, it would be relevant to know how many Humber wares there were on a particular site in comparison to the number of vessels in the Toynton/Bolingbroke fabric. But from a spatial viewpoint their comparison with late-saxon greywares would be of little significance. Thus the distribution of each regional tradition has been in proportion to the occurrence of a stated number of contemporary or near contemporary traditions. Local traditions have been compared against other fabrics in the same regional tradition.

All the maps are presented at the same scale of 1:250,000 or about four miles to the inch, the basic physical details being taken from the Ordnance Survey of the North Midlands and Yorkshire (Sheet II). A circle denotes the presence of a

fabric. This circle varies in size in relation to the size of the sample being considered to reduce the significance of the evidence from smaller assemblages. Within each circle, the percentage blocked off in black represents the proportion of the fabric or tradition present in the sample in comparison with the stated number of similarly dated fabrics. The size of the sample represented by each size of circle was not uniform, varying from map to map. A key on each map shows the numerical significance of each circle size in terms of sherds. In addition, known kiln sites are denoted by black diamonds; where kiln sites are speculative they have the same representation with the addition of a question mark.

### iii. Forms and Manufacture

Each of these sections is once again preceded by a small table designed to show the proportion of vessel forms recognised in each fabric within the tradition. This has been done on a percentage basis with the actual total number of sherds of each fabric being given in the extreme right hand column of each table. Using these totals it is possible to extrapolate back for any vessel form using the percentage figure to achieve the actual number of examples of each. Once again this information draws exclusively from the unstratified assemblages although the subsequent discussions are based on both stratified and unstratified samples.

These tables are also of use in correcting the visual bias of forms usually encountered in archaeological drawings. As in the case of this thesis, when selecting vessels for illustra-

tion it is usual to choose at least one example of each vessel form present within each fabric. While this reveals the variety of form present in each group it can leave the impression that there was a far greater balance between the various forms than a true numerical analysis would reveal. Tabulation in most pottery reports is limited to proportions of fabric types rather than vessel forms (for example, Adams 1977) although there have been a number of exceptions (for example, Armstrong 1980). What these tables show is that the jug and cooking-pot were overwhelmingly the most common medieval forms and that most of the other vessel forms were numerically of little significance.

A series of comparison plates are included, based on the stratified vessels, to show the changes or stability of forms through time for each tradition. These are all at  $\frac{1}{8}$ th scale and are intended to be a general visual guide to typological progression. They do not necessarily show the full chronological range of each type, the full vessel range of each fabric or the full range of variety of each type of vessel. Only the more complete vessel forms have been used, as they were the ones more likely to be contemporary in a group than the smaller body sherds. With the exception of some fabrics such as O1 and M1, all available, stratified profiles have been used, sometimes bolstered by others from elsewhere in the region. With one or two exceptions all the vessels used on these plates are also illustrated at  $\frac{1}{4}$  scale in chapter 3 where the relevant dating evidence (or lack of it) is discussed.

Discussion then follows on each of the principal vessel forms within each fabric or tradition, commenting on particular traits or characteristics of form, decoration or manufacture which appear typical of that fabric. It is hoped that the drawing conventions used in Volume 3 will make many of the constructional details of these vessels self-evident, although specific aspects will be discussed in the text especially where they correct or augment the writer's earlier work on the subject (Hayfield 1980, 29-43).

The aim of this section is thus to present the extent of the evidence available for each tradition; in most cases the limitations of this evidence do not allow an authoritative account. Where the evidence was ambiguous, the writer has adopted the policy of discussing each of the various possible interpretations rather than opting for a particular 'conclusion'. It is to be hoped that future work will eliminate some of the alternatives presented here.

Regional Tradition : Hand-finished Saxon Fabrics

(including fabrics SXS, SXG, SXGT, SXIP, SXSH)

i: Date range

	400	500	600	700	800	900
SXS		-----	-----		-----	
SXG		---	-----		-----	
SXSH			-----			S1
SXIP				-----		

This was a loose grouping of the principal hand-finished saxon fabrics in North Lincolnshire. Each fabric type embraced a considerable degree of variation. Although there is growing evidence for the trade of some vessel forms, particularly decorated urns (Walker 1976), it can be assumed that the bulk of the domestic pottery presented here was made, distributed and used on a very local basis. Some initial justification must be made here for including Ipswich-type vessels within this category, as it is traditionally heralded as the forerunner of the wheelthrown fabrics (Hurst 1976, 299). The several examples recovered from the region were all coil-built and largely hand-finished with only minimal evidence of 'turning' to the rim and necks. It is suggested later in this discussion that their shape, decoration and finish relates them more convincingly to the earlier, rather than the later, developments in saxon pottery.

This thesis is concerned only with the middle and late-saxon ceramic periods. Hitherto the pagan or early-saxon period has been one of the most widely studied ceramic periods in Lincolnshire, of which some of the more important contributions have been Philips 1934, 137-154; Dudley 1949, Myres 1951, 65-99; Thompson 1956, 181-199; Fennel 1974, 283-293; Eagles 1979 and Cook 1981. Most of these and the other, minor publications concerned themselves to a large extent with the cemetery archaeology of Lincolnshire and in doing so demonstrated the enormous scope of the period. As a consequence this study makes no attempt to review the current state of early-saxon cemetery evidence in the region.

Recent work on saxon settlement sites such as West Stow have demonstrated that the overwhelming part of the associated ceramic assemblage comprised plain, undecorated pottery (West 1969). This would also seem to have been true of Lincolnshire and it raises the thorny problem of dating these undecorated vessels. The two most numerous hand-finished saxon fabrics, the sand and the grit-tempered vessels, appear to have been in production throughout the early and middle-saxon periods. There is now increasing evidence that the shell-tempered fabric can be added to this list. For the majority of sherds in these three fabrics, both stratified and unstratified, it was impossible to divide them into early or middle-saxon groups. They have thus been included here on the grounds that they could have been of middle-saxon date rather than any firm conviction that they were.

Current evidence would suggest that grass-tempered pottery in this region was of sub-Roman or early-saxon date (Hurst 1976, 294). Both the sand and grit-tempered fabrics occurred amongst the numerous cremation urns of the region, confirming that they can be ascribed, for at least part of their currency to the early-saxon period. The evidence from Barton-on-Humber has demonstrated that the grit-tempered fabric survived the middle-saxon period, only disappearing with the advent of the late-saxon wheel-finished and wheelthrown products. The sand-tempered (SXS) fabric was less numerous and the evidence for the latter part of its range was sparse but there is, at present, every reason to suspect that it too lasted well into the middle-saxon period. Lincolnshire's hand-finished, shell-tempered fabrics

(SXSH) have traditionally been interpreted as a Maxey derivative and associated with the middle-saxon period (Addyman and Whitwell 1970, 96-102, Coppack 1980, 11). Certainly there is little evidence for the use of the fabric in the region's cremation urns and there are no known examples with any form of decoration. However, shell-tempered fabric has been found amongst the material associated with a Grubenhaus recently excavated at Cherry-Willingham. The interim note on this site dates the pottery to the 9th century largely because of the presence of shell-tempered wares. However, a brief examination of the material by the writer suggests that the pottery may well be of considerably earlier date (Field, N 1981, 70). The provisional evidence from Barton, St Peters offers the interesting possibility of shell-tempered wares occurring in a phase dated to the 6th or 7th century (information from Dr. Warwick Rodwell). If the final post-excavation work on St Peters confirms this phasing, it considerably narrows the gap between the decline of the North Lincolnshire Dalesware and related Roman shell-tempered industries and the earliest saxon shell-tempered vessels. As such the prospect of an indirect, or even direct, link between the two grows stronger. This also implies that it can no longer be taken for granted that all the hand-finished shell-tempered vessels (SXSH) are of middle-saxon date.

The contemporary occurrence of Ipswich-type wares in a group still remains the soundest indicator of a general middle-saxon date (Hurst 1976, 301-303). Thus the associated vessels found with Ipswich-type wares at Barton-on-Humber and Barrow-upon-Humber are presumed to be of similar date (SX/1/Bt, SX/2/Bt,

SX/4/Br). However, the problem of residuality amongst these groups is as acute as any in the medieval period. An example of this dilemma comes from the Wharram Percy grubenhaus assemblage, which contained several hundred sherds thought to have a terminal date in the 8th century (Hurst and Hodges 1976, 249-250). A substantial number of these sherds were Roman in date and a similarly large proportion of middle-saxon date. There were also a number of decorated saxon sherds and one problem has been to decide whether these were contemporary with the middle-saxon assemblage or part of a residual element. In comparison the Barton, East Acridge site produced an overwhelming proportion of residual Roman material amongst the saxon and early-medieval phases, and for that reason high proportions of residual material might be expected within the saxon material itself.

The dating of most of the hand-finished forms and fabrics on domestic sites remains very fluid. With the lack of coins to provide external dating evidence, radio carbon, TL, and dendrochronological dates would seem to offer the only foreseeable opportunities to introduce a more reliable dating framework.

## ii: Distribution

The general pattern of distribution shown on Map 151 reveals the shell-tempered SXSH fabrics dominating the Wolds and Ancholme Valley to the south of Glanford Brigg. In contrast, the coastal areas to the north would seem to show a preference for the sand (SXS) and grit-tempered (SXG) fabrics. Although

this could well represent an accurate picture of middle-saxon ceramic development, a cautionary note must be sounded. These distribution maps are based solely on the information from the unstratified assemblages of North Lincolnshire. In most cases the stratified groups would not have yielded any additional information but, with regards to this tradition, their evidence was of some importance.

Barrow, St Chads produced a mid-saxon assemblage almost entirely composed of shell-tempered wares (SX/4/Br, Pl.68). In complete contrast, groups of comparable date from Barton-on-Humber some three miles away were dominated by the sand and grit-tempered fabrics. These two groups were comparable in so far as they both contained Ipswich-type wares and could therefore be ascribed to a middle-saxon date. However, as already mentioned in chapter 3, Ipswich-type fabrics are thought to have had a currency of some two hundred years. No middle-saxon sherd from North Lincolnshire can yet be closely dated and, despite the arguments for similar chronological development above, it is possible that the difference between shell and sand/grit-tempered fabrics may prove chronological. On the other hand, the arguments for chronological compatability are strong and the Barton/Barrow dichotomy may merely indicate the parochial nature of the local pottery production and distribution during the middle-saxon period.

The whole nature of settlement archaeology in early and middle-saxon North Lincolnshire remains obscure even in comparison with the late-saxon or early-medieval periods. The

socio-economic hierarchy of the settlements is unknown as are the contemporary trading mechanisms. The Castle-dyke cemetery at Barton with its Frankish hanging bowls, Frankish jug and other bronze grave goods suggests the presence of people of some substance. Although Caistor and Lincoln were important Roman settlements (Whitwell 1970) and the latter was an important trading centre in the late-saxon period, the fate of both during the intervening saxon periods is largely unknown.

In later periods towns had an important influence on pottery in terms of manufacturing sources, potential markets and distribution. The concept of 'urban' settlements may well be an anachronism in the early and middle-saxon periods, but nevertheless, there must have been more densely populated settlement units containing varying echelons of socio-economic hierarchy. This would have had its effect on pottery production, either directly in terms of patronage, or indirectly in terms of levels of demand and motivation for the production of pottery.

While the location of the production centres for these saxon fabrics remains unknown, they were probably for the most part, extremely localised in terms of the production and distribution of domestic pottery. However, the saxon sherds recovered from Barton Haven and East Halton Skitter attest to some form of maritime trading activity, as do the Frankish imports at Barton and across the Humber, the imported cremation urn from Driffield (Swanton 1967, 48 Fig.3 No.2; Evison 1979, 78, Fig.15a). Work in the Midlands has shown how the decorated

urns of the early-saxon period can occur many miles from their original area of manufacture (Walker 1976). Finally, Ipswich-type wares occurred on at least six sites in North Lincolnshire and (although a specific East Anglian origin cannot be assumed for these vessels) it is almost certain that they were not produced in the region. On a national basis the work of Evison (1979) and Hodges (1981) has shown that pottery was being imported on some scale to parts of southern England, but, further north, examples are still extremely rare.

The distribution pattern of the unstratified assemblages taken together with the evidence from the stratified groups suggests that middle-saxon domestic pottery was available across the whole of North Lincolnshire. Within this area there was no evidence for any ceramic 'gaps' during the saxon periods. Across the Humber, several thousand sherds of middle-saxon pottery have now been recovered from Wharram Percy; there is no evidence to suggest why this site should be considered atypical and indeed, fieldwalking in the neighbouring townships has produced a thin but even scatter of saxon sherds (Le Patourel 1979, 77-79). The initial interpretation must be that throughout the region middle-saxon domestic pottery was common and widely available.

Both Lincoln and York, however, have so far produced surprisingly little hand-finished saxon pottery, despite the vast amount of ceramic material recovered as the result of recent, major excavation programmes (Coppack 1980, 135-6 ; Holdsworth 1978, 3-4). The saxon burgh ditch at Doncaster contained only residual Roman pottery from its primary fills.

The lowest occupation layers from Beverley : Highgate contained no pottery (Hayfield and Watkins forthcoming) and at Beverley : Lurk Lane the earliest feature was a large ditch which contained no ceramics, with the exception of several fragments of an Ipswich-type pitcher (information Gareth Watkins). These would all appear to have been 'urban' centres in the latter saxon period. In each case it must be accepted that either the areas of middle-saxon settlement have not yet been encountered, or they used very little pottery in that period. Barton-on-Humber may be an exception to this 'urban' pattern, but a dichotomy is nevertheless apparent between the abundance of pottery from rural centres and a dearth from 'urban' areas.

iii: Forms and manufacture

	CP	B	Lugged B	Pitcher	Total
SXS	100				147
SXG	97	3			132
SXSH	60.4	20.9	18.7		91
SXIP				100	5
Total	88%	6.1%	4.5%	1.3%	375

Of all the tabulations of forms presented in this section, this is the least satisfactory. Very few profiles were recovered (Pl.152) and vessels were only categorised as pitcher, bowls, etc. where a positive identification could be made.

Where identification was in doubt, as it was with the majority of body sherds, vessels were categorised as cooking-pots. Even within the bowl forms it is possible that all the shell-tempered (SXSH) bowl forms had pierced lugs, but only those with the remains of a lug were counted. Even allowing for such a bias of form it can be confidently stated that the majority of forms were cooking-pots. All local wares were coil-built and hand-finished. Many forms contained carbon deposits on their outer surfaces attesting to their domestic use.

The vast majority of saxon sherds recovered were undecorated and most probably derived from cooking pots. Rim forms alone offer the most practical way of examining the range of cooking-pots as few profiles were encountered. The most numerous rim form was a plain upright form; at Barton, East Acridge several occurred in the earliest group and can therefore probably be considered the earlier type (SX/1/Bt, Pl.67 Nos.1-4, 6). It was also the most commonly occurring rim form amongst the unstratified material (East Halton Skitter, Pl.25, 2-5; Barton, Pl.17, 1-4, 9-10; Worlaby, Pl.34, Nos.28, 30-34; Hemingby, Pl.41, Nos.1-4; Lissington, Pl.43 Nos.1-3, 5-6). A second type occurred later in the Barton, East Acridge sequence with a small, slightly everted rim (SX/3/Bt, Pl.67 17-18, 21). The shape of the bases of these vessels is uncertain, the more complete 'domestic' vessels from Fonaby had either flat or only slightly sagging bases (Cook 1981, 68-74). The few recognisable base fragments from North Lincolnshire would appear to fit into this picture; all belonging to the slightly sagging forms (Thornton Le Moor, Pl.12 Nos.17, 3; Barton: St Peters,

Pl.70 No.9, : East Acridge, Pl.67 Nos.7-8).

All the decorated sherds occurred on either the sand or grit-tempered fabrics, never on the shell-tempered ones. No attempt is made here to fit the decorated sherds into the elaborate classification systems recently established (Eagles 1979, 76-82). However, virtually every decorated sherd has been drawn and included. Where decoration could be associated with a rim form it was with the earlier plain upright forms (SX/17/Bt, Pl 70 No.3). Many sherds were burnished including a shell-tempered vessel from Barton, St Peters (Pl.19 No.6). One vessel was of particular interest in this respect (SX/19/Bt, Pl.70 No.15). Although the burnished areas of the vessel were black, the unburnished parts of the inner surface were a reddish-brown. This would suggest that not only did burnishing improve the surface finish, but it may also have affected the surface colour.

A single cooking-pot rim from Goxhill in the SXS fabrics (Pl.23 No.1) was unusual and of intrinsic interest. It closely resembled the forms of the late-saxon cooking-pot rims, although it was entirely hand-finished. A similar group of vessels from Lincoln: Saltergate was discussed by Coppack (1980, 45, Group L2) and has been included here (SX/20/Li, Pl.71 Nos.1-10). Continental imports with these sorts of rim forms do occur in the middle-saxon period (e.g. Hodges, 1981, 28) but they are sufficiently rare to make it more likely that these were copying the late-saxon forms - suggesting, in turn, that there may have been a short period of overlap between the hand-finished and the wheelthrown/turned vessels.

Hitherto there had been a similarity of form noted between the sand, grit and shell-tempered vessels. The shelly SXSH produced both types of cooking pot rim. There were numerous examples of the simple, upright rim form (West Ravendale, Pl. 8, 3-5; Thornton Le Moor, Pl.12 Nos.7-13; Worlaby, Pl.34 Nos.32-34). Examples of the small, everted rims were again less common but included some from Winghale Priory found amongst a restricted field scatter which were associated with lugged bowls (Pl.11 Nos.1-3). Although this cannot be accepted as a reliable association, it does lend support to the evidence from Barton, East Acridge in suggesting that this rim form was later, probably middle-saxon in date. Amongst the shell-tempered cooking-pot rims, there were a number which appeared to be somewhat larger in rim diameter; these included an example from Barrow, St Chads (SX/4/Br, Pl.68 No.1) and several from the unstratified material, (for example, Flixborough, Pl.38 No.65; Roxby, Pl.39 No.13; West Ravendale, Pl.8 No.8).

The use of pierced rim lugs, usually on bowls and less commonly on cooking-pots, has been regarded as a characteristic feature of middle-saxon shell-tempered vessels in Lincolnshire (Addyman and Whitwell 1970, 100). A small number have been recognised on the grit-tempered SXG fabric (Winghale Priory, Pl.11 No.6) but the lug remains predominantly a feature of shell-tempered vessels. In most cases the lugs were formed by the addition of pads of clay to the rim of the vessel. Holes were pushed through, rather than cut, usually at an angle (higher from the outer side of the pot, lower on the inner)

and several showed signs of considerable patination on the inner surfaces of these holes (e.g. Thornton Le Moor, Pl.12 No.25). It implies that they were functional, the patination indicating the gentle abrasion of a rope or cord rather than the insertion of sticks etc.

No complete example of one of these vessels has been recovered, but it is assumed that there would have been at least two of these lugs on each vessel. These pierced lugged bowls were possibly ceramic copies of saxon, bronze, hanging bowls usually associated with the early and middle-saxon periods (Thompson 1956, especially 195, Fig.5). Such copies of metal forms were well-known during the medieval period and as bronze hanging bowls would almost certainly have been a proud possession of the more wealthy members of society, such ceramic types would have been a means for the less wealthy to ape the lifestyle of their betters.

At Barrow: St Chads several of these lugged bowls were found associated with an Ipswich-type pitcher (SX/4/Br, Pl.68 Nos.4-5) confirming their use in the middle-saxon period. The form was not recorded amongst the late-saxon wheel-finished vessels. However, the earliest date of these lugged bowls is uncertain. There is, at present, no evidence to indicate that they had an early-saxon origin, if one assumes that the hand-finished shell-tempered fabric (SXSH) was also exclusively of middle-saxon date. If the argument for the occurrence of the SXSH fabric in early-saxon deposits receives future support, it will then be necessary to ask whether such 'diagnostic' middle-saxon forms also have an earlier origin. Again, if the

link of these forms with the bronze hanging bowls can be developed it might prove possible to relate the chronological range of the ceramic vessels with that of the metal forms.

These lugged bowls can now be regarded as a common find in North Lincolnshire and examples include finds from Thornton Le Moor, Pl.12 Nos.24-32; Winghale Priory, Pl.11 Nos.5-7; Scawby, Pl.39 No.54; West Ravendale, Pl.8 Nos.14-16. There were also a number of plain bowl forms mostly in the shell-tempered fabric (Roxby, Pl.39 No.14; Worlaby, Pl.34 Nos.36-37; West Ravendale, Pl.8 Nos.9-10 and Thornton Le Moor, Pl.12 Nos. 21-22), but there were also a number in the gritty (SXG) fabric (East Halton Skitter, Pl.25 No.7) and the sandy (SXS) fabric (Flixborough, Pl.38 No.7). However, it is uncertain whether these were plain bowl forms or merely the unlugged fragments from lugged bowls. Most appeared to have very simple outward sloping rims although there were a number of clubbed rim forms (SX/4/Br, Pl.68 No.3).

A unique vessel form came from Barrow : St Chads (SX/4/Br, Pl.68 No.6) which has been described as a quaich. It resembles in size and form the two-handled wooden drinking bowls that were common in Ireland and Scotland in the post-medieval period, which were known as quaiches (Evan Thomas 1932, 3-4 Pl.3 and 3a). Its shell-tempered fabric was identical to the other vessels in the group and there was no reason to suspect that it was not of local manufacture.

Another rarity in the region, this time in the gritty (SXG) fabric, is a small pierced lug from the side of a vessel,

recovered from Barton, St Peters (Pl.19 No.4). The only parallel for this from Lincolnshire came from the cemetery at Fonaby where an example occurred, probably re-used, as a cremation urn (Cook 1981, 70-1, Cremation 10, Fig.29 No.10). These Fonaby vessels were thought to have been of 6th-century date.

Finally, amongst this group of fabrics are the Ipswich-types. So far only the pitcher form has been recognised in the region, occurring in two fabric types, a very fine smooth-textured fabric (Barton, Barrow, Beverley, Thornton Le Moor), and a harder, slightly more gritty fabric (Flixborough, Elsham, Lissington). They were almost certainly imported into the region as there is no evidence for local production. However, it should not be assumed that they were all of East Anglian origin. Certain sherds in the local gritty (SXG) fabric seem to have several of the characteristics associated with the Ipswich-type pitcher shapes (SX/2/Bt, Pl.67 No.11), but the form cannot be confirmed. It would be surprising perhaps if the local potters had made no attempt to copy the form. It has been cogently argued that the Ipswich-type wares were a technological innovation re-introducing the technique of wheel-turning to England (Hurst 1976, 299-300). Of the dozen or so examples now recovered from the region, all were coil-built and largely hand-finished. Only the rims and necks were 'turned'. The technological gap between these vessels and the late-saxon vessels of the Thetford and related types was still very wide. The whole shape and style of decoration of these

pitchers resembles far more closely the early/middle-saxon forms rather than those of the late-saxon period. This thesis is clearly not an appropriate place to redefine the role of Ipswich-type wares, but for this reason the writer would include the type amongst the hand-finished rather than the late wheel-finished saxon traditions.

As the Ipswich-types are still a rarity in the region, a list is appended below of the sites in the region where it has been recognised :

### Lincolnshire

Barton, East Acridge (SX/1-3/Bt, Pl.67 Nos.9,16; Pl.73 Nos.9-10).

Barrow, St Chads (SX/4/Br, Pl.68 No.11).

Flixborough (Pl.38 No.68).

Elsham (Pl.22 No.46).

Humberston Abbey (Addyman and Whitwell 1970, 99, Fig.2, No.25).

Thornton Le Moor (Pl.12 No.6).

Lissington (Pl.43 No.4).

Lincoln, Flaxengate (Coppack 1980, 45).

### Yorkshire

Beverley, Lurk Lane.

Wharram Percy, Various sites.

Regional Tradition : Shell-Tempered Wares

(including fabrics S1,S2,S3,S4,SL and SH).

i: Date range

	800	900	1000	1100	1200	1300	1400	1500
S1	—	—	—	—	—	—	—	—
S2	—	—	—	—	—	—	—	—
S3			—	—	—	—	—	—
S4			—	—	—	—	—	—

The immediate origins of this tradition have been discussed in chapter 3 where it was suggested that it developed directly from the early/middle-saxon hand-finished, shell-tempered vessels (SXSH). This transition from hand-finished to wheel-finished was loosely ascribed to a period in the 9th century, although precise dating evidence is not available.

The use of shell-tempering in pottery vessels in the region has far earlier origins in the prehistoric period. Indeed, it still proves difficult to distinguish between middle-saxon SXSH fabric sherds and those of the pre-Roman Iron Age (May 1970). During the Roman period these Iron Age shell-tempered vessels developed into a major coarseware industry whose products are loosely ascribed the term "Daleswares". A recent study of Dalesware has suggested a production centre in north-west Lincolnshire (Loughlin 1977, 93-96). Production of this pottery type seems to have been large-scale, well-organised,

and commercially based, possibly under military patronage. It achieved a wide distribution.

It would be tempting to consider the production of shell-tempered pottery in North Lincolnshire as a single continuous tradition from the Iron Age to the 15th century A.D. However, there are still gaps in this sequence, particularly in the immediate post-Roman period; but this may be due to the lack of suitably dated groups rather than a real break in the tradition. The fluctuating range of forms and techniques throughout this long period will be examined later in this section.

Shell-tempered wares in this region remained common throughout the late-saxon and medieval periods, probably terminating almost two thousand years after the first production of this fabric, in the late 14th or early 15th century.

## ii: Distribution

Map 153 shows the distribution of the medieval shell-tempered wares (S3.S4) compared with the coarse sandy wares (C1.C2.C3). It is apparent that shell-tempered wares were common across the whole of northern and central Lincolnshire, only encountering serious competition with the coarse-sandy wares in the north-eastern part of the county. Across the rest of Lincolnshire they enjoyed a near monopoly of the medieval coarsewares.

On a wider, regional scale the distribution of shell-tempered vessels has already received some attention (Moorhouse 1974a, 7-8). They were common throughout the East Midlands and in parts of East Anglia, the Humber and South Yorkshire,

reflecting their northern limit. At Doncaster they occurred in some numbers forming the principal coarseware fabric during the 13th and 14th centuries. The moated site of East Haddlesey, near Selby, produced a number of shell-tempered sherds, but they seem there to have represented less than 1% of the total assemblage (Le Patourel 1973, 96-108). The type was also comparatively scarce at Pontefract Priory (Le Patourel 1965, 107-109), Castle Hill, Almondbury (information Stephen Moorhouse) and Sandal Castle, near Wakefield (*ibid.*); furthermore, it was completely absent from Kirkstall Abbey (Le Patourel 1967, 38). Generally the type proved uncommon north of the rivers Aire and Calder.

East Yorkshire provides some evidence for the production of shell-tempered wares during the late-saxon period, although they were never common. Examples are known from Wharram Percy (Le Patourel 1979, 80-81) and Beverley : Highgate (Hayfield and Watkins forthcoming). The forms of these vessels differed markedly from contemporary late-saxon wares from North Lincolnshire (EM/52/Bv, Pl.86, No.1 or Le Patourel 1979, 80 Fig.29, although the angle of this rim sherd is drawn incorrectly). From the 12th century, there is no hint that the East Riding either made or imported shell-tempered pottery on a commercial scale. A single rim sherd of a cooking-pot was recovered from Wawne DMV (material stored in Hull Museum); this vessel resembled the S3 fabrics from North Lincolnshire. Hedon produced one or two shell-tempered vessels (EM/59/HD, Pl.91 No.17 or HM/84/Hd, Pl.124 No.19), but none resembled those from North Lincolnshire, although they were similar to those recovered

from Doncaster. This connection is made all the more plausible by the regular occurrence of Doncaster, Hallgate B (WD) material in the earlier phases from the port. While it could be argued that, because of their numbers, the Hallgate B material was being deliberately traded in as pottery cargoes, the few examples of the shell-tempered vessels were perhaps more likely to have arrived as containers for more profitable merchandise.

Map 153 contrasts the occurrence of the S1 and S2 shell-tempered wares with their contemporary late-saxon greywares CL and CT. It demonstrates that numerically, the shell-tempered wares were the dominant late-saxon fabric across northern and central Lincolnshire. There were odd exceptions to this. Kettleby Thorpe and the northern part of Manley Wapentake proved to be areas in which the shell-tempered fabrics have been but rarely found, but the samples were rather small. Lincoln was perhaps a production source for both shell-tempered and grey sandy fabrics during the late-saxon period.

Amongst the unstratified material, the late-saxon pottery is numerically biased towards central Lincolnshire. The predominance of shell-tempered wares amongst these assemblages may lend extra weight to the less substantial middle-saxon evidence for the distribution of hand-finished SXSH shell-tempered fabric.

Whilst there were probably additional sources of shell-tempered fabrics between Lincoln and the Humber, it is most unlikely that there were any for the coarse sandy, greyware fabrics. Almost all Lincolnshire's late-saxon, coarse-sandy vessels can be attributed to either Torksey or Lincoln sources.

This assumption is of particular importance because it means that all the late-saxon greywares shown on Map 153 can be regarded as traded material. The relative distribution of the Torksey and Lincoln fabrics is explored further on Map 154. Two further considerations can be drawn from Map 154. Firstly, it is a study of an aspect of late-saxon trade. Secondly, the areas of predominantly shell-tempered fabrics may provide a tentative insight as to the location of their production sources, on the assumption that the coarse sandy fabrics might find it more difficult to compete in the immediate vicinity of the shell-tempered production marketing centres.

Map 153 suggests that there were two areas where the occurrence of late-saxon shell-tempered wares was more intense, one around Barton-on-Humber and the second in the central wolds area around Caistor and Kirmond-Le-Mire. As current evidence for the production of late-saxon pottery points to urban centres, it would be tempting to suggest that Barton and Caistor were the respective kiln sources. However, the distributional evidence from maps such as Map 153 shows only the distributional centres, i.e. where the pottery was marketed from, rather than where the pottery was produced. If, as suggested, both the late-saxon and early-medieval pottery production was based in towns, both manufacturing and distributional centres might correlate.

During the medieval period the two principal shell-tempered fabrics were the smooth-textured S4 and the rough-textured S3, suggesting the existence of at least two kiln sources. Map 155 showing the distribution between the medieval shell-tempered

fabrics (S3,S4) and the contemporary coarse sandy fabrics (C1, C2,C3) demonstrates that the shell-tempered fabrics were common across the whole of Lincolnshire, with the coarse sandy fabrics representing a minority fabric. In this overall respect the situation was similar to that of the late-saxon period (Map 153); however, the medieval coarse sandy fabrics can now be seen to cluster to north-east Lincolnshire. Map 156 was prepared to contrast the distribution of the two principal medieval shell-tempered fabrics, S3 and S4. The results are interesting because the S4, smooth-textured shell-tempered fabric clusters neatly into north-east Lincolnshire, covering approximately the same area as the coarse sandy fabrics in Map 155. It suggests that North Lincolnshire's coarsewares were, during the medieval period, divided into two geographical areas. In north-east Lincolnshire, in an area bounded to the west by the Ancholme, and to the south by Caistor and Great Limber, the coarsewares were dominated by the coarse sandy fabrics and there was, in addition, in the same area, a minority shell-tempered fabric S4. The rest of Lincolnshire was dominated by shell-tempered wares which were of the S3, rough-textured type. It could also be observed that the area of the S4 fabric correlated with one of the denser areas of the late-saxon shell-tempered fabric. Barton-on-Humber was postulated as being the likely production/distribution centre for this northern S1 area, and it is possible that production may have continued from the same centre for the medieval S4 fabric.

As the S3 fabric had a wide distribution, Map 156, it probably had a number of production centres. Only one of these

is known, that of Potter Hanworth to the east of Lincoln (Healey 1974, 30). The position of the Potter Hanworth kiln suggests that Lincoln may have been its principal market. It is most unlikely that this kiln centre was supplying the sites in Axholme or north-west Lincolnshire. Loughlin suggested that the Roman Dalesware industry was probably located in north-west Lincolnshire immediately west of the Jurassic limestone ridge which separated the Trent and Ancholme valleys (1977, 93-96). This was an area where the sedimentary rocks outcropped producing the fossil shell used in the Dalesware fabric (ibid, 102). It is not yet possible to tell whether fossil shell was used in the S3 fabric, but this would prove a useful research project. If the S3 fabrics contained fossil shell a similar source could be envisaged to the Roman Daleswares. However, if fresh shell was used, a site towards the coast would be more likely. In Glentworth, a land grant of 1171-2 included the toft of Seward the potter (Sevardi le potter) (Stenton 1922, 85). Jean Le Patourel has suggested that the surname Potter in such an early document is likely to refer to practising clay potters (1968, 102). As Glentworth is situated on the edge of the limestone ridge it would be interesting to see if any future discoveries of wasters include shell-tempered vessels.

The very high concentration of the S3 fabric on the central Wolds area may simply reflect the intensive fieldwork and commensurate large assemblages. However, it could also suggest a further S3 production centre somewhere to the east of Potter Hanworth. At present it is not possible to suggest a likely location.

iii: Forms and manufacture

	CP	B	CW	DISH	J	BD	OT	VESSEL TOTAL
S1	58.1	39.4		62.1			0.3	282
S2	89	11						100
S3	80.5	19.1	0.15		0.07	0.18	0.04	2731
S4	94.6	5.4						1297
Overall %	83.4	16.2	0.09	0.14	0.04	0.11	0.04	4410

This section will be divided into an examination of the late-saxon and early-medieval periods. This will be supplemented by a general discussion of the origins of the late-saxon forms with particular reference to the late-Roman Dalesware industry (Loughlin 1977).

Whereas the medieval shell-tempered vessels were heavily biased towards the cooking-pot form, the late-saxon S1 vessels show a slightly more even balance, although (at 58.1%) cooking-pots were still the principal form. Bowls would appear to have been more numerous in all late saxon coarseware fabrics than at any time in the medieval period.

For the late-saxon period the range of cooking-pot, bowl and other forms remained fairly uniform whether they occurred in a shell-tempered or a coarse sandy fabric. It would thus be appropriate at this stage to discuss generally the range of late-saxon forms and the possible explanations of their origins.

The typical examples of late-saxon cooking-pot forms in Lincolnshire, both in shell-tempered and coarse sand-tempered fabrics, can be seen from Barrow, St Chads (SX/4/Br, Pl.68 No.7; SX/5/Br, Pl.68 No.12) and East Halton Skitter (Pl.25, No.40). Their everted rims with dished inner faces were standard throughout the region in all late-saxon fabrics. Although these could be described as lid-seated rims, no matching ceramic lids have been recognised. In form and style these cooking-pots have no parallels or proto-types amongst the local early/middle-saxon wares, with the possible exception of the earliest material from Lincoln, Saltergate (SX/20/Li, Pl.71 Nos.1-10). It has been argued that the late-saxon greyware forms derived from the East Anglian Ipswich wares (Hurst 1976, 314-318). However, it was suggested above that the Ipswich wares belonged more properly to the earlier, middle-saxon pottery traditions. The wheel-finished late-saxon wares were new to saxon Lincolnshire, as the early Roman wares were to the native Iron Age pottery industry.

The closest native parallels to the late-saxon vessel forms were the region's late-Roman coarsewares. This link has been dismissed in the past because of the obvious, and seemingly insurmountable, gap of some four hundred years between the two industries (Coppack 1980, 146). However, if this problem is put to one side and the two ranges of forms compared, a surprisingly close, though not exact, series of parallels can be established.

The late-saxon cooking-pot was particularly similar in shape to the 4th-century Roman coarseware jars of the Huntcliffe,

Dalesware and Swanpool 'H' types. Amongst the earliest of the region's local Roman types to fit this vessel form were those potteries on the outskirts of Doncaster, such as Blaxton (Buckland and Dolby 1980, 24 Fig.6 Nos.117-118). Dalesware jars were particularly characterised by their tall everted rims which also had a pronounced bevel to the inner rim face (Loughlin 1977, 91 Fig.1, Nos.1,2 & 24; or 92 Fig.2, No.64). The rims of the Huntcliffe wares of East Yorkshire find no obvious parallel with Lincolnshire's late-saxon cooking-pots, although their rims do have a stylised lid seating and the overall profile of the jar is again remarkably close (Rigby 1980, 84-87). It was probably the late Roman Swanpool vessels from Lincoln which achieved the closest parallels, particularly the Swanpool 'H' type rim form which could occur in both calcite-gritted and grit-tempered fabrics (Darling 1977, 16 Fig.6). In none of these cases was there an exact parallel with the late-saxon forms, but the overall similarities were too close to dismiss as a coincidence. There were, however, a number of differences. Most late-saxon Lincolnshire cooking-pots had slightly sagging bases (SX/4/Br, Pl.68 No.7), whereas the late-Roman jars had narrower, flat bases. However, contemporary late-saxon wares from York and other parts of Yorkshire had similar flat bases, sometimes with 'wire-pulled' marks on the base (Holdsworth 1978, 20 Fig.5 Nos.8 & 23). Knife-trimming of the base and basal angle was a common late-saxon feature but rare on late-Roman vessels. The bands of rouletted shoulder decoration was also absent from the Roman vessels, although a similar technique of decoration was often used on Roman finewares.

A second common late-saxon form was the shallow bowl or dish, a series of profiles coming from East Halton Skitter (Pl.25 Nos.19-22). It is likely that many more of these vessels occurred across Lincolnshire but the similarity of their rims with contemporary bowl forms required a complete vertical profile for positive identification. Their shape resembles closely the late-Roman dish/platter forms in regional fabrics such as Blaxton (Buckland et al 1980, Fig.4 Nos.5-9), Huntcliffe (Rigby 1980, 80-81 No.302) and in the shell-tempered Dalesware-type fabrics (Rigby and Stead 1976, 188-190 Nos.7-8). Indeed, two illustrated dish forms from Barton, East Acridge may have been of Roman origin (EM/6/Bt, Pl.74 Nos.19-20).

Bowls were the second most common late-saxon form and seemed to have occurred with a variety of rim forms ranging from plain everted rims (SX/6/Br, Pl.68 No.15) to the more common, rounded, interned rims (EM/9/Bt, Pl.69 No.24 or East Halton Skitter Pl.25 Nos.24-29). Bowls of similar size were produced in the region's late Roman fabrics although there was frequently an outer flange to the rims (Buckland and Dolby 1980, 13 Fig.4 No.40 or Darling 1977, 8 Fig.2 Nos.38-42). Flanged bowl rims were uncommon on late-saxon shell-tempered vessels, although several examples have now been recovered from late-saxon deposits at Doncaster (Site DT Fn 107). However, examples were common in the late-saxon coarse sandy fabrics such as Torksey wares (Barley 1964, 181 Fig.8 No.10) although a more debased form of flange was more typical (SX/8/Bc, Pl.68 No.24; or Bt. Pl.19 No.11). Again some major distinctions are apparent. The 'O' spouts found on some late-saxon bowls and the occasional

'pie-crusting' to greywares were both features not found on the late-Roman wares.

However, it may be concluded that the region's three most common late-saxon vessel forms find parallels amongst the more common late-Roman coarsewares. Having argued a case for parallels, there now remains the problem of the 400 year break in production from the end of the Roman period to the introduction of the late-saxon wheel-finished products in the 9th century. The problem of the origin of these late-saxon forms was considered by Coppack who attempted to demonstrate that very similar vessels occurred in contemporary and earlier deposits in Merovingian and Carolingian France (Coppack 1980, 146).

A recent survey has listed and discussed the middle-saxon imported pottery from Europe (Hodges 1981). Many of the European forms showed a definite legacy from earlier Roman vessels (for example, *ibid*, 70 Fig. 7, 6 Nos.5 & 8-11). Indeed, it would appear that, unlike England, Europe never lost the technical skills of the Roman pottery industries and continued to produce wheelthrown wares throughout the migration period. It has been suggested that the English late-saxon forms arose under the influence or production of immigrant potters from Europe (Hurst 1959, 28-31) although the claim has recently been rescinded (Hurst 1976, 318).

North Lincolnshire has produced two middle-saxon European imports. Barrow: Cherry Lane produced an example of a red-burnished pitcher (HM/12/Br, Pl.98 No.42) of probable Merovingian date and considered to be a 'prestige' product (Hodges 1981, 71-2).<sup>5</sup>

More recently Barton: Castle Dike South has produced a Frankish pitcher as part of a grave group from an inhumation cemetery (Pl.194). This important vessel was discovered in April 1982 after the preparation of chapters 2 and 3. It was examined and drawn by the writer and was seen to be in a hard, coarse, sand-tempered fabric of orange colour throughout, with rough-textured surfaces. However, it was the shape and constructional details of this vessel which proved to be of the greatest interest. It was wheel-thrown with a knife-trimmed basal angle and a flat base. The rim was everted with a dished inner rim face remarkably close in form to the late-saxon cooking-pot rims of Lincolnshire. The handle was of the 'strap' type attached to the rim with a smoothed lower attachment. It came from a burial which was surrounded by others whose artifacts suggested a 7th-century date (information Ben Whitwell). Provisional identification of the vessel by Richard Hodges suggests that it was an import of Frankish origin, probably from the Cologne region. The rim and knife trimming of this vessel provide two of the principal features of the Lincolnshire late-saxon cooking-pot vessels. Its association amongst a series of rich graves (it was situated immediately to the east of the burials) which in 1939 had produced a bronze hanging bowl and other artifacts (Watkin 1980, 88-89; Bryant 1981), suggests that this too was regarded as a prestige artifact.

Although a single 7th-century import at Barton-on-Humber does not at all explain the sudden appearance of somewhat similar locally-made forms in the 9th century, it does demonstrate imported vessels, similar to the subsequent late-saxon pottery forms, were accessible to local potters. It also starts to

provide the evidence of contacts which Hurst considered lacking when he abandoned his earlier argument for the immigrant European potters in the 9th century (Hurst 1976, 318).

A second possible reason for the similarities in form between late-Roman and late-saxon pottery vessels is that in the late-saxon period there was still plenty of Roman pottery about, albeit in fragmentary form. Almost every middle or late-saxon pottery group in Lincolnshire contained residual Roman pottery. In some groups it was only one or two sherds but in others, such as Barton, East Acridge, or some of the Doncaster sites, 80 or 90 per cent of the group consisted of Roman pottery. Saxon building and domestic activity in the vicinity of Roman sites was clearly continually disturbing these earlier deposits: the chance discovery of 'archaeological deposits' was probably as common in the late-saxon period as it is today. Were late-saxon potters influenced by the forms of this disturbed Roman rubbish? Such a potter would have needed to have the knowledge to finish pottery on the wheel; he would then have been in a position to respond to any such stimuli, however unconventional its origins.

The shape of the cooking-pots underwent a change from the late-saxon forms (SX/4/Br, Pl.68 No.7) to the early-medieval (EM/10/Br, Pl.75 No.4 or ME/11/Br, Pl.75 No.5). This change can be clearly seen when comparing plates 152 and 157. Cooking-pots had become bigger, shallower and had wider bases. Bowls too had increased in size and therefore capacity. It is probably dangerous to make any assumption from this evidence on changes in culinary behaviour, because pottery was only one of the media

for cooking vessels. We do not know whether similar changes of form were taking place in wooden, leather or metal utensils. However, these changes must also be set against a general expansion and localisation of the pottery industry in the early-medieval period which competed with and eventually overwhelmed the larger, older, established late-saxon industries.

The advent of pitchers and jugs with the use of glaze relegated the cooking-pots and bowls to a position of secondary importance, and if the early-medieval jugs were to achieve new heights in potting standards, those of the cooking-pots and bowls sometimes fell short of the standard set by their late-saxon predecessors. The late-saxon cooking vessels were either wheel-thrown or coil-built and wheel-finished to a very high standard on both surfaces. The new, early-medieval cooking-pot forms, whether in shell-tempered or coarse sand-tempered fabrics, were invariably coil-built although the wheel-finishing was not always as complete on the coarse sandy wares as it was on the shell-tempered vessels.

The 11th and 12th century shell-tempered cooking-pot rims were generally very small and everted, having lost the dished inner rim face of the late-saxon forms. Knife-trimming largely disappeared, although it was to survive on the coarse sandy vessels until the late 14th century. Lower bodies lost their tapered late-saxon profiles and became more straight sided (Pl.157).

Although late-saxon socketed bowl and dishes of the S1 fabric disappeared from the early-medieval repertoire, new forms emerged. Curfews first appeared in the mid-12th century in the coarse sandy fabrics, and basting dishes by the latter part of

the century. Both forms occurred in shell-tempered fabrics, but rarely from dated contexts. Jug forms also occurred in the S3 fabric but they were extremely rare. The only complete profile came from Lincoln (Adams 1977, 29 Fig.15 No.114 and Pl. 157), but two examples were found at Thornton-Le-Moor (Pl.13 No.36) a site which produced one of the widest ranges of S3 shell-tempered forms (Pl.13 Nos.1-40). Elsewhere/<sup>in</sup>the country shell-tempered jugs were a little more common (Haslam 1978, 39 Fig.5 Nos.10-18). The small lid from Barrow: Cherry Lane (HM/12/Br, Pl.98 No.18 and Pl.157) is unique to the region and of unknown function.

By the late 12th century shell-tempered cooking-pots in both S3 and S4 fabrics showed an increase in rim size; this continued until the tradition's decline in the early 15th century (Pl.157). In addition to the datable profiles of Pl. 157, several other unstratified profiles of cooking-pots, probably of 12th or 13th-century date, occurred (Barton-on-Humber, Pl.17, No.22, and Kettleby Thorpe, Pl.20 Nos.13-14 and West Rasen, Pl.15 No.1). There appeared to have been considerably more variation both in overall vessel size and rim forms than there was in the late-saxon period. Although it is unlikely that this was entirely due to the increase in the number of production centres. The distribution of the S3 fabric suggests that there were a number of sources, but the S4 fabric was much more restricted and probably originated from one kiln centre and yet the variety of size and form is equally apparent on its vessels (Pl.157, and also East Halton Skitter, Pl.26 Nos.1-11). It is unfortunate that there were no

large stratified groups of S<sup>4</sup> vessels, but it is also likely that this variation owes little to chronology, save for the overall increase in rim size referred to above.

The large, plain, everted rim seen on the Somerby cooking-pots (Pl.157 and LM/11/Sm, Pl.133 Nos.2-7) would appear to be diagnostic of the final phase of rim development on the S<sup>3</sup> vessels. The form does not occur on the S<sup>4</sup> fabric; this may represent a divergence of styles between the two fabrics in the 14th century, but it may also suggest that the S<sup>4</sup> fabric ceased production at an earlier period than the S<sup>3</sup>. The lack of 14th century deposits with convincingly contemporary examples of S<sup>4</sup> vessels would seem to support such a suggestion.

Bowl rims in shell-tempered fabrics show similar general chronological trends in their rim forms. The 12th-century examples tended to have small everted rims similar to those of the cooking-pots (Pl.157; EM/12/Br, Pl.75 No.13). During the 13th century rims became more clubbed in appearance, usually having been folded (Pl.157, and HM/37/Tp, Pl.110 No.19). By the late 14th century rims had become larger, flatter and more fully everted (Pl.157, and LM/11/Sm, Pl.133 Nos.8-9). Again the S<sup>4</sup> fabric only produced examples of the two earlier rim types, there being no examples of the later Somerby rim forms even amongst the unstratified material.

The unstratified examples of S<sup>3</sup> bowls produce examples of all three rim forms with the addition of a fourth type which was not represented amongst the stratified material. This additional form comprises a simple, almost upright rim form, for example, at Thornton-Le-Moor (Pl.13 No.23). On occasion

this seems to have had a slight internal bevel (Thornton-Le-Moor, Pl.13 No.24 or Connesby, Pl.40 No.1). At present there is no indication of the chronological relationship of this type to the other forms.

Curfews were usually bowl forms inverted with the addition of vents and a handle. Few were found in dated contexts (Pl. 157) but one example from Thornholme Priory (TP/44/Tp, Pl.112 No.18) had a chamfered shoulder angle. This was also seen from a similar example from Toft Newton (Pl.15 No.45), whilst North Owersby produced one of the few definite curfew rims (Pl.11 No.33). All examples were in the S3 fabric, but the lack of further stratified examples precludes any discussion of typological development.

The few shell-tempered basting dishes amongst the unstratified material were all in the S3 fabric. Only two vessels are illustrated both having 'pie-crusting' to the top of the rims (Clixby, Pl.22 No.45 and Humberston Abbey, Pl.5 No.43).

Amongst the datable cooking-pot and bowl forms there does seem to have been a basic series of changes in rim form during the medieval period which can probably be related to chronology. However, within each basic rim type there was enormous variation. It is unlikely that these minor variations have any chronological significance, although the limited number of stratified examples of secure date defies a more detailed classification.

### Regional Tradition : Coarse Sandy Wares

(including fabrics CT,CL,C1,C2,C3,CB,CH,CS)

The fabrics which made up this tradition fell into two chronological divisions, late-saxon greywares (CT,CL) and the medieval coarsewares (C1,C2,C3,CB,CH,CS). Each category will be considered separately.

#### Late-saxon greywares

##### i: Date range

	800	900	1000	1100	1200
CT	---	-----	---		
CL	---	-----	---		

The origins and decline of these two fabrics has already been discussed in chapter 3. It need only be reiterated here that on current, rather limited, evidence, they probably began in the 9th century and terminated during the 11th century. Both fabrics enjoyed a very similar history and both the subject of more intensive study in recent years (Hurst 1957, 1959 and 1976; Barley 1964; Adams 1977; Coppack 1980).

##### ii: Distribution

Map 153 contrasts the percentage distribution of the late-saxon shell-tempered S1 fabric with the two late-saxon greywares. It demonstrates that numerically the greywares usually fell a poor second to their shell-tempered rivals. As the majority of the greywares from North Lincolnshire belonged to either the Torksey or Lincoln sources, it seems almost certain that there

was never any additional production centre within North Lincolnshire. This, in turn, would imply that the greywares on Map 153 represent pottery that was traded into North Lincolnshire from the south.

Torksey's position on the Trent immediately suggests the possibility of a water-based network of distribution. Lincoln had similar navigation opportunities to the south via the Witham, while to the north it had the major landward route of the Ermine Street which had remained an important routeway during the saxon period (Stenton 1936, 3). Unfortunately, the distribution of the two fabrics (Map 154) does not support such a simplistic distribution.

Amongst the sites studied in North Lincolnshire, Torksey wares comprised 150 vessels and Lincoln greywares 108. This numerical advantage for Torksey wares is demonstrated on a proportional basis on Map 154, and can be seen to have been widespread across the whole region. The majority of find spots have river connections, but so many of the parishes in North Lincolnshire either had a river or stream running through the village or the borders of the parish, that this ceases to be a critical criterion. However, if the distribution of Torksey wares had been principally riverine, it is difficult to understand why they should have appeared so sparsely in so many of the sites in the northern part of Manley Wapentake, where their position on the banks of the Trent/Humber confluence might be expected to yield a particularly high proportion of Torksey types. The coastal ports of Barton-on-Humber and East Halton Skitter produced completely conflicting proportions of the two fabrics. Inland sites such as Kettleby Thorpe, Thornton-Le-Moor

or Swinehope had high proportions of Torksey wares. In individual cases the fairly low numbers of these fabrics might invalidate such results, but taken as a whole, the almost random distribution between these two greywares suggests an obscure, but complex marketing and trading system in late-saxon North Lincolnshire.

iii: Forms and manufacture

	CP	B	Jar	Totals
CT	86.9	12.5	0.6	160
CL	94.6	3.6	1.8	112
Totals	90.1	8.8	1.1	272

Both fabrics were fired very hard and had surfaces bearing full wheel marks. As a consequence it was usually very difficult to determine whether they were wheel-thrown or wheel-finished. The late-saxon shell-tempered vessels appeared to have been wheel-finished, but the sand and grit-tempered continental prototypes were almost invariably wheel-thrown (Hodges 1981).

Although a number of Torksey wares and several Lincoln greywares have been recognised which were almost certainly coil-built, it is probable that a large number, possibly the majority, were wheel-thrown. The widespread distribution of these two fabrics, particularly Torksey wares, suggests large scale, commercially based, production which probably involved a number of contemporary kilns at each centre.

Few complete profiles were achieved for these fabrics and their representation amongst the stratified material was

particularly sparse (Pl.152). More complete, stratified forms have been recovered from Lincoln (Coppack 1980, 45-52 and 71-82) and Goltho Manor (ibid, 115-126). Amongst the unstratified vessels East Halton Skitter produced one of the wider ranges of forms in addition to a complete cooking-pot profile. The Lincoln and Torksey fabrics not only shared a similar fabric appearance, but also similar forms; indeed, there was a fairly rigid conformity of vessel form in the late-saxon period regardless of fabric. By the end of the 11th century, this situation had altered and local variations were resurfacing.

The similarity with late-Roman and Frankish/Carolingian forms was as apparent with the greywares as it had been with the shell-tempered forms. Late-saxon greyware flanged bowls were numerous (Pl.152, SX/8/Bc, Pl.68 No.24) particularly amongst the unstratified material (Swinehope, Pl.8, No.40, Kettleby Thorpe, Pl.20 No.5). In addition a further late-saxon greyware bowl rim occurred (Habrough, Pl.24 No.26, Swinehope, Pl.8 No.42) which was very similar to the rims of the late-Roman wide-mouthed bowls (Buckland and Dolby 1980, 28 Fig.7; Rigby and Stead 1976, for example 146, Fig.69; 169, Fig.83 No.87). However, the common interned late-saxon bowl rim (Thornton-Le Moor, Pl.12 Nos.66-68, Barton, Pl.17 No.21) was not a Roman form.

A small number of storage jars have been found, principally in the Lincoln Grey fabric (Alkborough, Pl.38 No.1, Barrow-upon-Humber, Pl.16 No.4). However, not only were they uncommon, but Coppack considered that they formed part of the later range of vessels in the fabric (Coppack 1980, 148).

Regional Tradition : Medieval Coarse sandy fabrics

i: Date range

	900	1000	1100	1200	1300	1400	1500
C1	---	-----	---				
C2			---	-----		---	
C3		-----	-----	-----	-----	-----	

These fabrics derived from local production centres which sprang up within the region during the 11th century, and successfully challenged the late-saxon pottery markets to the extent that by the late 11th or early 12th century these older industries had disappeared. Like the late-saxon greywares, these were coarse sand-tempered fabrics used principally for the production of coarsewares and can therefore be seen as essentially part of the same tradition. Within North Lincolnshire, 11th-century deposits are still unrecognised, but by the early 12th century this change between late-saxon and early-medieval forms was all but complete. Beverley: Lurk Lane provided one of the few insights into this transformation period (EM/46/Bv, Pl.86 1-30 ). The evidence from that site suggested that these new fabrics grew up alongside the late-saxon greywares rather than that they developed to fill the void left by the collapse of the late-saxon industries. Over a period of perhaps, several decades, their ease of availability and comparative cheapness may have compensated for their relative crudeness of manufacture and allowed them to gradually take command of local markets.

The chronological range of vessels presented for the fabrics in this tradition (Pls.160, 161) is only representative of the groups studied by the writer. It is evident from Thornholme Priory that the C2 fabric survived into the late 14th century (HM/36/Tp, Pl.107, Nos.13-14), although in the East Riding of Yorkshire it may have survived into the early 15th century. Evidence from Bridlington (information Gareth Watkins) and Wharram Percy (Le Patourel 1980, 83-86) suggests that Staxton wares (CS) persisted to about c.1450, but the late dates claimed for this fabric from Bolton, Fangfoss, founder on the lack of supportive dating evidence (Coppack 1978, 136-139). Hedon's seemingly more restrictive date span for its CH fabrics is likely to have been occasioned by the dwindling historical fortunes of the port by the 14th century (Craven 1972, 8).

The chalk and sand-tempered C1 fabric would seem to have had a more restricted lifespan. Some of the cooking-pot forms suggest a late-saxon origin for this fabric (Winteringham, Pl.39, No.59; Barton-on-Humber, Pl.73 No.11, Pl.19 No.20). The corresponding fabric from Beverley (CB1) does not appear to have been present in the levels associated with the Lurk Lane coin hoard of c.851, but was found in the intervening layers which were sealed by the destruction phases associated with the great fire of Beverley in 1188 (information Gareth Watkins).<sup>6</sup> The chalk particles themselves suggest an origin on or near the chalk Wolds and, unlike Torksey or Lincoln Grey fabrics, these can be regarded as locally made North Lincolnshire products. Current evidence would suggest that C1 was replaced with the C2 fabric during the 11th or 12th century. Consequently, its contemporary occurrence in a group indicates an early-medieval date.

## ii: Distribution

Map 155 shows that the coarse sandy fabrics were largely restricted to the north-eastern part of Lincolnshire in the area around Goxhill and East Halton. As the C2 and C3 fabrics had early-medieval origins, an urban production centre might be suggested, in which case Barton-on-Humber again forms a likely source. Shell and sand-tempered fabrics occurred in almost equal proportions at Barton and the production of differing fabrics from the same centre has several regional parallels (Buckland et al 1979, 12-13), including the two types of late-saxon wares produced at Lincoln. However, were this the case a more even distribution might be expected in the area around Barton. The densest areas of coarse sandy fabrics occurred east of Barton around Goxhill and East Halton, areas which produced some of the highest proportions of this fabric. There is no archaeological evidence for pottery production in this area, but East Halton has a street named "Potter Lane" and a craft potter in the village still produces wares from local clays. In this respect it is worth recalling that a rurally based Potter name was recorded at Glentworth in the late-12th century (Stenton 1922, 85).

It is inevitable that the concentration of these fabrics in north-east Lincolnshire should be related to the suggested production of vessels in this tradition immediately across the Humber at Hedon. Trading contacts between Hedon and East Halton were dominated by the large numbers of Hedon FH jugs recovered from East Halton Skitter (Pl.27 Nos.6-38). The possibility thus arises that all the coarse sandy wares in

North Lincolnshire might have been traded in from Hedon with no independent Lincolnshire production centre. However, Lincolnshire's C2 and C3 fabrics differed quite markedly from the Hedon CH fabrics and the only physical link might have been the availability of similar estuarine clay sources. Indeed, the distribution of the shell-tempered vessels demonstrated that the Humber was an effective northern barrier for that tradition. The implication is that whereas the finewares were traded in limited numbers across the Humber, coarsewares were not.

Having established a limited spatial distribution for the coarse sandy fabrics as a tradition (Map 155), the two principal constituent fabrics C2 and C3 have been contrasted in Map 159. The more prolific of the two, C2, clustered into north-east Lincolnshire, almost in a mirror reflection of Map 155; the C3 fabric, on the other hand, was restricted to a line to the south of Caistor in an area where coarse sandy fabrics were generally rare. It would seem that the C2 fabric probably had a single production centre, possibly located around East Halton. However, the remaining C3 fabric had no apparent nucleus of distribution and other factors will be considered below to attempt to explain this situation.

The occurrence of the C1 fabric in excavated groups to the north of the county enabled it to be recognised as an essentially early-medieval fabric in contrast with C2 which lasted well into the 14th century. It is unfortunate that so far the C3 fabric has not been recognised amongst stratified groups and hence there can be no certainty over its date range. The sparsity of the C3 fabric might suggest a restricted early-

medieval lifespan like that of the C1 fabric.

Alternatively, centres producing a jug fabric often also produced a lesser number of coarsewares, either in a coarser fabric variant or in a completely different fabric. It is possible that a jug fabric in either the fine sandy (F) or medium sandy (M) traditions were also producing coarse sandy coarsewares. This sort of situation has been suggested for Hedon where it seems likely that both the fine sandy FH fabrics and the coarse sandy CH fabrics were both produced at the port. Such a situation might go some way to explain the thin scattered distribution of the C3 fabric. The C3 fabric was also situated on the southern periphery of the East Yorkshire coarse sandy tradition in an area heavily dominated by the rival shell-tempered fabrics (Map 155), and its occurrence as a minor fabric variant to a more important fineware fabric would not be out of place. Comparison between the various fineware distribution patterns suggests that the fine sandy F1 fabric had a distribution which geographically matched that of the C3 fabric (compare Map 159 with Map 166). If this were the case it would further strengthen the Hedon example. Several splashed glazed jugs occurred in both the C2 and C3 fabrics, but this need not prejudice the present argument, as the table below shows that they only comprised about 1% of the total product and again Hedon's CH fabrics also produced the occasional glazed vessels. Such vessels were splashed glazed and can therefore be attributed to the early-medieval period.

It has been observed that the C2 and C3 fabrics represented the southern boundary of a coarse sandy coarseware tradition

which was centred on the East Riding of Yorkshire. Occasional vessels occurred at Doncaster, but the fabric never appears to have been common in the town. Production centres are known on the Vale of Pickering at Staxton and Potter Brompton (Brewster 1952; 1958), and their production almost certainly goes back to the early-medieval period (Le Patourel 1979, 84). The products of these kilns (CS) formed the principal coarsewares at Wharram Percy (*ibid*, 95-107) and probably at Bolton, Fangfoss (Coppack 1978, 118-139). Other production centres supplied a fabric similar to Bridlington (information Gareth Watkins), Beverley (Hayfield and Watkins forthcoming) and Scarborough (Reutter 1961). To the west, the tradition does not seem to have penetrated far into the Vale of York and the fabric rarely occurred in the city of York (Cathy Brookes pers. comm.). The northern boundary of this tradition has not been explored by the writer.

iii: Forms and manufacture

	CP	B	CW	BD	Pitcher	J	P	Total
C1	95.7	4.3						70
C2	92.0	6.7	0.2	0.08	0.2	0.7	0.08	1233
C3	92.5	5.7	0.6			1.2		335
Total	92.25	6.41	0.3	0.06	0.12	0.79	0.06	1638

As the table above suggests, this was principally a coarseware fabric producing an overwhelming preponderance of cooking-pots. The percentage of bowl forms was far lower than their late-saxon predecessors. Basting dishes and curfews completed

the range of coarsewares, but they were never of any numerical importance. The occurrence of a small number of fineware forms, pitchers (East Halton Skitter, Pl.27 Nos.1-2), jugs (EM/11/Br, Pl.75 No.8) and a single pipkin seems restricted to the early-medieval period. It has been suggested that the Hedon CH fabrics, and possibly the C3 fabric, were the coarseware counterparts to a fine sandy fineware partnership. However, the Staxton and Potter Brompton kilns seem to have been primarily coarseware kilns with only a handful of rather poor quality jugs being recognised in the fabric (Le Patourel 1979, 83-86). Although the distribution of the C2 fabric would seem to centre on the rural sites of Goxhill and East Halton, the overall distribution of the fabric corresponds quite well with the F1 fine sandy fabric. With the caveat of Staxton wares in mind it could be suggested that the three coarsewares CH, C2 and C3 are matched respectively with FH, F1 and F2 fabrics. However, it is unclear whether the C2/F1 and the C3/F2 couplings shared the same production source as did the CH/FH fabrics, or whether they merely shared a similar clay source.

Almost all the vessels in the medieval coarse sandy fabrics appear to have been coil-built and then wheel-finished with varying degrees of efficiency and completeness. The sole exception was the single basting dish form which had coil-built walls and a slab base (Goxhill Pl.23 No.31). Most cooking-pots, though not bowls or curfews, had applied rims added to their coil-built bodies (East Halton village, Pl.24 No.91), although in some cases it is possible that the extensive wheel-finishing to the rim and neck obliterated all trace of the original coils, giving the impression of wheel-thrown rims. This view is

enhanced by a number of examples which appeared to have been entirely coil-built (Kirmond Le Mire, Pl.42 No.21 or Winteringham, Pl.39 No.59). In a recent study of manufacturing techniques, the writer drew attention to a number of examples from Hedon and elsewhere where the scar of the rim confirmed the existence of the applied rim technique (Hayfield 1980, 31). This has also been recognised elsewhere in the country (Jope 1952, 77-111; 1956(a), 102-105; Moorhouse 1971(a) 49-66; Bryant et al 1969, 3-50; Bryant and Steane 1971, 3-94). Bowls and curfews were almost invariably coil-built throughout (Kettleby Thorpe, Pl.20 No.42; Goxhill, Pl.23 No.30; Worlaby, Pl.34 No.62). A solitary bowl from Kettleby Thorpe (Pl.20, No.46) was the only recognised example with an applied rim. Unlike the medieval shell-tempered vessels the use of knife-trimming to the basal angles remained common throughout the lifespan of this fabric tradition.

As observed above, this was principally a fabric tradition of the East Riding of Yorkshire and consequently the following study of form development draws heavily on the evidence from Yorkshire sites. By far the largest assemblage of stratified coarse sandy wares in the region came from the CB fabrics at Hedon. A series of stratified profiles from the port have been presented on Plate 160. Wide-mouthed bowls, narrow-mouthed bowls and peat pots were frequently encountered, although again the largest proportion of vessels was cooking-pots. From the early 12th century cooking-pots fell into two principal forms, large examples with wide diameters (EM/58/Hd, Pl.89 Nos.23-24) and the more common 'medium' sized cooking-pots (EM/58/Hd, Pl.89

Nos.4-5, 18). In addition wide-mouthed (EM/58/Hd, Pl.89 No.26) and narrow-mouthed (EM/58/Hd, Pl.89 No.19) bowls occurred in conjunction with a single curfew (EM/58/Hd, Pl.89 No.27). This was the earliest occurrence of a curfew in the region, although splashed glazed curfews of 11th-century date have been recovered from Lincoln : Flaxengate (information Jane Young).

By the second half of the 12th century, the large, wide-mouthed cooking-pot had probably disappeared. The medium sized cooking-pot remained the principal form flanked by the narrow-mouthed bowls and a new form, peat-pots (EM/59/Hd, Pl.92 No.20). These peat-pots were a typical East Riding form which combined a cooking-pot profile with a wide diameter and shallow depth. It is interesting that this form has not been recognised in Lincolnshire in any fabric, although the form is known from other parts of the country (Jope 1963, 332-334 and Fig.66). A characteristic of cooking-pots of the second half of the 12th century was a horizontal band of shoulder thumbing situated at the approximate junction of the rim with the coiled body. It has been suggested that this was designed to strengthen the join of the applied rim (Hayfield 1980, 31), although an example from Barton-on-Humber contained these thumbings, reversed as bosses, despite an entirely coiled body (Pl.17 No.35). Again these shoulder thumbings appeared particularly common in the East Riding, several other examples occurring from Hedon and a Staxton ware vessel from Wharram Percy (Pl.161). All would seem to date to the second half of the 12th century and until an extended date range can be demonstrated, they can probably be regarded as a type fossil.

Medium-sized cooking-pots persisted throughout the rest of the Hedon range (Pl.60) but, from the 13th century, a new form of large cooking-pot emerged (HM/85/Hd, Pl.125 No.5), and a new series of small cooking-pots (HM/72/Hd; HM/74/Hd, Pl.121 Nos.1, 45). The narrow-mouthed bowls failed to survive the 12th century with the possible exception of HM/81/Hd, Pl.122 No.37 and the peat-pots had disappeared by the mid-13th century.

The Staxton wares from the Vale of Pickering have hitherto been the best known fabric in this tradition (Brewster 1952; Le Patourel 1965, 111-112). Only a small range of forms have been presented here (Pl.161), all from the writer's work at Wharram Percy. A range of other later forms from Wharram have recently been published, but (although from pit groups) they lacked satisfactory dating evidence (Le Patourel 1979, 99-101, 104-105). There is a fairly strong degree of similarity between these 12th-century forms from Wharram and those from Hedon, including the use of thumbled shoulders in the late 12th century (Pl.161). There is also a general similarity in rim forms, although the Staxton wares tended to be a little more rounded than the Hedon vessels. However, by the 13th and 14th centuries the differences were becoming more clearly marked, especially regarding the rim forms. While the Hedon and Beverley forms tended towards simple rim styles those of the Staxton wares became increasingly more complex. A useful selection of later Staxton ware rim forms can be seen from Bolton, Fangfoss (Coppack 1978, 118-139). However, the dating of these groups must be regarded with caution as it is unsubstantiated by any external evidence.

The Beverley fabrics, occurring in space halfway between Wharram Percy and Hedon, might have been expected to have reflected this in terms of vessel form. Unfortunately most of the complete profiles currently available for the CB fabrics were restricted to pre-12th century phases and hence antedate the earliest available groups from Hedon and Wharram Percy (Plates 160, 161). Nevertheless, there seems to be no immediate similarities between the forms (Pl.161). In this respect it may be of consequence that the CB fabrics in Beverley had a late-saxon origin and hence a late-saxon influence, whereas the Hedon potteries would have started afresh with the foundation of the port in the early 12th century.

The Staxton (CS), Beverley (CB) and Hedon (CH) coarse sandy fabrics revealed similar standards of potting. In all three cases the early medieval cooking-pots failed to match the potting standards of the late-saxon fabrics in the region. Wheel-finishing was often incomplete and this was particularly evident on the inner surfaces which revealed clear evidence of hand-finishing. Such evidence in the past has led to claims of a technological 'collapse' of the early-medieval potteries (Hurst 1976, 342). However, whereas the cooking-pot was the pre-eminent late-saxon form, it was relegated to a secondary position by the jug in the early-medieval period. The decline in the standard of potting of these Yorkshire cooking-pots is more likely to reflect the decline in the importance of the vessel form rather than any overall technological decline in the industry.

The above discussion of the Yorkshire coarse sandy fabrics forms an essential backcloth for the far sparser evidence of the Lincolnshire fabrics (C1, C2, C3) whose number of complete or semi-complete profiles were few. Although the range of Lincolnshire forms compares with the Yorkshire examples, certain differences occur. There have been no examples of the narrow-mouthed bowls, or peat-pots from Lincolnshire. The shallow dish forms from Beverley (EM/46/Bv, Pl.86 No.22) have only one parallel in a C1 vessel recently recovered from Barton-on-Humber (Baysgarth Museum).

The Lincolnshire examples also resembled the Yorkshire vessels in the general methods of manufacture, with one exception. In general terms, the standard of wheel-finishing on the Lincolnshire vessels was more proficient and more complete, usually matching the high quality potting of the early-medieval jugs. It is difficult to appreciate the reasons for these higher standards although it could be noted that in East Yorkshire the coarse sandy vessels had no competitors, but in Lincolnshire they were in competition with the shell-tempered wares which were themselves of a higher potting standard.

The earliest recognisable Lincolnshire coarse sandy fabric was the C1 vessels. It was suggested in chapter 3 that the C1 fabric may have had its origins in the late-saxon period. Although sherds have been recognised in late-saxon groups (SX/2/Bt, SX/3/Bt, SX/19/Bt) the forms of these early vessels has yet to be firmly established. However, amongst the unstratified and residual material are rim forms which parallel the forms of the late-saxon greywares (EM/2/Bt, Pl.73 No.11,

Winteringham Pl.39 No.59). It is these forms which are likely to reflect any late-saxon phase of the C1 production. A complete profile was recovered from Barrow : St Chads and a selection of rim forms from Barton : St Peters (Pl.19, Nos.16-21), East Halton Skitter (Pl.26 Nos.23-24). They reveal a series of very simple, rounded, upright rims of which the Barrow : St Chads' example cited above was the most common. A further profile attributed to this fabric was the bossed cooking-pot from Barton : Saxon Close (Pl.17 No.35). This vessel posed a number of problems as its precise form was unparalleled and its fabric was, in some respects, different from the majority of C1 examples. Although it can provisionally be included within the C1 classification, the growing number of early imports in the region suggests that this vessel would merit further detailed study of its fabric composition. Only three bowl fragments in this fabric were recognised from the unstratified material and none have been illustrated.

The bulk of the Lincolnshire coarse sandy vessels occurred in the C2 fabric. Two of the more interesting vessels in this fabric were the pitchers from East Halton Skitter (Pl.27 Nos. 1-2). The more complete example had a fitting profile to mid-body but the depth of the lower body was conjectural; two of the three handles survived but the '0' spout hatched on is also conjectural. The form would seem reminiscent of the late-saxon Thetford-type pitchers (Hurst 1976, 315 Fig.14 No.5) and it is unfortunate that so interesting a vessel should have come from an unstratified context. Both these vessels were unglazed.

Other fineware forms occurred with glazes which were invariably of the 'splashed' type which confines them chronologically to the early-medieval period. Examples occurred from Barrow : St Chads (EM/11/Br, Pl.75, No.8) and Barton : East Acridge (EM/4/Bt Pl.73, No.37) and conform in shape and construction to other jugs in early-medieval fabrics from the region.

A range of cooking-pot rims occurred on the C2 fabric, one of the best illustrated series being from East Halton Skitter, (Pl.26, 25-36). These rims would seem to divide into two basic types. The first was a rounded, clubbed type (Pl.26 No.33-35) and the second a small, more squared form with an indented outer rim face (Pl.26 Nos.26-32). One example (Pl.26 No.36) seemed to represent a combination of the two. At present the chronological relationship between the two is uncertain, but the clubbed types seem typologically closer to the C1 forms and an example of the indented forms was the latest dated example from Lincolnshire (HM/36/Tp, Pl.107 No.13).

There seemed to be even more variety amongst the bowl rims of the C2 fabric, but there was even less evidence available to suggest chronological distinctions between them. It was noted with the shell-tempered bowls that their rims became larger and more complex through time. The earliest coarse sandy bowls had small, simple rims such as East Halton Skitter (Pl.26 No.37), Stallingborough (Pl.31 No.63) or Thornton Curtis (Pl.32 Nos.22 and 24). A more clubbed type of rim was recovered from mid-13th century contexts at Barrow : Cherry Lane (HM/14/Br, Pl.99 No.19), and a good unstratified example came from Goxhill (Pl.23 No.30). Large, everted rims with

dished inner faces made up the third and most numerous category of bowl rims. Kettleby Thorpe provided a complete profile (Pl.20 No.42) and a series of similar rim forms (Pl.20 Nos.43-46). Other examples occurred at Thornton Curtis (Pl.32 No.25) and Worlaby (Pl.34 No.62). This was also the rim form which was most commonly decorated, usually with 'pie-crusting' or a single incised wavy line on the inner rim face.

Curfews were the other minor form in this fabric. It is likely that the number shown in the table above is understated because curfews were very similar in form to bowls, and body sherds may have gone unnoticed, especially where minor surface abrasion amongst the fieldwalking material may have removed any soot deposits from the inner surfaces. The only firm indication of profile came from an early 13th-century deposit from Thornholme Priory (HM/38/Tp, Pl.108 No.20) a seemingly dull vessel in comparison with the more ornate examples in the M1 fabric (Pl.182). Two unstratified examples of curfew handles occurred, one from Kettleby Thorpe (Pl.20 No.47) and the other from Thornton Curtis (Pl.32 No.26). Both had thumbled edges to the handle and it is possible that this was the standard form of the curfew handles in this fabric.

The rim forms of the C3 fabric seemed very similar to those of C2 and C1. There were examples of the early simple C1 types (Swinehope, Pl.9, Nos.1-2; and Humberston Abbey, Pl.5 No.44); the clubbed forms (Hawerby cum Beesby, Pl.6 No.20) and the simple upright types with the indented outer faces, again the most common type (Swinehope, Pl.9 Nos.4-8; Humberston Abbey, Pl.5 No.45; and Thornton Le Moor, Pl.13 No.42). A very

different rim form occurred from Kirmond Le Mire (Pl.42 No.21), this is so far unparalleled. Amongst the bowl rims, there were several examples of the thick everted types with the dished inner faces (Thornton Le Moor, Pl.13 No.44; Hawerby cum Beesby, Pl.6 No.21). From Swinehope there was a bowl rim which combined the small simple types with the clubbed forms (Pl.9 No.11).

In similar manner to the shell-tempered wares it is probable that these basic rim forms will each have their own chronological range. However, at present there are not enough well stratified examples from North Lincolnshire to develop further on this.

Regional Tradition : Grit-Tempered Wares

(including fabrics G1, GD, GB)

i: Date range

	800	900	1000	1100	1200	1300
G1			---	---	---	---
GD			---	---	---	---
GB	---	---	---	---	---	---

This fabric tradition first appeared in the region in late-saxon deposits associated with the Beverley coin hoard group of c.AD 851<sup>6</sup>. Within North Lincolnshire its origin is more obscure; although certainly late-saxon, its demise can be confidently ascribed to the mid-12th century. Only two examples occurred amongst the extensive deposits from Thornholme

Priory. These were two of the very small number of vessels from the site with splashed glazes. The priory was founded c.1150 (Knowles and Hadcock 1953, 155), and this would suggest that production had almost ceased by this period. The fabric type was also absent from the assemblage from Hayes Priory which was founded before 1164 (*ibid*, 172). However, within Yorkshire the fabric adapted and survived late into the medieval period. The earliest wheel-finished local wares from York were also grit-tempered and dated from the 9th century (Holdsworth 1978, 7-10).

Grit-tempered fabrics also formed a category of hand-finished early/middle-saxon fabrics in Lincolnshire and it would be tempting to see a continuation of a basic fabric type through into the late-saxon period, but as yet, the link cannot be fully demonstrated. The Barton : St Peter's vicarage site demonstrated that the SXG grit-tempered fabric was present right up until the point of transition to the wheel-finished and wheel-thrown wares (SX/14/Bt). However, within Lincolnshire wheel-finished, grit-tempered fabrics cannot be proved to have existed before the 10th century. This is perhaps more likely to reflect the limited number of 9th-century stratified groups rather than the history of the fabric tradition. Grit-tempered fabrics were present in the hand-finished middle-saxon deposits of the East Riding of Yorkshire, (but they were numerically inferior to the sand-tempered 'Whitby types' and again cannot offer a convincing link with the 9th-century GB gritty wares from Beverley, (Le Patourel 1979, 78)).

Like the coarse sandy fabrics, this was essentially a

Yorkshire fabric tradition which spilled over into the Northern parts of Lincolnshire during the peak of its commercial success.

## ii: Distribution

Past pottery studies have traditionally linked this fabric with South and West Yorkshire (Holdsworth 1978, 11), but only in recent years has it been recognised in the East Riding and North Lincolnshire (Hayfield and Watkins, forthcoming). The distribution of this fabric type within Lincolnshire in relation to other early-medieval fabrics is shown on Map 162. It was strongest on the southern bank of the Humber and diminished rapidly towards the central wolds area although Great Limber and West Ravendale were interesting exceptions. Excluding West Ravendale and East Halton Skitter, the G1 fabric consistently formed less than 50% of the recognisable early-medieval unstratified material. The significance of this is accentuated when it is remembered that this early-medieval grouping does not include any of the coarse sandy or shell-tempered fabrics which had defied separation into the medieval time-phases.

Despite its widespread occurrence in the northern parts of Lincolnshire, it was never a common fabric and therefore had only limited lifespan. In contrast, in Yorkshire it persisted and several finer whiteware fabrics seem to have derived from it. The dense clustering of the C2 coarse sand-tempered fabric formed a convincing argument for a production centre in north-east Lincolnshire. However, the more sparse and sporadic distribution of the G1 grit-tempered fabric would make the suggested location of possible production centres more difficult.

It could be argued that it was never produced in North Lincolnshire and was instead imported from Yorkshire. The high proportion of the G1 fabric from East Halton Skitter would seem to offer strong support for this argument, and unlike the coarse sandy tradition, there was no easy distinction of forms either side of the Humber. However, present evidence suggests that coarse wares were rarely traded across the Humber, and an alternative argument could be suggested.

One of the other fabrics in this tradition, the Doncaster: Hallgate C fabric (GD) was one of at least four fabric types, representing four different traditions which were known to have been produced from Doncaster during the medieval period. There is nothing to suggest that pottery production at Doncaster was in any way exceptional, save perhaps that we know so much about it. Doncaster itself was also a rather unexceptional market town during the medieval period (Magilton 1977, 32-36), and might therefore prove typical of urban pottery industries. Recent evidence from Doncaster now suggests that all three Hallgate fabrics were at one stage in contemporary production (Buckland et al in prep.) During the late-saxon period, Lincoln had produced shell-tempered fabrics (SL), a coarse sandy greyware fabric (CL) and a splashed glazed jug fabric (ML) (Coppack 1980, 149 and Lauren Adams pers. comm.). At Nottingham the sand-tempered finewares from the Glasshouse Street kilns differed markedly from the smoother wares thought to have been produced from St Anne's Street (Coppack 1978(a), 21-25). There is, therefore, growing evidence that several fabrics could be produced at the same time from the same centre.

Having established this possibility an examination of the role of the grit-tempered Hallgate C fabric at Doncaster reveals that it was limited to a short time-span, and that it was never numerically of any consequence in the town's assemblages even during its production period (Buckland et al, 1979, 53-59). Similarly the St Anne's Street material at Nottingham proves a rarity within the town (Coppack 1978(a), 21-25 and information Bob Alvey). It could thus be observed that production of a fabric at a market centre was no automatic guarantee of commercial success or popularity. There must have been many instances of failed attempts to make and sell pottery during the medieval period and varying and fluctuating degrees of success amongst those potteries which did become established.

Whereas the clustering densities of a fabric's distribution can be regarded as strong evidence for its place of production, the reverse situation does not automatically follow. Grit-tempered G1 fabrics may have been produced as a minor fabric in North Lincolnshire in the same way as Hallgate C was produced at Doncaster. This would account for the widespread but sparse distribution in the same way that it was suggested that the C3 coarse sandy fabric might have been produced as a secondary fabric to fineware vessels. However, this explanation fails to explain the high proportions of the fabric at East Halton Skitter.

iii: Forms and manufacture

	CP	B	J	PN	Total
G1	59.1	5.3	34.8	0.8	132
GD		66.6	33.3		3
Total	57.8	6.7	34.8	0.7	135

Few complete profiles in the G1 fabric existed amongst the stratified deposits from North Lincolnshire and a number of examples from Beverley (GB) have been used to supplement the comparison plate (Pl.163). More profiles were available from the unstratified material including a number from East Halton Skitter (Pl.26 Nos.12-20).

The table above shows that over half the vessel range was comprised of cooking-pots, but the proportion of fineware forms was over 35%, a much higher figure than that of the coarse sandy fabrics. During the early-medieval period, the region's pottery fabrics had started to specialise, either producing coarsewares or finewares. The G1 gritty fabric appears to have tried to produce both categories of vessels, thus retaining a hold on the old coarseware market it had successfully shared in the late-saxon period, and entering the new and rapidly expanding fineware production of glazed vessels. In this respect it may be no coincidence that this was the one major fabric tradition which failed to survive the early-medieval period.

Generally the cooking-pots and bowls were of a high quality which compared, and at times superseded, the best products of the contemporary shell and coarse sand-tempered fabrics. Like the late-saxon greywares, they were fired harder than their competitors and in terms of degree of porosity and strength of fabric they were probably the best on the market. However, the expanding section of the early-medieval pottery market was the glazed finewares, and the G1 jugs may have failed to compete successfully with the other contemporary fineware fabrics such as the fine sandy wares (F1) and the orangewares (O1). Indeed, the G1 jugs shown on Pl.163, which were typical of their fabric, seem rather crude and lumpy in appearance in comparison with their competitors. It may prove an anachronism to consider the influence of aesthetics on what was essentially a utilitarian product largely designed for poor and uneducated people. Nevertheless, it would be interesting to consider whether the 'less pleasing' appearance of the grit-tempered fineware forms may have contributed to the decline of the fabric.

A recent study of prehistoric artifacts in Yorkshire has demonstrated that 'choice' was an important factor in artifact selection for grave goods (Pierpoint 1980, 255-278). Within prehistoric Yorkshire pottery the criteria of shape, surface finish and quality of decoration were shown to have had a far greater influence over 'choice' than size. The most prestigious axe heads were the better quality examples rather than simply the biggest, (*ibid*, 255 ). Medieval potters were undoubtedly involved in deliberate attempts to attract customers to their wares. It has already been suggested in chapter 3 that the

peak use of decoration on any fabric in the post-splashed-glazed period was often associated with the introduction of that fabric; suggesting that decoration was used to attract a market. The association of glaze with the new vessel forms of the early-medieval period might suggest that glaze itself was principally a form of decoration designed to attract custom. The new fineware fabrics of the early-medieval period would thus appear to have vied with each other to corner their local markets. It seems no coincidence that the gritty wares should fall victim to this competition when their fineware forms were the least visually attractive. The ability of the gritty wares to produce good quality cooking-vessels would have been an advantage in the pre-jug phases of potting, but once the jug became the growth area of medieval potting the advantage would have been dissipated. In this situation the inability of the gritty wares to produce jugs to match the quality of its competitors may have been an important factor in the rapid decline of the fabric during the 12th century.

Once again the production at Doncaster offers a potential parallel for this situation. Substantial pre-jug phases have yet to be identified in Doncaster, but amongst the splashed glazed fabrics there were four basic types, the three Hallgate fabrics and an orangeware, whose origin is, at present, uncertain. Of the three Hallgate fabrics found amongst the kiln material, the gritty fabric was the least well represented (Buckland et al 1979, 13-14). It would appear to have been principally a coarseware, although it produced a considerable number of glazed jugs.

In this respect it was very similar to the G1 fabric. Alternatively, both the A and B Hallgate fabrics were principally jug fabrics, although producing some cooking-vessels (ibid, 13-14). By the early 13th century the gritty 'C' fabric had disappeared, the 'B' fabric was in decline and the 'A' fabric was left as the town's principal jug fabric, whilst the coarsewares were in the hands of a specialised shell-tempered fabric. The specialisation into coarse and finewares had apparently eliminated first the gritty fabric and then, eventually, the 'B' fabric. Again the gritty Hallgate C jugs were the least attractive of the three Hallgate fabrics. It is tempting to suggest that the refusal to specialise and the poorer quality of its fineware forms were the major determining factors in the decline of the grit-tempered fabrics in both Doncaster and North Lincolnshire.

The most complete examples of cooking-pots in the G1 fabric occurred at East Halton Skitter (Pl.26 Nos.14-15). Their slightly clubbed rims would seem to be a derivation from the typical late-saxon cooking-pot rims although their overall form was more medieval in appearance. Knife-trimming of the outer surface was minimal, but Pl.26 No.15 shows knife-trimming of the inner surface, a feature usually confined to early-medieval splashed glazed jugs. A wide variety of rim forms occurred on the cooking-pots which ranged from a true late-saxon form (East Halton Skitter, Pl.26 No.16) through to more clubbed examples (East Halton Skitter, Pl.26 Nos.13-15 and 17-18, and Goxhill, Pl.23 No.13). More angular squared rims were present on some examples (Goxhill, Pl.23 No.12; Thornton Curtis, Pl.32 No.6) although this was a form more commonly found on the Beverley

GB fabrics (Pl.163 No. 26 ). There were also attempts to copy the small simple upright rims of the early-medieval C1 coarse sandy fabric (Thornton Curtis, Pl.32 No.4 and Barrow : St Chads, EM/14/Br, Pl.75 No.20). Other rim forms occurred at Thornton Curtis (Pl.32 No.3), Roxby (Pl.39 No.16) and Lissington (Pl.43 No.13). There would seem to have been a greater degree of variation on the cooking-pot rim than on any other of the local coarsewares.

Amongst the bowl forms only two rim forms occurred, a small squared type (East Halton Skitter, Pl.26 No.19; Haythby, Pl.38 No.74) and a larger everted type with a dished inner rim face (Burnham, Pl.34 No.1; Walcot, Pl.38 No.14; Lissington, Pl.43 No.14). Two profiles exist one for each rim form (East Halton Skitter, Pl.26 No.20 and the Lissington example above) of which the Lissington vessel was glazed on the inner surface. Generally these gritty coarsewares were neat, hard, thin-walled vessels.

Several jug profiles exist, including EM/3/Bt, Pl.73 No.32 and West Ravendale, Pl.8 No.26. They were generally thick-walled and roughly finished. While strap handles were the common early-medieval handle form, these jugs had thicker plainer handles (South Ferriby, Pl.22 No.5; Barton-on-Humber, Pl.18 No.2). Jug rims could either be of a simple upright type (Barton, St Peters, Pl.19 No.26) or a collared type (Habrough, Pl.24 No.28; West Ravendale, Pl.8 No.26).

In general these gritty fabrics remain a fairly enigmatic tradition which appears to have been largely confined to the late-saxon and early-medieval period.

Regional Tradition : Fine Sandy Fabrics

(including fabrics F1, F2, FD, FH)

i: Date range

	1000	1100	1200	1300	1400	1500
F1		--	-----	--	--	--
F2		--	-----	--	--	--
FD		--	-----	--	--	
FH		--	-----	--		

Fine sand-tempered fabrics formed one of a number of early-medieval fabric traditions which had emerged by the 11th or early 12th century. All four of the constituent fabrics in this tradition had a splashed glaze phase of production. By the latter 12th century this tradition was being increasingly overshadowed by the orangewares, although present evidence would suggest that all four fabrics probably survived on a localised basis into the 14th century.

The evidence from North Lincolnshire and the surrounding region suggests that all four of these fine sandy fabrics were in production within the region by the early 12th century, although considerably earlier origins are possible. Hedon's FH fabrics could be sub-divided into three (FH 1-3) with their numerical sequence representing their approximate chronological order. As the town and port of Hedon is not thought to have been founded until the early 12th century, this would seem to represent the earliest likely date for this fabric. (Craven 1972, 5).

## ii: Distribution

The fine sandy, medium sandy and orangeware traditions have had their distribution examined in terms of the total body of sherds recovered in each of the fabrics and secondly on the basis of the occurrence of splashed-glazed sherds. These splashed glazed sherds can now be confidently assigned an early-medieval date and therefore allow some discussion of the earliest phase of these traditions.

Map 165 indicates that the fine sandy fabric was the most commonly occurring splashed glazed tradition in North Lincolnshire. Given the small size of the assemblages<sup>on</sup>/either side of the Wolds, it would seem to have had a fairly even distribution from the Trent to the eastern seaboard. An overall comparison of the full range of the tradition (Map 164) showed it to be of a lesser significance in comparison with other medieval fine-ware traditions; however, the general pattern of its distribution differed very little from that of its splashed glazed vessels (Map 165). This would suggest that there was no dramatic change in the tradition's market areas from the early-medieval to the high-medieval period.

The numerical strength of the fine sandy splashed glazed vessels in comparison to the splashed glazed orangewares or medium sandy wares (Maps 172, 177) has two possible explanations. It could simply have been that the fine sandy tradition was the more important, that is, the more popular, during the early-medieval period. However, it could also mean that the fine sandy fabrics had a longer splashed glazed phase than the other two

traditions. Although the changeover from splashed glazed to suspension glazes was probably fairly swift for each production centre, there was some evidence to suggest that some traditions made the change before others. At Hedon, the earliest group of material has been assigned a date or date range during the first half of the 12th century (EM/58/Hd). Within this group the local fine sandy (FH) wares were largely splashed glazed however, the orangewares from the group belonged to two fabrics. The one fabric (OH) was splashed glazed but the Beverley orangewares (OB) from the group were suspension glazed. Taken at a regional level, it would appear that the orangewares were probably the first of these three major fineware traditions to make the transition to suspension glazed. This must inevitably have some bearing on the comparatively poor showing of the distribution of splashed glazed orangewares (Map 172).

When the total number of fine sandy, medium sandy and orangewares sherds were compared, rather than just the splashed glazed vessels, the widespread distribution of the fine sandy fabrics remained, but their numerical importance had slumped from being the foremost to being the lesser of the three traditions. A more detailed analysis of the distribution of the various constituent fabrics within the fine sandy tradition revealed distribution with neat clustering patterns.

Fabrics F1 and F2 (Maps 166 and 167).

The bulk of the fine sandy sherds from North Lincolnshire belonged to one of these two fabrics. Fabric F1 clustered neatly to the North of Lincolnshire, whereas F2 lay to the South

of a line from Grimsby to Caistor through to Grayingham. It can be observed that the F2 fabric was therefore probably available at Grimsby, Caistor and Gainsborough markets to the exclusion of F1 (Map 167), whereas the reverse was true for the F1 fabric at Brigg and Great Limber (Map 166). The two maps show a very clear-cut marketing division between the two fabrics. The significance of this distribution is enhanced when it is correlated with the distribution of the C2 and C3 fabrics (Map 159). A remarkable degree of similarity existed between the distributions of the F1 and C2 fabrics and between the F2 and C3 fabrics. It suggests that they had similar marketing orbits, and strengthens the arguments for a close manufacturing relationship between the fine sandy and coarse sandy fabrics.

Fabric FD (Doncaster : Hallgate A) (Map 168).

The general distribution of the Doncaster : Hallgate fabrics has already been the subject of some discussion (Buckland et al 1979, 53-55). The Hallgate A fabric would appear to have been one of two fabrics commercially marketed into the Isle of Axholme during the early and high-medieval periods. As the Isle seems unlikely to have had its own production centres during the medieval periods, it had to import all its coarsewares and finewares in from either South Yorkshire or North Lincolnshire. The Hallgate vessels could have reached Axholme via land or water. The Axholme Fens had not yet been drained (Dunston 1909) and river access could have been achieved along the Old River Don or the Turnbrigg Dike (Gaunt 1975, 15-21). Road links were more difficult but routes existed through Haxey

and across the Hatfield Chase (Fletcher 1858). The river trade option is given extra weight by the distribution of Hallgate A vessels on several sites along the East bank of the Trent including Alkborough, Burton-Stather and Somerby by Gainsborough. The navigability of the Trent has already been the subject of detailed research (Barley 1936) which will be summarised in a later section of this chapter.

#### Fabric FH (Map 169)

Although the Hedon fine sandy fabrics have been sub-divided into three varieties (Hayfield, in prep. (c)), they have been considered here as a single entity. Whereas the distribution of the Hallgate A fabric suggested at least a partial degree of river transport, such a means was a necessity for the Hedon fabrics to have reached North Lincolnshire. It can, therefore, be confidently asserted that the distribution of the FH fabric on Map 169 represents a marine based distribution. In this respect it is no coincidence that the major findespot for the FH fabric was East Halton Skitter. The fabric was also strong at Goxhill and Barrow Havens. Further afield at Barton or Killingholme the fabric was of less consequence, as indeed it was further inland at Goxhill (via Barrow and Goxhill Havens) and Thornton Curtis (via the Skitter). The small quantities of the FH fabric involved suggest that the fabric was never deliberately marketed into North Lincolnshire, but instead can be seen as a possible bi-product of local coastal trade along the Humber. Indeed, it could be suggested that Map 169 shows the minor trading ports of North Lincolnshire that had close marine trading contacts with Hedon. Even though these

finewares do not appear to have been marketed on a commercial basis, it must be remembered that their numbers were considerable in comparison to the very few coarseware vessels which crossed the Humber.

An intensive distributional study of fabrics in the East Riding of Yorkshire is impractical, for the number of unstratified assemblages available for study is considerably less than for North Lincolnshire. Nevertheless, it would appear that the Hedon fabrics had a fairly restricted market hinterland. Very few FH vessels have been recognised from the extensive Hull assemblages and only a handful from Beverley, with most of these being confined to 12th and 13th-century deposits. Little work has been done on the pottery to the south and east of Hedon towards Patrington and the ports of Ravenser and Ravensrodd. These latter two ports were of considerable commercial importance during the 13th century (Boyle 1889), but their location, on low lying, isolated sand flats at the approaches to Spurn Point, probably determined an absence of potters due to lack of fuel and clays. On present evidence, therefore, Hedon would have been the nearest available land-based pottery source. The marine transgression which destroyed the port of Ravensrodd took place c.1346 (*ibid*, 38-41). Hedon's decline as a port seems to have begun over a century earlier. As Hull and Ravensrodd began to flourish (Poulson 1840, 10-41) Hedon was reduced to a minor Humber port and market town. Yet if the evidence for pottery production at Hedon is considered secure, the Middle Lane assemblage would suggest that such production continued into the 14th century, but not into the

15th. Whereas it is possible that the decline of Hedon's pottery production owed much to the general moves to rural potteries and the rise of the Humber wares, it may be no coincidence that this decline would also seem to correlate with the destruction of Ravensrodd and the consequent loss of a substantial part of Hedon's possible ceramic market.

The evidence for pottery production at Hedon is still largely circumstantial, but a more convincing argument can be made. The related coarse sandy (CH) and fine sandy (FH) fabrics from the Middle Lane excavations made up over 96% of the assemblage. As the origins of the fabric date to the 12th century an urban production centre would be expected; indeed, the neighbouring towns of Hull, Beverley and Bridlington all produced very small quantities of the fabric. Several partly wasted sherds occurred in the FH2 fabric at Middle Lane, these were sherds which had cracked during firing allowing glaze to seep through to the inner surfaces. Whereas it is conceivable that such vessels could have been sold as seconds, it is unlikely that they would have travelled any great distance from their production source. Amongst the corporation rentals of the borough of Hedon were two for 1448 and 1449 which each mention a Potter Croft, "Wm Sewardby, for a common croft, called Potter Croft, in Magdaleyn way, 4d" (Poulson 1840, 134, 137). There was no mention of potters or potting and the ceramic evidence from Middle Lane would suggest that if the name referred to a clay potter's croft, it must have been archaic in this 15th-century context.

iii: Forms and manufacture

	CP	B	BD	Pitcher	J	P	PN	M	Aqua- man- ile	Total
F1	3.3	0.2	0.2	0.1	92.1	2.7	0.9	0.2	0.1	702
F2	4.0				93.7	2.0	0.3			347
FD					96.1	3.9				51
FH			1.9		96.1	1.9				155
Total %	2.9	0.2	0.4	0.1	93.2	2.5	0.6	0.2	0.1	1255

The table above, based on the North Lincolnshire unstratified material, demonstrates that this was principally a tradition of fineware fabrics. At Hedon these finewares and the coarse sandy coarsewares were related; in North Lincolnshire the distributional evidence suggests a similar relationship between the local wares. The existence of some coarseware forms in these fine sandy fabrics need not detract from this argument as almost all fineware fabrics within the region produced a small number of cooking-pots and bowls. Other forms such as pitchers, pancheons and drinking mugs were also of little numerical importance.

The majority of complete vessel profiles in this tradition belong to the earliest splashed glazed phase of production (Pl.163). These early vessels were usually of a very high standard of potting. However, it was Hedon which by-produced the biggest range of profiles across the full chronological range of the tradition and for this reason the FH vessels will

be considered first.

#### First half of the 12th century

The earliest phase of fine sandy vessels from Hedon were splashed glazed (Pl.90 Nos.1-15 and Pl.170). Although there was some variation in vessel size, there was a general conformity of shape. These thin-walled, well-finished vessels produced little evidence of coil construction except in some of the larger jugs with their thicker walls (EM/58/Hd, Pl.90 Nos. 7-8). It may have been that only the larger vessels were coil-built and in this respect it might be no coincidence that it was usually the larger jugs which had knife-trimming to the lower parts of their inner surfaces. It could be assumed that the larger vessels would have been more difficult to throw than the smaller ones, but alternatively, the smaller ones would have been easier to produce a thinner-walled, finer finish in a wheel-finishing process. This internal knife-trimming, whatever its technological implications, was chronologically restricted to the splashed glazed period, pre c.1150, and can probably be regarded as a manufacturing type fossil of the early-medieval period throughout the region.

The early jug rims on these vessels were generally small and squared with shallow necks (EM/58/Hd, Pl.90 Nos.1-2). The largest early jug profile from Hedon (EM/58/Hd, Pl.90 No.7) had a more complex rim form, suggesting that there was some degree of variation despite the squared form occurrence being easily the most frequent. For this splashed glazed phase the handles were of strap form and applied to the top of the rim with a small fillet of clay underneath to strengthen the rim.

The lower handle attachments were smoothed on with no back fillet and no thumbings. In these respects the handles showed considerable similarity with the handles of the late-saxon pitcher forms in the Torksey/Thetford fabrics (Hurst 1957, 31-60; 1976, 314-318). Generally the lower bodies of the smaller jugs were wiped whilst those of the larger ones were knife-trimmed, although there was some degree of overlap. There was, however, no indication of the use of basal thumbings during this period. The splashed glazes on these vessels were bright and clear even if only rather sparsely applied on the smaller vessels.

#### Second half of the 12th century

The range of Hedon vessels belonging to this 50-year period demonstrated a number of changes and ceramically they were associated with the Hallgate B and Developed Stamford ware vessels. A range of new forms appeared for the first time including glazed bowls, cruets, lamps and pipkins. Pl.91 No.18 was the earliest locally made pipkin in this tradition, and its overall shape and its rounded base closely resemble the imported Rhennish, blue-grey ladles which were proving relatively common contemporary imports (Dunning 1959, 56-60). An example had occurred in the earlier Hedon group (Pl.90 No.26) whilst another was associated with this phase. As no English pipkins have been recorded prior to the importation of these blue-grey ladles, it is possible that the English pipkin form originated as copies. Round-bottomed English pipkin forms were rare and would all seem to be restricted to a 12th-century date.

The range of smaller vessel forms (Pl.91 Nos.19-21 and

Pl.170) had a thick, even, lightly pocked glaze referred to as "developed splashed glazes". However, the fine sandy jugs had made the transition to suspension glazes and, with the possible exception of the gritty wares, were the last of the early-medieval fineware traditions to do so. Amongst the jug profiles there can be observed a tendency towards more globular forms. Examples of internal knife-trimming were becoming rare. Although basal thumbings were present on the orangeware jugs at Thornholme Priory shortly after 1150, they were not used on the Hedon fine sandy wares until after 1200. Jug rims by this time were divided between the small squared types (EM/59/Hd, Pl.91 No.27) and the more numerous collared forms (EM/59/Hd, Pl.91 Nos.23,25) whilst contemporaneous jug handles were attached either to the side of the rims (EM/59/Hd, Pl.92 No.13) or immediately below them. The use of wraps was more common for the upper handle attachments, and although the lower handle attachments were still smoothed on without the use of back fillets, the handle thumbings to secure the 'tail' were fast becoming standard practice. Jugs, Pl.26 No.26 and Pl.92 No.24 were the first decorated vessels in this fabric although contemporary vessels in other traditions, such as orangewares, were more commonly decorated during this period.

The small cruet Pl.91 No.20 was the first vessel in this fabric to have basal thumbings which produced the effect of raising the vessel's base clear of the ground. This vessel was made as a single unit, whereas other ceramic cruets from elsewhere in the country were often made in two sections joined at the waist (Dunning 1969, 226-227).

### First half of the 13th century

Jug Pl.120 No.38 despite its relative completeness, was probably residual as its form, rim and splashed glaze reflect the style of the early 12th-century vessels. The majority of handle forms were by now of the rod type with their upper attachments in the more usual medieval position on the side of the neck (HM/70/Hd, Pl.120 No.21). Fillets of clay were being used to support both upper and lower handle attachments. An interesting regional distinction was provided by the upper handle attachments, which here, were applied without the aid of any lateral thumbings (Pl.120 Nos. 21, 40), whereas on the F1 fine sandy fabric across the Humber such thumbings were almost de rigueur. The use of basal thumbings was becoming common with pairs of thumbings (Pl.120 Nos.21, 23) being the more typical. In general Hedon FH vessels seemed slow to adopt jug decoration which elsewhere had become widespread and varied by the end of the 12th century. Archaeological evidence, however, points to Middle Lane being one of the less affluent areas of Hedon, and if there had been a cost distinction between decorated and plain vessels, then the overwhelming preponderance of plain jugs on this site would be more readily explainable. The use of the horizontal bands of wavy combing seen on Pl.120 Nos.22-23, was a particular early common regional design which was in use from the early 12th century to the latest groups in this study c.1550.

### The second half of the 13th century

This period produced the greatest variety of jug form and

decoration that was ever achieved in the Hedon FH fabrics. Such variety also extended to rim and handle form (Pl.170 including strap, rod and twisted rod forms. Generally, upper handle attachments were plugged, the earliest use of that technique in this fabric. Lower handle attachments included triple as well as double thumbings. These triple thumbings, with the central one being the deeper, appeared to have been peculiar to the FH fabrics. It did not usually occur on other fine sandy fabrics or in fabrics in other traditions. Within the region, it would appear to be a reliable guide to late-13th or early 14th-century Hedon products.

The coil construction of Pl.121 No.19 was particularly interesting because it was a comparatively under-fired example. Generally the evidence for coil construction of these vessels was rare by this period. Other fineware forms have all the visual appearance of having been wheel-thrown and this vessel may simply have been an exception. However, it is worth recalling that the associated coarsewares were all coil-built until the postulated decline of the industry in the later part of the 14th century. The narrower bases of the fineware vessels would probably have made them easier to wheel-thrown than the wider bases of the coarsewares and two technological levels of manufacture may have existed for this reason alone.

The more unusual jug profile amongst this date range (Pl. 122 No.42) would seem to represent a prototype of the 'tall-necked' jugs that were to be found amongst the Humber ware assemblages (Cowick Moat Pl.51 Nos.1-14) of the late-medieval period. This form was never common in the region and its shape

owes much in inspiration to the high-medieval whiteware forms from the Vale of York (Holdsworth 1978, 28, Fig.12 No.148).

#### The first half of the 14th century

Although it is difficult to prove that the Hedon fine sandy fabric did not persist beyond c.1350, it may be significant that this was the last, and the smallest, group of vessel profiles from the Middle Lane assemblage. Jug, Pl.123 No.9, would seem to represent the final development of the FH jug and was a typical, tall-necked jug form. It was unfortunate that this vessel was not more complete and that there were no other jug profiles of similar date. The glazed bowl or pancheon was never a very common medieval form in East Yorkshire, indeed, it would appear to have been marginally less popular than it was in North Lincolnshire where, in turn, it was less popular than it was in South Lincolnshire. It suggests that there were probably certain basic regional preferences for particular forms. Whether this reflects differences in fashion or something more tangible, such as differences in agriculture producing a commensurate difference in kitchen requirements, is difficult to decide.

Pl.125 No.31 was the latest pipkin profile to be recovered in this fabric although smaller, probably residual, sherds occur later on this and other sites. The traditional pipkin form was becoming less common by the 14th century, and as it was essentially a cooking-vessel, it would be tempting to link this with the gradual decline in the number of cooking-pots during the late-medieval period. Alternatively, it could be argued that the form was superseded by the two-handled tripod pipkin forms. These were being imported from the Low Countries

in increasing numbers during this period, and were already generating copies in local fabrics.

#### The Doncaster Hallgate A fabric (FD)

The fine sandy FD fabric was only one of at least three separate fabrics from three separate regional traditions that were produced at Doncaster. The full production range of each fabric has still to be firmly established. Although the A fabric was present in a splashed glazed, early 12th-century, phase of potting (EM/43/Dn) there may have been a period in the latter part of the 12th century when the whole of Doncaster's pottery production was given over to the white B fabric. By the end of the 12th or early in the 13th century the B fabric disappeared and the re-emerged A fabric asserted itself, becoming the town's principal fineware fabric. The precise mechanisms and chronology of these changes are still not fully understood, but the relationships of these various Doncaster fabrics were probably more complex than the present writer had originally supposed (Buckland et al 1979, 55-57).

In many respects the Doncaster A fabric forms compare with those of the other fabrics in the fine sandy tradition (ibid, 38-53). Jugs came in two basic shapes; globular (ibid, 27 Fig.10 No.41) and cylindrical (ibid, 32 Fig.13 No.127). The globular type had plain, knife-trimmed bases usually without thumbings, whilst the cylindrical forms had a pedestal base. Although some rod and twisted rod handles were present amongst the waster assemblage, the principal form was the strap handle which would seem to have persisted longer in this fabric than it did elsewhere in the region. A more detailed discussion of

these waster forms has already been published (Buckland et al 1979, 13-20).

The typical, decorated Hallgate A jug with its tubular spout, rim type and applied, notched strip decoration (ibid, 24 Fig.8 No.22) has a number of close regional and national parallels. The Doncaster Hallgate B fabric also produced similar forms, a reconstructed profile coming from the Hedon : Middle Lane assemblage. Remarkably similar profiles occurred amongst the Developed Stamford fabrics (Kilmurry 1977, 58-59, Group 24, and Hedon EM/59/Hd, Pl.92 No.29) and on the Glasshouse Street and St Anne's Street kiln material from Nottingham (Coppack 1978, 24 Fig.2 No.27). Several white sandy vessels from Beverley (WB) produced traces of a similar vessel form (EM/56/Bv, Pl.88 No.24). Coppack has suggested that the similarities between the Doncaster and Nottingham vessels resulted in a Doncaster potter moving to Nottingham (Coppack 1978(a), 25). Whereas this cannot be completely beyond the bounds of possibility, it is most unlikely. The similarities in form can be observed on late 12th and early 13th century jugs (in a variety of fabrics) from Yorkshire, south to the East Midlands. Of the various fabrics involved, only the Developed Stamford ware had a sufficiently wide distribution to have had an influence across the entire north-eastern part of England which produced this vessel form. It is perhaps a little more likely that this jug form was sufficiently popular to become part of the repertoire of several regional traditions. The seemingly close date range of all the vessels of this type suggests a greater astuteness of local potters to prevailing fashions than may hitherto have been appreciated (Hodges 1974,

Le Patourel 1976).

To clarify the more complex published tabulation of waster forms from Doncaster Hallgate (Buckland et al 1979, 13-14) the following table was prepared to show a percentage comparison of the identified forms in the two major fabrics.

	J	P	CP	PN	OT
B	57.3	4.5	27.5	10.6	0.1
A	72.0	24.3	2.1	2.5	0.1

An overall comparison between the Doncaster A and B fabrics showed that the B fabric had a more varied range than A, which was particularly pronounced in the differing proportion of cooking-pots between the two fabrics. They were only a minor product in the A fabric but formed over one in four of the B products. Almost the reverse was true of the pipkins with just under one in four of the A products being a pipkin. It has been suggested elsewhere in this thesis that pipkins were most probably used as cooking-vessels so this may represent the continuation of a similar percentage of cooking vessels in each fabric with a simple switch in form from cooking-pot to pipkin. However, the end of the 12th century saw an increasing specialisation of the early-medieval fabrics towards either cooking-vessels or finewares. As the A fabric wasters from Hallgate appeared to have been later than those of the B fabric this may instead represent a move towards that specialisation. Certainly from the 13th century, shell-tempered vessels became the dominant coarseware product in Doncaster. However, it must be remembered that the excavated Hallgate wasters were not

chronologically, fully representative of any of the three fabrics recovered. The writer's current work on the Doncaster post-excavation material should lead to a greater clarification of the local Doncaster potteries.

Available profiles in the F1 and F2 local fabrics were restricted to the jug forms of the early-medieval splashed glazed phase (Pl.163). These compared quite favourably with the earliest phase of Hedon jugs, although the Lincolnshire jugs seemed to have a slightly more bulbous profile. The general techniques of manufacture were also similar and the same development of handles would seem to have occurred. The only stratified examples of the 13th and 14th century vessels in this fabric came from Barrow : Cherry Lane (HM/12/Br, Pl.98 Nos.36-39; HM/13/Br, Pl.99 Nos.8-10), but these were very fragmentary and many may even have been residual. The range of decoration on these and other sherds and their associated vessel forms can best be seen amongst the unstratified vessels in this fabric.

Amongst the splashed glazed jugs in the F1 fabric the square, outward turned rim form was the most common; examples were found at East Halton Skitter (Pl.28 No.1); Kettleby Thorpe (Pl.20 Nos. 48,50); Thornton Curtis (Pl.32 Nos.30-32); Barton (Pl.18 No.4) and Winteringham (Pl.39 No.61). The associated handle forms were usually a thick, strap form (Walcot, Pl.38 No.16; Winteringham, Pl.39 No.62 and Goxhill, Pl.23 No.41). A further near-complete profile from Goxhill (Pl.23 No.34) produced a similar shape to the stratified Barton-on-Humber examples (Pl.73 No.33-4,38). The use of internal knife-trimming on the larger jugs in this fabric was confirmed by a basal sherd

from Walcot (Pl.38 Nos.18).

With the advent of suspension glazes there appears to have been a commensurate growth in the variety of rim forms, handle forms and decoration. The late 12th-century rim form with the neck carrination, which was popular on the tubular-spouted jugs with applied notched decoration, is seen on a sherd from Kettleby Thorpe (Pl.20 No.49), but the form was never common in this fabric. Generally rims became smaller and more upright, the following examples showing some of the range, Goxhill, Pl.23 Nos.37-38; Thornton Curtis, Pl.32 Nos.36-40; Great Limber, Pl.31 No.26. Although there was some variation in handle form the most common was the rod handle (Worlaby, Pl.34 No.64; Kettleby Thorpe, Pl.20 No.56). The typical jug base is seen from Goxhill, Pl.23 No.44. Several examples of rough pedestal bases occurred (Thornton Curtis, Pl.32 No.47) but in one case the pedestal base was applied (Type 1, Goxhill, Pl.23 No.45) and in another the outer edge of the base was formed from an applied strip (Walcot, Pl.38 No.17). The most common method of decoration was plastic rather than incised or impressed; however, a rouletted sherd did occur from Thornton Curtis, (Pl. 32 No.44). Among the designs were vertical strip and pellets (Goxhill, Pl.23 No.39) plain vertical strips (Barton, Pl.18 No.8) and horizontal pellets with incised lines (Thornton Curtis, Pl.32 No.43). In most cases the applied part of the decoration was coated with an iron-wash.

There were several unusual features amongst the jug designs including a notched base (Stallingborough, Pl.32 No.65), an example of which occurred amongst the Hallgate B wasters

Buckland et al 1979, 40, No.277). Two cooking-pot bases from Hedon had similar but more pronounced notching (HM/79/Hd, Pl.122 No.1 and Pl.46 No.35). From Thornton Curtis there was a lower handle attachment with a single thumbing (Pl.32 No.46) and a jug rim which closely resembled those of the related coarseware cooking-pots (Pl.32 No.35).

Amongst the other forms a single pipkin rim is illustrated (Roxby, Pl.39 No.25). Cooking-pots were rare but occurred in a number of forms (Habrough, Pl.24 No.37-38; Goxhill, Pl.23 No.32; Thornton Curtis, Pl.32 Nos.27-28). Two types of bowl rim occurred, a small, squared form probably belonging to a small, early bowl (Goxhill, Pl.23 No.39) and a larger more everted type (Habrough, Pl.24 No.39).

A single aquamanile form was recognised (Barrow, Pl.16 No.10). It came from a field adjoining Barrow Castle earthworks. Excavation by the late W.F. Varley in the 1960s produced a range of pottery restricted to the early-medieval period (material in Hull Museum). It is probable that this sherd belongs to the same era. Unfortunately it was slightly abraded and although it has been provisionally allocated to the F1 fabric it might well have derived from any of the region's fine sandy production centres.

#### Fabric F2

The vessels in this fabric were remarkably similar to those of F1 and instead of repeating the various descriptions already outlined for F1 a series of examples will be listed for each form.

Splashed glazed jugs (Swinehope, Pl.9 Nos.16-20; West Ravendale,

Pl.8 No.27; Winghale Priory, Pl.11 No.8; Thornton-Le-Moor, Pl.13 Nos.46-48).

Suspension Glazed jugs (North Killingholme, Pl.31 Nos.12-13; Haverby cum Beesby, Pl.6 No.23; West Rasen, Pl.15 No.10).

Cooking-pots (Haverby cum Beesby, Pl.6 No.22; Swinehope, Pl.9 Nos.12-14; Thornton-Le-Moor, Pl.13 No.45).

Regional Tradition : Orangewares

(including fabrics O1, O2, OB, OH, OS, OC)

i: Date range

	900	1000	1100	1200	1300	1400	1500
O1			— — — — —			— —	
O2			— — — — —			— — — — —	
OB		—	— — — — —			—	
OH			— — — — —				
OS			— — — — —			— —	

Orangewares were a class of fineware fabrics which first achieved prominence during the early 12th century, although their origins may go back to the end of the late-saxon period. They remained the single most important regional fineware tradition until their decline in the early years of the 14th century.

The earliest group presented here to contain orangeware was EM/52/Bv which probably dates to the 11th century. However, a glazed fineware fabric, not unlike orangeware, was

recovered from pre-conquest groups at Lurk Lane including the groups sealed by, and associated with, the coin hoard of c.A.D. 851 (information Gareth Watkins). These early sherds have been examined by the writer and appear to be fully wheelthrown vessels with thin walls and thick, even, suspension glazes. Sherds in a similar fabric have been recovered from 10th-century levels at York : Coppergate (information Cathy Brookes). It is probable that these were imports from an as yet unlocated source, as they were technically far in advance of the earliest known locally made orangewares which were coil-built and splashed glazed.

The locally made, medieval orangewares had a very fine, smooth-textured fabric which, like contemporary Stamford wares, appeared virtually untempered. As their name suggests the fabric was usually an orange colour, although varying to shades of red and pink. Of all the fabrics which make up this tradition, the Scarborough wares have hitherto been the better known (Rutter 1961, Farmer 1979 ). There is still a regrettable tendency for orangeware sherds found imported elsewhere in the country to be automatically assigned a Scarborough provenance (Farmer 1979), Whilst undoubtedly Scarborough wares were traded over considerable distances, other production centres may have included the ports of Beverley, Barton and Grimsby which would also have been well placed to achieve a wide coastal distribution. The term orangewares was first used by Peter Armstrong when referring specifically to the fine tempered orange products found at Hull (Armstrong 1977, 35-51) which would seem to have derived for the most part from Beverley. As it became increasingly apparent that a range of kilns in

eastern Yorkshire and North Lincolnshire had chosen to produce a series of similar vessels in an almost identical fabric it seemed appropriate to use the term orangewares as a loose generic name for this whole regional tradition.

The decline of the orangewares seems to have taken place during the 14th century, although in some places their share of the market was dropping from the late 13th century. At Hull they would appear to have been directly replaced by the Humber wares (Armstrong 1980, 32). However, it was difficult to decide whether the Humber wares were directly challenging the orangeware share of the ceramic market, or whether the orangewares were already in decline and the Humber wares were filling the resulting gap in the market. At Thornholme Priory orangewares had formed the dominant fabric from the site's foundation (c.1150) until their decline in the early 14th century. However, the fabric which replaced it, the M1 medium sandy fabric, as the dominant fineware fabric on the site, had already been occurring on the priory in small quantities from the late 12th century. In this case at least, the M1 fabric would appear to have simply filled a gap left by the disappearance of the orangewares rather than by its own aggressive competition.

## ii: Distribution

### Splashed glazed phase

The quantity of splashed glaze orangewares was considerably less than that of the fine sandy wares, but they showed a greater degree of spatial clustering (Map 172). Three concentrations could be seen, the first around Barton-on-Humber and the southern

bank of the Humber, the second around Grimsby area and a third around Caistor. These three towns may have represented the centres of manufacture for the fabric during the early-medieval period, or alternatively, the principal centres of its marketing. Their quantity in comparison with the fine sandy fabrics suggested a position of secondary importance, but the evidence from Hedon would suggest that the orangewares made the transition to suspension glazes somewhat earlier than the fine sandy fabrics and a numerical imbalance could have arisen for this reason alone.

#### Ordinary or Suspension glazes

Within North Lincolnshire the orangewares were the dominant high-medieval fineware fabric (Map 171). It was most prolific to the north and east of Lincolnshire thinning considerably to the south-west, along the upper parts of the Ancholme valley and the northern tributaries of the Witham. Orangewares were also prolific in eastern Yorkshire at least as far north as Scarborough. They form a frequent, though not common, find at Wharram Percy, but they failed to penetrate the Vale of York in any number. Orangewares occurred as a minor fabric at Doncaster, although they were more common in the early-medieval phases than those of the high-medieval. The type was rare in Lincoln. As a tradition it would seem to have had a predominantly coastal distribution from Scarborough to Grimsby, stretching westwards onto the Yorkshire and Lincolnshire Wolds, but only on major waterways, such as the Humber, did it penetrate any further west. Although its distribution covered a wide area, the principal urban centres contained within it were

ports, either coastal such as Scarborough or Grimsby or inland such as Beverley.

The two principal orangeware fabrics to occur in North Lincolnshire were the 01 and 02 types. Their distribution, which has been contrasted on Map 173, produced a neat north/south division. Of the two, the Northern 01 fabric appeared both the more numerous and the more widespread. Although some sites such as Great Limber and Thornton-Le-Moor showed some overlap between the two fabrics, it was clear that certain market sites such as Scotter and Brigg were committed to the 01 fabric whilst others, such as Thoresway and Market Rasen, fell within the 02 distribution area. Caistor, which had been one of the areas of splashed-glazed orangeware concentrations, now seemed to have been equally divided between the two fabrics. If the town had ever been a production centre for an early-medieval, splashed glazed, orangeware, this was certainly no longer the case during the high-medieval period as both the 01 and the 02 fabrics found a market there.

Lincolnshire would seem to have had at least two production centres for orangeware, one for 01 and another for 02. As they were fineware fabrics of the early and high-medieval periods it is probable that these would have had urban manufacturing sources in common with other contemporary industries at Beverley, Scarborough, York, Lincoln, Doncaster, Nottingham, etc. Taking the evidence of Maps 171 and 173 together it suggests that Barton-on-Humber would have been the most likely source of the 01 fabric and perhaps either Louth or Grimsby for the 02 fabric. This is essentially speculation but with the elimination of Caistor as a possible source, those three towns were the

only major urban centres within the principal areas of orange-ware distribution. From the 18th and 19th centuries, tileries were situated on the southern banks of the Humber around Barton and Barrow Havens which extensively used the estuarine clays. The fabric of these tiles forms an almost exact parallel with the medieval orangeware fabrics both in colour, texture and macroscopic inclusions. Were this also a source for the medieval orangeware clays then it is possible that the enormous clay pits dug for these tileries may have obliterated any evidence of medieval potting.

iii: Forms and manufacture

	CP	B	CW	BD	Pitch.	J	P	PN	M	C	Aq.	OT	Tot.
01	1.2	0.4	0.03	0.15	0.03	93.6	4.0	0.15	0.2	0.06		0.2	3239
02	0.5	0.09			0.09	94	4.9	0.2		0.09	0.09	.09	1111
0S						71.4	28.6						7
0H						100							11
% Tot.	1.05	0.3	0.02	0.11	0.05	93.69	4.23	.16	.14	0.07	.02	.16	4368

As the above table demonstrates, this was principally a fine-ware tradition with over nine out of every ten vessels being jugs. There were also more surviving vessel profiles for this tradition than any other in the region, largely as a result of the extensive quantities recovered from the excavations at Thornholme Priory. As a result there is a considerable body of information regarding changes in forms and types.

### Splashed glazed vessels

Plate 17<sup>4</sup> shows several splashed glazed jugs which belong to a period before 1150. All were in the O1 fabric although splashed glazed sherds also occurred in the O2 fabric amongst the unstratified material. The shapes of the O1 splashed glazed jugs conformed to the types already seen for the fine sandy fabrics and seemed to have an almost identical development of manufacture. There was a little more variation in the rim form. Whereas most fine sandy splashed glazed jugs had squared rims the form was not exclusively used on the O1 fabric. Examples occurred at East Halton Skitter, Pl.28 No.9; Barton-on-Humber, Pl.18 No.10; Thornton Curtis, Pl.32 Nos.56-58. East Halton Skitter produced two different rim forms (Pl.28 Nos.10, 12) but neither of these was particularly common elsewhere. Handle forms were usually a rather thick strap type (Thornton Curtis, Pl.32 Nos.69-71). Bases were wiped or knife-trimmed on either surface but remained without basal thumbings.

### O1 fabric-Ordinary/Suspension glazes.

The earliest jugs of this type occurred at Thornholme Priory, phase 1, dating shortly after c.1150. Of these, Pl.78 Nos.3,6 from EM/29-30/Tp reflected very strongly the earlier splashed glazed vessel forms. In each case their bodies were decorated with applied, iron-washed spots, but they retained the strap handles. Other, contemporary vessels in the group such as Pl.78 Nos. 4, 7, were of a more developed form which was to remain current throughout the remaining lifespan of the O1 fabric. The use of basal thumbing also occurred for the first time on both vessel shapes. Two principal rim forms were found, the

first being an upright squared form with a neck carrination, (Pl.78 No.1) and the second, a simple, upright, rounded form (Pl.78 No.4). An early variety was an everted rim with inner lid seating seen on EM/21/Tp, Pl.77 No.1. Elsewhere in the region there were further varieties such as the folded, indented rims seen at Goxhill (Pl.23 No.51); Burnham (Pl.34 No.15); Great Limber (Pl.3 No.29) and Habrough (Pl.24 No.43). Other forms included the outward indented rim, seen previously on the fine sandy vessels (for example, Kettleby Thorpe, Pl.20 No.49 ; Burnham, Pl.34 No.3). More unusual forms occurred at Barton-on-Humber (Pl.18 No.22/23); Burnham (Pl.34 No.7) - this was copying the early Humber ware rims; Goxhill (Pl.23 No.53) and Risby Warren (Pl.39 No.7).

The applied lips such as at East Halton Skitter (Pl.28 No. 18) or North Killingholme (Pl.31 No.14) were rare but they would appear to be fairly early in date. The earliest recognised in this fabric was from Thornholme Priory, EM/26/Tp, Pl.77 No.10 dating early in the second half of the 12th century and probably belonging to a vessel similar in form to Pl.78 No.3. Such forms can no longer be seen as deriving from imported French Polychrome wares of the late 13th century (Dunning, 1933), as they can now be demonstrated to have existed over a century earlier. Other origins must be sought. The form was never common in the region either in orangewares or other fineware fabrics, but examples are known to have occurred in both the A and B fabrics from Doncaster, Hallgate (Buckland et al 1979, 24, Fig.8 No.30; 38, Fig.16 No.234). They may have derived in part from the 'O' spouts of the late-saxon pitcher forms as they represent a very

similar technique of manufacture. Within the region they would appear to be confined to a period before 1350, one of the later examples occurring from Epworth HM/1/Ep, Pl.95 No.1. A single, late example in an unidentified orangeware fabric occurred at the Bishop's Palace site at Lincoln, sealed by a feature of the mid-15th century (LM/41/L1, Pl.146 No.17). It would be most surprising if this vessel was of such a late date, and it may well be that these groups contained considerable quantities of earlier, redeposited material.

The typical handle form from c.1150-1300 was a ribbed oval; in some earlier forms this was folded (EM/27/Tp, Pl.77 No.27) but such variations were rare and almost certainly all of 12th-century date. At Doncaster: Hallgate, the strap handle persisted into the 13th century, but only a handful of such forms occurred with suspension glazes in the O1 fabric (Brumby, Pl.39 No.49). Orangewares did occasionally copy the ribbed rod handle of the Lincoln wares (Barton, Pl.18 No.25; Goxhill, Pl.23 No.58 and East Halton Skitter, Pl.28 No.36). Later there were copies of the typical Humber ware forms (Conesby, Pl.40 Nos.13-14). Other minor varieties included small plain oval handles (Goxhill, Pl.23 No.64 and No.57 which had the regionally unique feature of a white clay slip over the glaze).

As Pl.174 demonstrated, there was a variety of incised and applied decorative designs, but these were usually neatly regimented into vertical or horizontal rows. Often the applied designs had an iron-wash and occasionally the vertical applied strips were made of a white pipe clay. The use of a deliberate slip was rare but when used, produced a bright clear lemon yellow glaze usually forming a background for applied copper-washed spots

(HM/16/Tp, Pl.100 No.13). Such vessels would appear to have comprised two panels; the one having the slip and resulting yellow coloured glaze whilst the other was left plain producing a bright copper-green glaze (EM/32/Tp, Pl.80 No.2). This form of double-panelled design was rare in the region but has been recognised on an almost complete York ware vessel (Rackham, 1972 Plate E). Almost every assemblage in the northern part of the county produced decorated sherds in this fabric, most of which conform to the types found at Thornholme Priory. However, there were very few rouletted sherds from the site although they proved common elsewhere in the region. The usual roulette was horizontal lines of small squares (Habrough, Pl.24 No.50). Rarer, more complex rouletted designs occurred at East Halton Skitter (Pl.28 No.22) and Walcot (Pl.38 No.25). Similar rouletted forms occurred on the Winksley kiln waste jugs from Yorkshire where Mrs Le Patourel suggested that they were copying imported vessels from such continental sources as <sup>a</sup>Ardenburg (Bellamy and Le Patourel 1970, 116-119). Such imports are still very rare in the region and whereas this may possibly have been the source of inspiration it may instead represent a continuation of the late-saxon cooking-pot decoration which proved so common across the region. The small square notched roulette that occurred at Habrough was the most common form and matches almost exactly the size and style of the late-saxon designs. Rouletting occurred on one or two splashed glazed jugs in other traditions, including an early 12th-century stratified example from Barrow, St Chads (EM/11/Br, Pl.75 No.10). There still remains a chronological gap between the late-saxon and early-medieval rouletting, but it is a small one.

The various linear designs seen on the Thornholme vessels (Pl.174) were occasionally used in less regimented styles (Barton-on-Humber, Pl.18 No.34; East Halton Skitter, Pl.28 Nos. 23, 27) but these were rare. Random applied spots, usually ironwashed, were found on late 12th century vessels at Thornholme Priory and elsewhere, although generally rare they would all appear to be of a similar date. In addition, some of the vessels had a curvilinear, floral motif seen as a complete design on a medium sandy M1 vessel (HM/18/Tp, Pl.100 No.34) but again these were rare (Conesby, Pl.40 No.9; Goxhill, Pl.23 No. 76). The horseshoe design seen as part of the decoration on the same M1 vessel was represented only once in orangeware on a jug from Burnham (Pl.34 No.10). Other unusual techniques included panelled inclosures of copper-washed scales (Thornton Curtis, Pl.32 No.95) and stamped notching also seen on the Developed Stamford jugs (Swinehope, Pl.19 No.90).

From the early 13th century a new technique of decoration was used, relief moulding, where a mould was held against the outer surface of the vessel whilst the inner surface was pressed into the mould. The most common design was the ear of wheat and raspberry motifs most clearly seen on a beautiful H1 vessel from Conesby (Pl.40 No.36). 01 orangeware examples were found from East Halton Skitter (Pl.28 No.32) and Thornton Curtis (Pl.32 No.92). A variation on this also occurred at East Halton Skitter (Pl.28 No.34).

The Scarborough wares are perhaps best known for their range of face and knight jugs (Farmer 1979), but as yet very few have been recognised in the other orangeware fabrics. A splendid example of an 01 face jug came from East Halton Skitter

(Pl.28 No.11) and a rather worn head of a knight from Thornton Curtis (Pl.32 No.65). Allied with these anthropomorphic forms was the use of additional decorative loops of clay usually reaching vertically from the shoulder to the neck. A substantially complete profile was recovered from Thornton Curtis (Pl. 32 No.55) whilst fragments of these loops proved quite common (Goxhill, Pl.23 No.69). A variation on this was the use of two intertwined loops under an applied lip, an example being recovered from Epworth (HM/1/Ep, Pl.95 No.1). Similar decoration was used extensively on both the Hallgate A and B fabrics from Doncaster (Buckland et al 1979, 15). Although few of these forms can be accurately dated they would seem to belong to the late 12th and early 13th century.

The final aspect of the O1 jugs to consider is their bases. Their usual simple forms can be seen on Pl.174, nearly all appeared fully wheelthrown. However, there were some examples with applied bases of both type I and II (Hayfield 1980, 34 and Goxhill, Pl.23 Nos.79, 80, 84). There were a number of baluster formed jugs in the O1 fabric although they were uncommon. A reconstructed profile is illustrated on Pl.174. The pedestal bases associated with this form of jug occurred in a variety of shapes and sizes (Winteringham, Pl.39 No.67; Thornton Curtis, Pl.32 No.97; Barton-on-Humber, Pl.18 No.35 and Kettleby Thorpe, Pl.20 Nos.66-67).

From c.1200 to the decline of the O1 fabric there appears to have been little chronological variation in jug form, design and decoration. The forms which were present in c.1200 were still in use by 1350. On the assumption that all the orange-

wares seen on Pl.174 from Thornholme Priory came from the same source, it implies that three or four successive generations of potters produced a range of pottery jugs which were similar in fabric, form, manufacture, style and decoration. If it can be seen that successive generations of potters could have conformed so closely in terms of potting tradition it becomes a little easier to understand how contemporary styles could also conform from centre to centre. It suggests that a potter's wares could have been largely determined by traditions which could seemingly override any individual "expression" in vessel form. This apparent conservatism can be misleading however, for when the appropriate stimulus or incentive for change was made, the medieval potters' response was generally swift.

Of the total product, pipkins comprised only 4% and yet were still the second most important vessel form in the O1 fabric. The range of pipkin forms shown on Pl.175 was drawn entirely from Thornholme Priory where the vessels were particularly prolific. Typologically the earliest pipkin form in the O1 fabric was unstratified and came from Conesby (Pl.40 No.15). Its handle was attached to the top of the rim and had a splashed glaze. Such handle attachments were common on early 12th century jugs from the region, but they were also used on the "blue-grey" Rhennish ladles (Dunning 1959, 56-60) which may have formed a prototype for the medieval pipkin form. The earliest Hedon (FH) pipkin of the mid-12th century had a round base similar to the "blue-grey" examples. In this respect it was unfortunate that the earliest stratified example from Thornholme Priory should have been missing its base, since the forms of the late 12th

century all had flat bases (Pl.175). All pipkin rims were slightly everted, some having the dished inner rim faces which suggest lid seatings. Similar rim forms occurred amongst the unstratified material and a range of examples occurred at Thornton Curtis (Pl.32 Nos.98-100). Like the jug form the Thornholme Priory sequence suggests that there was little variation of form through time.

Pipkins were usually designed to be held in the right hand and to pour inwards, although some left-handed examples are known. The long handles invariably had a curved or hooked end (Goxhill, Pl.23 No.82; Conesby, Pl.40 Nos.15-17) which may well have been designed to enable the vessel to be hung up on a nail or cord. The great majority of the pipkin forms from Thornholme Priory showed traces of sooting to the basal angles, which implies that they were essentially cooking-vessels. Pipkins may have had a specialised cooking function such as the preparation of sauces and the like, or alternatively, they have have been "individual cooking-pots. The large number found at Thornholme Priory from the small guardrooms of the gatehouse in Area 1 would have provided an appropriate setting for such a function. It is also worth observing that although orangeware lids were rare, where they occurred they were almost invariably of a size which would have fitted the average pipkin (Kettleby Thorpe, Pl.20 No.71; Habrough, Pl.24 No.52 and Thornton Curtis, Pl.32 No.101).

Cooking-pots in orangewares were rare and no full profile has yet been recognised; Pl.32 No.49 from Thornton Curtis represented the most complete form available. Perhaps it was because cooking-pots were not a regular or important part of the

O1 potter's repertoire that there was never a distinctive orange-ware cooking-pot rim form. In almost every example it became apparent that the potter was copying the forms of other contemporary coarseware fabrics. A number of examples occurred which were copying shell-tempered cooking-pots (Thornton Curtis, Pl.32 Nos.50-51; Kettleby Thorpe, Pl.20 No.68; Goxhill, Pl.23 No.46). Others copied the designs of the coarse sandy wares (North Killingholme, Pl.31 No.15; Goxhill, Pl.23 No.47) whilst a few copied those of the gritty wares (Barton, Pl.18 No.15; Nettleton, Pl.31 No.52). Generally it was only amongst the cooking-pots that such close attempts to copy the wares of other traditions could be observed. The limited numbers found demonstrate that they were never produced on a sufficient scale to represent a threat to the markets of the traditional coarseware fabrics.

Although there was the same variety of rim form amongst the bowls there did seem to be at least one distinctive orange-ware form. This was a small, narrow-mouthed bowl with almost vertical walls and small, fully everted rims (Thornton Curtis, Pl.32 Nos.52-53; Great Limber, Pl.31 No.28). Other bowl rims from Thornton Curtis (Pl.32 No.54) and Haythby DMV, (Pl.38 No. 77) were probably of later date as they seemed to be copying the later, thick, everted bowl rims found on the shell and coarse sandy coarsewares. The bowl from Goxhill (Pl.23 No.48) with its applied thumbled band under the rim seems unique; were it not for its small size and lack of sooting it would have been tempting to interpret it as a curfew rim.

Indeed, there was at least one possible curfew fragment in an O1 fabric HM/37/Tp, Pl.110 No.16 which was glazed, a similar

example occurring in the OB fabric from Beverley (HM/66/Bv, Pl. 119, No.4). Only five examples of basting dishes were found, of which one of the earliest was EM/26/Tp, Pl.77 No.25, dating to the late 12th century. Another, unstratified example came from Goxhill (Pl.23 No.83). The six examples of drinking mugs in orangeware included a form in a late-14th century context from Thornholme Priory HM/36/Tp, Pl.107 No.12, and examples from Kettleby Thorpe (Pl.20 No.70) and East Halton Skitter (Pl.28 No.40). These were traditionally a late-medieval form and it is possible that these vessels would be more properly classified under the OC fabric, the smooth, late-medieval fabric variant from the Cowick kilns (Pl.54 Nos.1-4).

Thornton Curtis produced an interesting range of unusual vessel forms in this fabric; Pl.32 Nos.103-104 remain unidentified. Plate 32 No.102 would seem to be a fragment from one face of a flask. Again this was a traditional late-medieval form usually associated with imported fabrics (Hurst 1966, 54-59). Two other unidentified forms occurred from Barton-on-Humber (Pl.18 Nos.17-18).

### The O2 orange fabric

In almost all respects of vessel range, form, shape and decoration the vessels in the O2 fabric resembled those of O1. Distinction between the two fabrics was not always easy, the glazes of O2 were perhaps a little lighter and brighter with less of a tendency to mottle, whilst the fabric was also paler, slightly more sandy with occasional tiny voids visible in the fracture. The larger groups of drawn vessels came from the assemblages at Stallingborough (Pl.31 Nos.67-80), Swinehope

(Pl.9 Nos.21-58), Thornton-Le-Moor (Pl.14 Nos.1-21) and Hawerby cum Beesby (Pl.6, Nos.26-40).

There were a number of vessels worthy of specific attention, and several features which were not present or common on the 01 fabric. Strap handles were generally limited to splashed glazed 01 vessels, but in the 02 fabric there were a greater number with suspension glazes (Swinehope, Pl.9 No.34; East Halton Skitter, Pl.28 Nos. 41, 44). Quite a number of these strap handles had thumbled edges, a feature not usually found on 01 jugs (Hawerby cum Beesby, Pl.6 No.35; Ketsby, Pl.41 No.12 and Swinehope, Pl.9 No.45). The use of rouletted decoration was slightly more common on 02 than on 01 and there was a tendency for larger, bolder rouletting. On 02 vessels this was often found around the jug necks, a feature not yet recognised on 01 (Hawerby-cum-Beesby, Pl.6 Nos.30-32; Goxhill, Pl.23 No.85). The applied floral design was equally rare on 02 jugs, but one example occurred with a splashed glaze (Thornton-Le-Moor, Pl.14 No.16). Jug decoration was uncommon on splashed glazed vessels although increasingly more examples are being recognised. However, it was usually confined to incised, or rouletted designs, and this plastic design, usually considered late in date, was particularly surprising. The same site also yielded a fragment of a beard from a face jug (Pl.14 No.19).

Grimsby produced the foot of an aquamanile (Pl.5 No.12), whilst from East Halton Skitter came the most complete example of a pipkin in this fabric (Pl.28 No.49) and an early urinal form (Pl.28 No.50). No examples of this fabric have yet been recognised from stratified deposits and it can only be assumed that its dating, like its forms, were similar to the northern 01 fabric.

The OH vessel form has only been recognised amongst stratified groups at Hedon (EM/58/Hd, Pl.90 Nos.20-22) where it was generally confined to the early 12th-century groups. Some suspension glazed vessels, presumably later, in a similar fabric were recovered from East Halton Skitter (Pl.28 Nos.51-57) but they were uncommon. The source of this fabric is completely unknown, but if it was an early-medieval fabric it could have been a minor fabric product from any one of a number of Yorkshire towns including Hedon. The few examples known in this fabric were jugs and all seemed to conform to the general early-medieval orangeware jug forms.

The OB orangewares are thought to derive from kiln sources at Beverley (Gareth Watkins pers. comm.). Current excavations at Beverley, Lurk Lane, offers the potential of the best, most reliably dated sequence of stratified pottery groups in the region, because of the wealth of external dating evidence and cross-referencing dendrochronological dates which should be available from the extensive waterlogged deposits on the site. Post-excavation work is still in its early stages but the sequence of groups included in chapter 3 provides the earliest stratified occurrences of orangeware in the region.

The jug profiles from Beverley presented on Pl.175 represent a very small sample of the available material, but they do suggest that once again the early-medieval jug types conformed with those of the other orangeware fabrics from the region. The Beverley : Highgate sequence provided evidence that "highly decorated" jugs were also occurring from the second half of the 12th century (EM/56-57/Bv, Pl.88 Nos.20, 27) perhaps confirming

their early dating at Thornholme Priory. This and other evidence from the region, confirms the fact that such highly decorated pottery was widely available from c.1150, some hundred years earlier than previously dated (Bellamy and Le Patourel 1970, 119; Le Patourel 1966(a), 40; Le Patourel 1968, 107-108).

If the region's orangewares were of a standard form during the early-medieval period there were considerable variations by the end of the 13th century. The North Lincolnshire fabrics produced similar globular jug forms with only the occasional baluster form. However, the Yorkshire orangewares were showing an increasing influence from the tall, baluster jug forms that were so common in the Vale of York (Holdsworth 1978, 28-30). This was clearly demonstrated by a group from Hull:Blackfriargate (HM/87/Hu, Pl.126) where the range of late 13th century orangeware jugs contrast with contemporary vessels from North Lincolnshire. It must be stressed that these differences only developed towards the end of the orangeware tradition. It demonstrates that regional traditions were not completely static but were open to the influence of other traditions.

Although pipkins only amounted to about 4% of the total number of North Lincolnshire orangewares, the form was considerably rarer in the East Riding of Yorkshire, few being recognised from Hull in any fabric, and at Hedon they formed less than 1% of the vessel range. This may prove to be a further example of the geographical differences in the occurrence of vessel forms.

Regional Tradition : Medium Sandy Fabrics

(Including fabrics M1, M2, ML, MT)

i: Date range

	1000	1100	1200	1300	1400	1500	1600
ML	--	-----					--
M1			--	-----	--		
M2			--	-----	--		
MT			--	-----	--		

This tradition centred around the influence and inspiration of a single, principal pottery industry in the city of Lincoln, which, unlike most urban industries, saw continuous production throughout the medieval period (Coppack 1980). Pottery research from the town has centred on the material derived from recent rescue excavations, most of which were discussed by Glyn Coppack (ibid.). Nevertheless a synopsis of Lincoln's pottery industry is appropriate to an understanding of the other fabrics within the medium sandy tradition. This synopsis draws heavily on Coppack's work. During the late-saxon period, Lincoln is thought to have been a production centre for both the grey sandy wares and shell-tempered fabrics (ibid., 136-148). Coppack suggested that the early splashed glazed phase of Lincoln ware developed directly from the grey sandy fabric during the late 11th or early 12th century (ibid. 144). Throughout the early years of the Lincoln industry there was still a considerable number of splashed glazed products from Nottingham amongst the city's assemblages and Coppack suggested that these vessels

had an important influence on the origins and development of the later Lincoln industry (ibid, 151).

No splashed glazed vessels have yet been recognised in the Toynton fabric (MT) and only a single rim sherd in the M1 fabric. However, several splashed glazed vessels are now known in the M2 fabric, and it is therefore probable that the M2 fabric was the first 'dependent' fabric to develop under the influence of the Lincoln industry. It is highly probable that the M1 fabric derived from a smaller, rural-based industry. With the exception of the splashed glazed sherd (Roxby, Pl.39, No.32), it first occurred at Thornholme Priory in the second half of the 12th century (EM/31/Tp). There were few stratified Toynton vessels, but a pipkin rim in this fabric occurred at Thornholme in deposits dating to the end of the 13th century (HM/38/Tp, Pl.108 No.23). It has also been found in Lincoln, Flaxengate in pre-1300 contexts (research note by Lauren Adams). Mrs Rudkin has found documentary evidence to suggest that production was underway at Toynton by the 13th century, and it is probable that the products of her "Roses" kiln at Toynton were of a similar date (Mrs Rudkin pers. comm.).

Lincoln's industries survived the general decline of the urban potteries in the late 13th and early 14th centuries and production continued into the late-15th century or beyond, (Coppack 1980, 154). In doing so it created the pattern for its dependent fabrics to follow suit, although at least two were rural industries. The M1 fabric continued at Thornholme Priory into the late-15th century or early-16th. At Toynton, the MT fabric developed into the late-medieval Toynton/Bolingbroke fabric which continued into the late-15th century at Toynton

and then moved to the neighbouring village of Old Bolingbroke where production survived into the post-medieval period. The full date range of the M2 fabric is uncertain as examples were rare in stratified contexts.

This discussion will also make passing reference to the small number of Nottingham medium sandy fabrics which occurred in North Lincolnshire.

## ii: Distribution

These fabrics were strongest in the western and southern parts of North Lincolnshire although around Louth they extended to the coast. Four fabrics from at least four separate sources make up this tradition, and they are discussed in turn below. Map 176 shows the distribution of the total body of vessels in this tradition against those of the fine sandy and orangeware traditions.

### Splashed glazed vessels

Map 177 represents the proportional distribution of the total number of splashed glazed vessels in this tradition against those of the fine sandy, and orangeware traditions. However, the bulk of these splashed glazed vessels were in Lincoln ware (ML) and therefore the pattern of distribution quite closely matched that of Lincoln ware itself.

### ML Lincoln ware

The distribution of this fabric (Map 178) was particularly interesting because it derived from a known source outside the area of North Lincolnshire under study. Although it had a wide-spread distribution, it usually only formed a small percentage

of the medium sandy wares from each site. As might be expected, its percentage of the total medium sandy wares increased gently with its southern proximity to Lincoln. Trade along the River Trent and the Ermine Street may well account for much of its western distribution. Its presence at places such as Great Limber, West Ravendale and Skidbrooke are less easy to explain. The case of Great Limber is particularly interesting as it was a market town without direct access to the river system implying the use of overland transport.

### The M1 fabric

This was one of the two principal fabrics to occur at Thornholme Priory, Appleby. Map 180 demonstrates a distinct clustering of the fabric to the north-west of Lincolnshire. This area would include the hinterlands of such markets as Burton-upon-Stather, Winteringham, Appleby, Brigg, Broughton and Messingham. It was a particularly distinctive fabric and the distribution pattern (Map 180) would suggest a single source. Although there was no archaeological evidence for the production centre of this fabric, documentary evidence suggests the site of a kiln source at Yaddlethorpe. In 1338 a potter at Yaddlethorpe failed in a contract to supply 2000 pots (olle) and dishes (patelle) of earth to Robert Beaumont of Appleby (Lincolnshire Archives Committee 1957/8, 9, 31). The placing of such an order implies the existence of a pottery of some consequence. Whether the potential customer was a wholesaler on Appleby market, a manorial reeve or the priory steward, it implies heavy marketing in the Appleby region. This was the only high-medieval fabric whose distribution clustered in the Yaddlethorpe

region. The 14th century was a time when rural pottery industries were to be expected. Yaddlethorpe was positioned on the western scarp of the limestone ridge where drifts of windblown sand had accumulated whilst to the west of the township lay the alluvial silts of the Trent valley. The village also had a stream running through it offering the potter a ready water supply. It is significant therefore that the principal tempering agent in the M1 fabric was windblown sand. In the writer's opinion, there is a strong possibility that Yaddlethorpe was the production centre for the M1 fabric. Archaeologically this has yet to be demonstrated, especially since there are additional caveats to this documentary reference. The potter involved had failed to supply the pots ordered, and the above discussion is based on the assumption that this was a potter who had hitherto been, and continued to be, a supplier.

The distribution of the M1 fabric stretched to the east coast at places such as East Halton Skitter, Habrough and Grimsby. To the south, it reached Southorpe but not Somerby, and was, therefore, unlikely to have been marketed at Gainsborough. To the south-east, it reached West Rasen but not Toft Newton. It would also appear to have reached the market towns of Caistor and Thoresway, but its absence at Haverby cum Beesby and Brackenborough suggests that it did not reach Louth. It was unfortunate that so few assemblages were available from Axholme as the Trent may have formed a barrier to its western distribution. Only a single sherd occurred at Epworth and a single vessel from Doncaster in a group which probably dates to the 14th century (Site DQ). No examples occurred at Hedon although a few sherds have been found at Hull (information

Gareth Watkins). The fabric has yet to be recognised at Lincoln.

### The M2 fabric

This fabric had a sparse but surprisingly widespread distribution (Map 183) although its denser proportions clustered around the market towns of Caistor, Market Rasen and Thoresway. A production centre in or around these towns would seem likely on the present evidence. The fabric was surprisingly strong at places such as Toft Newton, whose proximity to Lincoln might have presumed a larger number of Lincoln wares. As a fabric its close visual similarity with Lincoln ware has already been observed. The existence of this M2 fabric may explain why Lincoln ware itself did not occur in greater numbers within North Lincolnshire.

### The MT fabric

There was always a problem in distinguishing the early Toynton-type sherds (MT) from the later, developed form (T1). This meant that as only definite early Toynton vessels were included in this category, the numbers may have been substantially understated. Nevertheless, the distribution of the MT fabric (Map 184) suggests that in its earliest phase, the Toynton industry had a far more restricted market than it was to achieve in the late-medieval period. It was limited to the southern parts of the wolds with odd outliers at Willoughton and Humberston. However, while it can probably be assumed that the MT fabrics derived from Toynton-All-Saints, the T1 fabric is likely to have been made in a number of centres.

The distribution of the medium sandy fabrics contrasted with those of the fine sandy and orangeware traditions in that the latter two had clearer spatial divisions both as traditions and constituent fabrics. The various medium sandy fabrics, although having clearer centres of distribution, seemed to have wider and more interlaced distributions. At present the writer can offer no satisfactory explanation for this.

iii: Forms and manufacture

	CP	B	CW	BD	J	P	TP	Cauld.	PN	M	Lid	CN	Urinal	Skillet	Cocur-bit	Scent pot	OT	Total
ML					98	1											1	104
M1	23.9	0.7	1.0	0.25	62.8	0.6	0.33	0.33	9.0	0.33	0.08	0.16	0.08	0.08	0.08	0.08	0.16	1212
M2	3.0	0.3			94.6	1.2			0.5	0.2							0.2	596
MT					100													38
MN					100													14
Total %	15.7	0.6	0.6	0.15	75.3	0.8	0.2	0.2	5.7	0.25	0.05	0.1	0.05	0.05	0.05	0.05	0.2	1964

In the case of the fine sandy and orangeware traditions, strong similarities between the component fabrics in terms of the proportions of the principal vessel forms may be observed. However, within this tradition the M1 fabric can be seen to contrast markedly with the other medium sandy fabrics, and indeed contrasts with the majority of the region's fineware fabrics in that it attempted during the high-medieval period to produce both finewares and coarsewares. The manufacturers of all other fabrics had opted to specialise. Despite this difference there is still considerable cohesion between the component fabrics of this tradition.

#### ML Lincoln Wares

The range of Lincoln ware vessels shown on Pl.179 was drawn from Thornholme Priory and supplemented with a number from the city of Lincoln. Amongst the late 12th-century groups, there would appear to be some typological discrepancy. The Thornholme dating and that of the Lincoln, Bishop's Palace groups would both appear to rest principally on documentary and architectural evidence, or more accurately upon the interpretation of that evidence, (Coppack 1975 and Coppack's Thornholme phasing in Chapter 3:ci). It is possible that the late 12th century was a period of rapid change and development in the pottery industry of Lincoln, or even that different potters within the city were producing different forms. Amongst the phase attributed to the end of the 12th century at Thornholme, there was a knight jug in Lincoln ware (EM/34/Tp, Pl.82 No.25). This represented one of the earliest dated knight jug forms and one of the growing number to be recognised in Lincoln ware.

As the table above suggests, the vast bulk of the Lincoln ware products traded out of the city were jugs, of which a considerable proportion were decorated (North Owersby, Pl.11 Nos.48-50; Thornton-Le-Moor, Pl.14 Nos.41-47; Nettleton, Pl.31 No.54; Kettleby Thorpe, Pl.20 Nos.75-76). Most of the examples cited were vessels with complex applied and stamped designs which would have stood out from the more conventional designs of most of the local North Lincolnshire vessels. However, the number of Lincoln ware vessels from Thornholme Priory would suggest that they were deliberately marketed into the Priory either directly or via local markets. Thornholme did have a number of properties in the city throughout its history (information, Victoria Moore).

The use of decoration would appear to have persisted on Lincoln ware vessels into the 15th century (Pl.179), whereas in most other fabrics the use of decoration on jugs became rare after the 14th century. The evidence for these 15th century Lincoln vessels again rests heavily on the Bishop's Palace groups. The same groups also produced a pipkin (LM/41/L1, Pl. 146 No.16) which was a surprising find at this date. Elsewhere in the region the pipkin form was at its most prolific during the 12th and 13th centuries and had considerably declined in numbers throughout the 14th century. The possibility that these Bishop's Palace groups could have largely comprised earlier, redeposited material has already been discussed in chapter 3.

### The M1 fabric

Compilation plates 181 and 182 demonstrate the most impressive range of complete and dated profiles for any fabric within

the region. It is handicapped only by the fact that they all derive from a single site, that of Thornholme Priory. This fabric has only been recognised in recent years (Hayfield 1977, 32 No.4) and in terms of vessel range and allegiance to pottery traditions it proved to be something of a maverick.

Although jugs constituted the most numerous vessel form, the total fell well short of that achieved by the other fine-ware fabrics. It was usually the jug form which presented the most reliable indicator of the pottery tradition which a fine-ware fabric belonged to. In terms of fabric composition, M1 fell convincingly into the medium sandy category, and from c.1150-c.1350 its jugs did conform to the Lincoln and other medium sandy fabric styles. However, from c.1350-c.1500 the M1 jugs altered in form and style (Pl.181) so as to conform more closely with jugs from the Humber ware tradition. This represented a clear switch in the allegiance of the M1 fabric from one pottery tradition to another. In all the other vessel forms in this fabric, however, (Pl.182) there appeared to be no corresponding change in form. This may have been due to the fact that both the medium sandy and Humber ware traditions were fineware fabrics with no corresponding coarseware range. Apart from the single splashed glazed vessel recognised in this fabric (Roxby, Pl.39 No.32), the earliest vessels occurred at Thornholme Priory. Although several were recovered from late 12th-century groups, they formed a small percentage of the total vessels. The jug forms illustrated on Pl.181 show a range of sizes which were largely plain and rather uninspiring. However, the first half of the 13th century saw an increase in the number of vessels in

this fabric at Thornholme Priory and it was perhaps no coincidence that there was a corresponding proliferation in the incidence and design of decoration. Comparison of the jugs on Pl.181 and the corresponding orangeware jugs (Pl.174) from Thornholme show a complete contrast in form, style, and especially decorative designs. Whereas although the orangeware designs were competent and well-executed, they were usually neatly regimented into vertical or horizontal rows. In contrast, the contemporary M1 jugs showed a more flamboyant style which was very similar to the designs found on the Toynton-All-Saints "Roses" kiln material (Healey 1975 and 1976).

During the first half of the 14th century the M1 jug forms became a little taller and the number of decorated examples declined along with the standard of design. Simple chevrons and the vertical bands of three lines became the dominant, and rather monotonous designs. The whole emphasis was now towards less decoration and a poorer quality of design. By now though the fabric had captured the major share of the Thornholme pottery market, and perhaps, as a consequence, the need for decoration diminished.

From c.1350 the M1 jugs at Thornholme Priory showed a major change of influence from Lincoln wares to Humber wares. The narrower vessels of the 13th century disappeared to be replaced by squatter and more globular jugs which compare with the Humber ware jugs on Plates 188 and 189. The grooved rod handles so characteristic of Lincoln ware jugs disappeared, to be replaced by the ribbed oval handles which were to become similarly characteristic of the Humber wares. Jug decoration all but

disappeared, with only the standard horizontal shoulder lines remaining which were almost de rigueur on Humber ware jugs. The writer has not counted these shoulder lines as decoration, although they formed an unnecessary embellishment in the vessels' manufacture and as such could perhaps be seen as a final debased phase of jug decoration. This style of jug persisted throughout the 15th century and only two jugs (LM/18/Tp, Pl.136 No.4, HM/36/Tp, Pl.107 No.17) attempted to reflect contemporary Lincoln styles, and the contrast in their forms with the majority of contemporary jugs (Pl.181) demonstrates nicely the overall change in tradition.

It is pertinent to consider why there had been this change in tradition during the mid-14th century. It was certainly a period when the Humber wares were beginning to exert their influence in the region and had, for example, become the dominant local ware in Hull (Armstrong 1980, 51). It would be tempting to see the M1 potters reacting to this possible threat to their markets by conforming to the Humber ware styles. It is also worth remembering that the reference to the Yaddlethorpe potter was dated 1338 and this was a failure to deliver no fewer than 2000 pots. If the writer is correct in equating this with the M1 fabric, it is hard to avoid the possibility of linking problems at the kiln site with a major change in the emphasis of the fabrics production. It will also be demonstrated later that this period, c.1350, saw a number of anthropomorphic designs on the M1 vessels whose similarities suggested the hand of a single potter. The change may have been nothing more complicated than a change of potter at the production centre.

There is an unparalleled number of 'other forms' in this fabric, again almost exclusively from Thornholme Priory. The proportion of cooking-pots, at 23.9% amongst the unstratified material, emphasised the way in which this fabric differed from other contemporary finewares. There may have been other differences, particularly in regard to the methods of production. Whereas most high-medieval coarsewares were coil-built, the majority of finewares exhibited all the appearances of having been wheelthrown. However, with few exceptions all the M1 vessels demonstrated traces of coil construction. Wheel-finishing varied in its quality with some vessels showing an extraordinary high quality finish. Generally, however, there was little differences in the quality of finish between, for example, a cooking-pot and a jug. It would be difficult to deride this coil construction as an example of inferior technology at work when the end result matched in appearance most of the contemporary orangeware or Lincoln ware products. The remarkable variety of pottery forms shown on Pl.182 also demonstrates the versatility of the M1 potters who, it would seem, were prepared to "turn their hand" to almost any ceramic form.

With the notable exception of the jugs, there was little change in most other vessel forms throughout the range of this fabric. Cooking-pots remained remarkably similar in form with the same varieties of shape and size occurring in the 15th century as they had in the 13th (Pl.182). The range of complete curfew profiles was particularly impressive, but again showed no real variation in size, style or decoration. Urinals did change in form during the first half of the 13th century from the two-piece vessels with a side aperture (Pl.100 No.36), to

the single piece vessel with the open tops (Pl.111 No.21). However, this would appear to have been a major regional change in form rather than anything exclusive to this fabric. The early style was present in early contexts at Sandal Castle, Wakefield (Moorhouse 1974) whereas the later form was present from the earliest groups at Hull (Armstrong 1980, 54 Fig.18 No.11). The New urinal form was a more simple and straightforward vessel and the saving of time and effort in its production probably had much to do with the change in forms.

Amongst the unstratified material pipkins were a rare form in this and other medium sandy fabrics. However, they appeared to have been an unusually important vessel form at Thornholme Priory especially amongst the orangeware fabric. It was probably for this reason that there were more M1 pipkins found at Thornholme than there were across the rest of North Lincolnshire. They were slightly smaller in capacity than the orangeware examples and had no obvious lid seating to their rims; indeed, in form they appeared to be miniature cooking-pots with handles.

Amongst the earliest forms in this fabric were vessels described as condiments with two shallow dishes joined by a central handle (Pl.100 No.33). A number of these vessels occurred across various parts of Thornholme Priory in early 13th-century contexts. It is uncertain how long the form persisted, sherds of these vessels occurred throughout the Thornholme sequence, but many of them may have been residual. A Humber ware example from Hull occurred in deposits of considerably later date despite having an almost identical form to the earlier M1 examples (Armstrong 1980, 58 Fig.21 No.69). The precise function of these vessels remains unknown although they may have been used

for salt. Until early this century open salts were produced and sold in pairs. However, many earlier wooden examples of the 17th and 18th centuries were constructed from a single block of wood with two adjacent compartments (Evan Thomas 1932, 113 and 116-117, Pl.45 No.G). Some of the medieval ceramic forms have traces of burning and sooting to the undersurfaces and this could have resulted from the heating of salt which had become too moist.

Late-medieval English tripod-pipkins are generally associated with copies of imported Dutch forms. However, examples occurred in the M1 fabric at Thornholme from the late 13th century in conjunction with similar handled forms with longer legs which have been categorised as cauldrons. Recent evidence from Hull has demonstrated that Dutch tripod pipkins were being imported into the port from the late 13th century (Armstrong 1980, 54, Fig.18 No.1) and the link may still prove valid. However, tripod cooking vessels were also a common Midland form from the early-medieval period, and there is a possibility that the form may have evolved from such earlier English products rather than from the later imported vessels.

Plate 182 demonstrates a series of other vessel forms, all from Thornholme Priory. Whether these were a regular part of the M1 potter's repertoire or specific commissions for use at the priory, is difficult to decide. Some vessels such as the shallow dish (HM/44/Tp, Pl.112 No.42), dating to the second half of the 13th century, were remarkably delicate pieces of work, and in this case were probably imitating contemporary silver vessels.

The second half of the 14th century seemed to produce an M1 potter with a taste for anthropomorphic decoration and, one suspects, with a sense of humour. A jug, a curfew, two basting dishes and a basket all dating to this period each had an applied face design. An additional, unstratified sherd (Pl.143 No.26) can also be stylistically associated with these vessels. Although anthropomorphic decoration was not unusual on medieval pottery (Dunning 1971), all these M1 vessels seemed to occur within phases dating from c.1350-1400 and each face displayed a remarkable similarity in design, expression and manufacture. It would thus seem reasonable to assume that they were the work of one man. (To reverse the argument, it was comforting in terms of the reliability of the sites phasing, that these vessels deriving from a number of excavation trenches, should fall within the same phases). The reasons for this decoration are hard to understand. The use of the jug decoration had declined and the M1 potter had full command of the Thornholme assemblage during this period. However, it may be no coincidence that this anthropomorphic decoration should have coincided with the transition of the jug types from Lincoln to Humber ware forms. As this transition and general indication of a new potter at work takes place c.1350 it is hard not to consider the possible influence of the Black Death of 1348 (Zeigler 1969, 178-80) which must surely have affected the medieval pottery industry as it did all other walks of life (Le Patourel 1968, 110). However, despite the changes in jug form and the corresponding use of anthropomorphic decoration, Pl.182 shows that most other forms continued in the same style and manner with no suggestion of a break in tradition.

The M1 fabric remains the most remarkable and enigmatic fabric type from North Lincolnshire. A large number of vessels in this fabric were recovered from the unstratified assemblages in North Lincolnshire and the variety of forms seen in the table above, reflects that found at Thornholme Priory. Many of these were illustrated in chapter 2, but intrinsically they add little to the Thornholme Priory collections seen on Plates 181 and 182, although Kettleby Thorpe produced a wide selection of vessels in this fabric (Pl.21 Nos.1-32).

### The M2 fabric

Very little is known about this fabric and the one stratified example came from Thornholme Priory from contexts dating to the early 14th century (HM/21/Tp, Pl.101 No.30). As the table above suggests, it was principally a jug fabric; the Thornholme example and a jug from Thornton-Le-Moor (Pl.14 No.37) were the closest to a full profile that could be achieved in this fabric. The range of illustrated sherds in chapter 2 suggests that this fabric was very similar to Lincoln wares in form, style and decoration. The occurrence of splashed glazed vessels such as Swinehope, Pl.9 No.75 with its strap handle suggests an origin in the 12th century, but how far into the late or even high-medieval it stretched remains uncertain. Both the distribution and the range of forms recovered in this fabric demonstrated that it was a local North Lincolnshire industry. The unstratified imports from Lincoln, Toynton or Nottingham were, with the exception of two Lincoln vessels, all jugs.

### The MT fabric

Very few sherds occurred amongst the unstratified assemblages which could be reliably associated with the early phase of production at Toynton-All-Saints. Few of those were illustrated and the best guide to the Toynton forms unfortunately remains unpublished (Healey 1975), although Mrs. Rudkin's remarkable waster collection from the "Roses" kiln is now in the hands of Lincoln Museum. Production at Toynton ranged from the 13th century to the 16th in what was probably an unbroken potting sequence. Of this sequence only the vessels of the 13th and early 14th century would seem to relate closely to the forms and designs of the Lincoln wares. From the late-medieval period it became one of a number of centres producing a range of products which differed from Lincoln wares and have thus been attributed a separate (Toynton/Bolingbroke) tradition. There remains a great deal of work to be done on the pottery from Toynton-All-Saints to establish whether there was a slow and gradual change of emphasis in vessel forms or whether, like the M1 fabric, the change was more dramatic.

### The MN or Nottingham Wares

These fabrics from Nottingham relate very closely to the ceramic sequence at Lincoln (Coppack 1980), although it would probably be inappropriate to regard them as part of the same tradition. The majority of Nottingham wares recognised from North Lincolnshire would appear to be of high and late-medieval date, long after the close ceramic affinities had passed, which had existed between the Nottingham and Lincoln industries during the 11th and early 12th centuries. Examples occurred from Epworth

(Pl.35 No.21). East Halton Skitter (Pl.30 No.8), Goxhill (Pl.23 No.86), Haythby (Pl.38 No.85, Burton-upon-Stather (Pl.38 No.49) and Thornton-Le-Moor (Pl.13 Nos.52-54). With the exception of the Thornton-Le-Moor examples, all the sites lay in fairly close proximity to the River Trent or the coast. Additional unillustrated sherds came from Barton-on-Humber. Unlike the Lincoln ware vessels, these Nottingham examples can be regarded as occasional imports or strays which were essentially a bi-product of trading connections rather than a deliberate item of trade.

Regional Tradition : White wares.

(Including fabrics WSt, WDt, WD,WS,WB,WY,RW)

It is probable that no white wares were ever produced in North Lincolnshire. However, they were extensively manufactured in Yorkshire and, along with South Lincolnshire's Stamford wares, they frequently occurred as imported vessels in North Lincolnshire assemblages. They are included here for completeness and have only been discussed in general terms.

i: Date range

	900	1000	1100	1200	1300	1400	1500
WSt	-----		-----				
WDt			-----	---			
WD			-----	---			
WS			-----	-----			
WB			-----	-----	---		
WY			-----	-----	-----	-----	---

ii: Forms and manufacture

	CP	B	Pitcher	J	P	Aquamanile	OT	Total
WSt	19.8		70.2					91
WDt				92.9			7.1	14
WD				100				10
WS	12.5	12.5		62.5		12.5		8
WB				100				3
WY				100				5
RW	5.3	3.5		89.5	1.7			57
Total	11.7%	1.6%	38.8%	46.3%	0.5%	0.5%	0.5%	188

The information in table (ii) above, like all those in this chapter, represents only those vessels found amongst the unstratified material in North Lincolnshire, although vessels from further afield in the region have been used on Pl.185. Most of these fabrics have been the subject of independent study in recent years. With the exception of the early Stamford material (WSt) the fabrics belong to the early and high-medieval periods and demonstrate the sort of vessel forms being traded into North Lincolnshire. With the possible exception of Stamford ware (WSt, WDt) it seems unlikely that any of these whitewares were ever traded on a commercial basis into North Lincolnshire markets. They would appear instead to be casual imports, bi-products of trade rather than deliberate cargoes. It will be seen from table (ii), that with the exception of the early Stamford wares, jugs were the principal imported form (89.7). This would seem to confirm the evidence from the previous section where Lincoln and Nottingham wares arriving in North Lincolnshire were almost all jug forms.

#### Stamford wares (WSt, WDt)

Stamford wares have probably been the most intensively studied of the English medieval fabrics (for example, Hurst 1958, Kilmurry 1977(a), 1977(b) and 1980). As an early fineware fabric it was in many ways "ahead of its time", which was almost certainly one of the principal reasons for it achieving such a wide distribution. Its occurrence across much of lowland Britain has enabled a reasonably close dating framework to be established (Kilmurry 1980, 130-143 and 201-203, and this in turn transforms it into a useful dating tool on otherwise undated assemblages.

It was interesting that it was the early Stamford ware (WSt) which was the most numerous and achieved the widest distribution in North Lincolnshire. During the late-saxon and early-medieval periods it represented the best quality "fine-ware" vessel that was available in the region. By the 12th century when Developed Stamford wares were produced (WDt), there were a number of other whiteware fabrics available to compete for the "quality" market. It was probably no coincidence, therefore, that the Developed Stamford wares failed to have the numerical impact on North Lincolnshire assemblages that their predecessors had enjoyed.

#### Hallgate B fabric (WD).

The Doncaster: Hallgate B fabric has already been discussed in some detail (Buckland et al 1979). In that report the present writer attempted to demonstrate that the fabric probably belonged to the early-medieval period although its exact date range was not clear. There was also evidence to suggest that apart from the home market, the widest distribution of this fabric occurred to the east, a predominantly redware area rather than to the west where whitewares were the dominant tradition.

Hallgate B belonged to a phase of newly emerging fineware fabrics in the early-medieval period. A very similar fabric was being produced at Upper Heaton, as a second, minor fabric to the more numerous white gritty products (Manby 1964). However, the jug forms and decoration were so close to those of Hallgate B that the two sources must be regarded as part of the same tradition. Manby rather cautiously attributed the products of the Upper Heaton kilns to the early years of the 14th century,

but this is based largely on a deed of 1314 referring to the village of "Potter Heaton" (*ibid*, 102). The similarities of this fabric with Hallgate B would also strongly suggest a roughly comparable date range. Although the products of Upper Heaton have still to be independently dated, their forms would suggest a date in the late 12th century.

The Hallgate B waster products all had suspension glazes but the evidence from EM/43/Dn in chapter 3 suggests that there was an earlier splashed glazed phase. In 1979 the present writer had suggested that the three Hallgate fabrics replaced each other chronologically with some degree of overlap (Buckland *et al* 1979, 55-57 and 59). However, the situation would now appear to be more complicated with all three fabrics having a splashed glazed phase, suggesting that they were all contemporary during the 12th century. By the mid-13th century the Hallgate B and C fabrics had gone leaving the A fabric as the principal fineware fabric at Doncaster.

Within North Lincolnshire and its surrounding region the distribution of the Hallgate B fabric was largely coastal with the greatest numbers occurring at ports such as Hedon, or Havens such as East Halton Skitter (Pl.30 Nos.2-4). However, examples occurred at Thornholme Priory (Pl.139 Nos.18-19), Worlaby (Pl.34, No.69), Thornton Curtis (Pl.33 No.26), Walcot (Pl.38 No.22) and West Rasen (Pl.15, No.7). Walcot's position on the Trent makes the fabrics occurrence readily explainable in terms of coastal trade. Its presence at other, inland sites, remains more difficult to understand.

### Scarborough white wares (WS)

A series of vessels in a distinctive hard, white, sand-tempered fabric had been recognised from Hedon and other sites in North Lincolnshire, although a Yorkshire source was suspected the fabric could not be precisely provenanced. Recent finds from Scarborough, however, have produced a range of waster material in a corresponding fabric. A number of these wasters were jugs with splashed glazes.<sup>(7)</sup>

These finds were of particular importance as Scarborough had hitherto been regarded as an exclusively "orangeware" production source (Farmer 1979). The chronological relationship between these white wares and the two orangeware fabrics has yet to be fully determined. However, the splashed glazes on a number of wasters suggests a production period which, in part anyway, pre-dated the earliest known Scarborough I vessels, currently thought to be of late 12th-century date (ibid). Several Scarborough white sherds occurred from stratified deposits in North Lincolnshire, notably at Barton-on-Humber where they were associated with other splashed glazed vessels in groups thought to be of 12th-century date. The evidence from Hedon would suggest that the fabric may have persisted well into the 13th century. However, the aquamanile which occurred in a mid-13th-century context (HM/74/Hd, Pl.121 No.49) may well have been part of the residual element in the group. On this rather sparse evidence a provisional 12th to 13th-century date range for the fabric would seem appropriate. In this respect the fabric has many similarities with the Doncaster:Hallgate B fabric, which also declined during the 13th century to leave a "red" fabric with a near local monopoly. Scarborough can now join Doncaster,

Nottingham, York, Lincoln, Upper Heaton, Cowick etc. as a potting centre which saw contemporary pottery production of a number of contemporary fabrics from differing regional traditions.

Although some of the waster sherds examined by the writer appeared to have been coil-built, the majority showed every indication of having been wheelthrown. Hedon, Barton-on-Humber and East Halton Skitter were the principal sites to produce evidence for this fabric. Unfortunately most were small body sherds and Pl.30 No.5 from East Halton Skitter remains the only rim sherd from North Lincolnshire.

#### Beverley-type white wares (WB)

A white sandy fabric, not unlike the Hallgate B fabric, occurred in considerable quantity at Beverley, but at all times it was numerically subordinated to the orangewares. Its origins remain uncertain, possibly belonging to the Vale of York, but as it can now be demonstrated that Doncaster and Scarborough produced both white and orange fabrics, the possibility of the Beverley orangeware industry having a corresponding white ware fabric becomes far stronger.

The Beverley: Highgate sequence would suggest that this fabric appeared during the late 12th century, replacing earlier white gritty wares, and lasting well into the 13th century. It would therefore seem to have had a potential date range which was once again similar to that of the Doncaster, Hallgate B and Scarborough white wares. Little work has been done on the distribution of this fabric in Yorkshire, but the fabric seems to have had a fairly distinctive sand filler which should allow easy

identification. In particular, if the fabric fails to occur in the Vale of York an East Riding provenance would seem to be confirmed.

Of the three vessels in this fabric recognised from the North Lincolnshire, unstratified material, all were jugs though none have been illustrated. It was interesting that Developed Stamford wares, Nottingham, St. Annes Street wares, Hallgate B and this Beverley-type white fabric should all have produced jugs of similar form, and all had vessels decorated with applied, notched strips (Kilmurry 1980, 311; Coppack 1978(a), 21-25; Buckland et al 1979, 21-34, 40; EM/56/Bv, Pl.88 No.24 and EM/59/Hd, Pl.91 No.31).

#### Vale of York white wares (WY)

So far there has been no definite evidence for the production of a medieval white fabric in York, although there would seem to be a strong probability that there was. Rural production centres are known at Brandsby<sup>(8)</sup> and further afield at Winksley (Bellamy and Le Patourel 1970). Of the many white wares to occur in North Lincolnshire most can be ascribed a "Yorkshire" origin. Among these vessels there was a distinctive conical jug shape with a narrow neck and vertical rows of incised lines and iron-washed spots. A complete profile was recovered from York (Holdsworth 1978, 28 Fig.12 No.148), but examples also occurred at Winksley (Bellamy and Le Patourel 1970, Fig.47 No.35). Several fragments of this vessel form, all in a similar fabric, have been recognised, two from Epworth (Pl.35, No.36 and HM/1/Ep, Pl.95 No.12) one from Cherry Lane (HM/13/Bv, Pl.99 No.15) and another from East Halton Skitter (Pl.30 No.12).

### Miscellaneous white ware fabrics (RW)

Some 57 white ware vessels occurred amongst the unstratified material in North Lincolnshire for which no definite provenance could be suggested. It would seem likely that many of these also derived from Yorkshire. However, the Surrey white ware jug from Epworth serves as a warning that some may have come from further afield.

Although some of the biggest groups of these sherds came from coastal sites such as East Halton Skitter (Pl.30 Nos.9-11) and Barton-on-Humber (Pl.18 No.40) there were a number from inland sites such as Thornton Curtis (Pl.33 Nos.28-29) and Thoresway (Pl.15 No.27).

The majority of English "strays" in North Lincolnshire were white ware vessels, but as a category these could easily be distinguished from the local red fabrics. Stray vessels in red fabrics would thus have been more likely to have been missed amongst the local fabrics. Nevertheless, most of these white wares were occasional finds, novelties perhaps; it is possible they were even regarded as being "Yorkshire" vessels by the contemporary population.

Regional Tradition : Humber wares

(including fabrics H1, H2, OC, GC)

The advent of the Humber wares was, in most places within the region, preceded by a transitional fabric, H1, which will be considered separately from the main Humber ware development.

The H1- Smooth Humber ware.

i: Date range

	1150	1200	1250	1300
H1	--		--	

This fabric was associated with the Humber ware tradition on the basis of form, glaze and extreme hardness. However, in texture and fabric tempering it has a far greater affinity with the orangeware tradition, including the characteristic slight mica content in the filler. In comparison with the orangeware distribution (Map 171), that of the Humber ware fabrics (Map 186, 187) shows a considerable overlap. It could, therefore, be argued that, spatially as well as chronologically, the Humber wares replaced the orangewares. Ceramically the H1 fabric forms an interface between the two traditions.

The date range of this H1 fabric rests on the evidence from Thornholme Priory where it first appeared early in the 13th century (HM/37/Tp) and, although never common, survived throughout the century. Elsewhere, in places such as Hull, the fabric

was eclipsed during the early 13th century by the H2 Humber wares. However, at Thornholme Priory, Humber ware was largely resisted by the M1 Medium Sandy fabric which may consequently have given the H1 fabric a comparatively extended lifespan. Nevertheless, the H1 fabric would seem to provide a reliable indicator of a 13th-century date.

ii: Distribution

Although it has been observed above that the distribution of the H1 fabric correlated with both the orangewares and the Humber wares, it is uncertain whether it represented the final development from the orangeware centres, the earliest phases of the Humber ware factories or the product of an entirely separate source of manufacture.

iii: Forms and manufacture

	CP	BD	J	P	PN	M	LID	CN	Urinal	OT	Total
H1	2.4	0.1	91.4	0.1	0.3	4.0	0.1	1.1	0.1	0.3	746

If the distribution pattern does not demonstrate the origin of the H1 fabrics, the study of their forms would seem to indicate a closer affinity with the Humber wares. As the table above suggests, it was a fineware fabric principally used in the production of jugs which were wheelthrown to a high finish, carefully glazed and decorated with a wide range of designs. An example from Great Conesby DMV (Pl.40 No.36) demonstrates the quality which these jugs could display.

The stratified profiles on Pl.188 all came from group HM/37/Tp, dating to the early years of the 13th century. Their

forms and relief-moulded decorative designs were new to the Thornholme site and probably new to the region. This method of decoration was also used by 13th century orangeware and Humber ware potters and seemed to have been retained by the latter until the late 15th century, occurring amongst the wasters from Cowick Moat (Pl.51 No.1).

The most common relief-moulded motif was the ear of wheat and raspberry seen on the jugs from Conesby (Pl.40 Nos.36-37). Further examples occurred from Thornton Curtis (Pl.33 Nos.8-9). Other, more complicated designs such as whorls (Kettleby Thorpe, Pl.21 No.38) and other, unidentified forms (Haythby, Pl.38 No. 86; HM/37/Tp, Pl.110 No.21) were occasionally used. Amongst the local potteries of the post-medieval period there was a class of decorated jugs called Harvest Jugs (Brears 1971) which remained a popular rural design until the 19th century. It is possible that the ear of wheat and raspberry design on these jugs represented an earlier form of Harvest jug; certainly harvest-time was a time notorious for its degree of liquid celebrations (Ewart Evans, 1969, 69).

A range of more traditional methods of decoration also occurred including an applied armorial design from Thornton Curtis (Pl.33 No.7) and applied panels enclosing stamped decoration (Pl.29 No.10).

The most common jug rim was a simple upright with an internal bevel (Thornton-Le-Moor, Pl.14 No.48; East Halton Skitter, Pl.29 No.6; Thornton Curtis, Pl.33 No.1). A rouletted example from Stallingborough (Pl.31 No.70) was reminiscent of the 02 orangeware forms from Grimsby. Plate 33 No.2 from Thornton Curtis had a most remarkable rim form which is so far unique to

the region. Other forms such as Pl.33 No.5 from Thornton Curtis had rims more typical of jugs from the Toynton/Bolingbroke tradition. Jug handles were generally of the Humber ware types (for example, Habrough, Pl.24 Nos.56-58) but included occasional examples more typical of the orangewares (Thornton Curtis, Pl.33 No.17). Amongst the bases there was an example with some form of applied base or basal angle (Hawerby-cum-Beesby, Pl.6 No.48) and, from Thornton-Le-Moor, a small baluster form (Pl.14 No.50) although alternatively this could have been the base of a chafing dish.

The small proportion of cooking-pots had rim forms clearly reminiscent of later Humber wares (for example Kettleby Thorpe, Pl.21 Nos.33-34). Cisterns were also uncommon but, given the date of the fabric, must have been amongst the earliest of this form from the region (Thornton Curtis, Pl.33 No.25). Several drinking mug forms were also recognised (Thornton Curtis, Pl.33 Nos.22-23).

The H2 Humber wares.

i: Date range

	1100	1200	1300	1400	1500	1600
H2	-----	-----	-----	-----	-----	---
GC			-----	-----	-----	
OC					-----	---

The term "Humber ware" was first devised and widely defined by Jean Le Patourel, encompassing any hard red sand-tempered fabric in the Yorkshire region, including the products

from Kelk (Le Patourel 1965, 113-114) and the Doncaster:Hallgate A fabric (Le Patourel 1966, 160-164). The Yorkshire branch of the Medieval Pottery Research Group recently produced a research note which attempted to clarify the situation by restricting the application of the term Humber wares to the products of Cowick and Holme-upon-Spalding-Moor, while Kelk and the York:Walmgate fabrics were classified as Humber ware-types. In many ways this proved equally unsatisfactory because it failed to recognise the potential existence of unlocated kiln sources producing Cowick-like products. An essential element of a regional tradition was also the attempt at similarity; the M1 medium sandy fabric was not a Humber ware fabric but from the late 14th century its forms and decoration showed a definite attempt to emulate the Cowick products.

## ii: Distribution

The distribution of four late-medieval fabric traditions (Humber wares, Toynton/Bolingbroke fabrics, the Coal Measure fabrics and the Cistercian wares) are considered together. Given the shorter lifespan of the Cistercian wares in terms of the period under study here, these four fabric types dominated the pottery of the region throughout the 15th and 16th centuries.

The distribution of the Humber wares against these other late-medieval fabrics is shown on Map 187. They would seem to have been restricted to north of a line drawn between Gainsborough, Caistor and Grimsby but they were predominant only in the assemblages from north of Brigg and Stallingborough. Having established that the fabric was strongest towards the north of Lincolnshire, one may also see a western bias, since the fabric becomes slightly weaker towards Stallingborough and Grimsby.

The closest known kilns to North Lincolnshire which produced Humber wares were in Yorkshire at West Cowick and Holme-upon-Spalding-Moor. Although one or two vessels from North Lincolnshire assemblages can be confidently assigned to these two kiln groups, it is most unlikely that they supplied the many thousands of Humber ware vessels recovered from North Lincolnshire. The Firsby kilns producing the Coal Measure fabrics had a much more restricted distribution in North Lincolnshire (Map 192), making it more likely that these fabrics were traded in. It would be tempting to hypothesize an as yet unlocated Humber ware kiln site in North Lincolnshire. Given the regional evidence a rural pottery might be expected but the only known reference, at Yaddleshorpe, fails to qualify because the neighbouring site of Thornholme Priory produced few Humber ware vessels during the known history of the Yaddleshorpe kilns.

A number of Humber ware waster fragments have been found at Thornton Curtis. They were, however, recovered widely over the eastern part of the parish and so far no definite clustering can be recognised. Other late-medieval kiln sites suggest that operations were on a large scale with a number of potters working from the same village (Le Patourel 1968, 110-111). On the present limited evidence Thornton Curtis would seem to offer the most likely site of Humber ware kilns in North Lincolnshire.

iii: Forms and manufacture

	CP	BD	J	P	T.P.	PN	M	C	Lobed Cup	CN	Urinal	Chafing dish	Lid	OT	Total
H2	1.3	0.02	88.7	.04	.04	.8	1.6	.02	.02	7.0	.06	.02	.1	.2	5126

In many respects the proportion of vessel forms in the H2 fabric differed little from the range of high-medieval finewares. The proportion of cooking-pots and jugs was marginally lower than in earlier fineware traditions accounting for 1.3% and 88.7% respectively. The major distinction was the higher proportions of cisterns (7.0%) and drinking mugs (1.6%). Neither having been significant in earlier fabrics. In addition there were a number of minor forms new to the local fabrics, such as tripod pipkins, cups, lobed cups and chafing dishes, forming less than 1% of the total.

Although the most complete sequence of Humber ware forms in North Lincolnshire came from Thornholme Priory (Pl.188) several other sites such as Epworth, Burnham and Humberston produced important groups of these vessels (Pl.189). In Yorkshire, extensive late-medieval deposits from Hull also gave rise to a large number of stratified Humber ware vessel profiles. Only a few of these have been used on Pl.189 in order to supplement North Lincolnshire's rather meagre late 14th-century range.

The following discussion supplements the analysis of Humber ware forms in relation to the kiln waste from Cowick Moat seen in chapter 2 with examples from North Lincolnshire.

Small, medium, large and narrow-necked jugs were found, of which the medium sized vessels were by far the most numerous type. Although a considerable variety of shape was encompassed by the "medium sized jug" there seemed to be little chronological variation from the earliest 13th-century examples to those of the mid-16th century. There were however, some points of detail which may be of chronological significance. The forms of the few 12th century examples of Humber ware have yet to be establish-

ed, but those of the 13th century seem to have usually had rims with a sharp internal bevel (Thornton Curtis, Pl.33 No.49; Goxhill, Pl.24 No.2; East Halton Skitter, Pl.29 Nos.17, 19). Many of the more southerly examples of Humber ware jugs had similar rims (Thornton-Le-Moor, Pl.14 Nos.52-54, 57; Kirmond Le Mire, Pl.42 No.32), suggesting that the Humberwares may well have made their greatest distributional impact during the earlier phases of its production. Later rims included simple upright types (Goxhill, Pl.24 No.9; Barton-on-Humber, Pl.18 No.49, 52; Burnham, Pl.34 No.19) and clubbed rims with flattened tops (East Halton Skitter, Pl.29 No.16; Goxhill, Pl.24 No.5; Swinehope Pl.10 No.7). The majority of the Humber ware jug rims were one of these three types. However, several examples appeared to have, or be copies of rim types which were more commonly found on jugs of other contemporary traditions. Plate 38 No.41 from Broughton appeared to copy Lincoln jug rims, the Toynton/Bolingbroke rims were seen on Pl.31 No.18 from North Killingholme or from Brigg, Pl.22 No.4, and typical Coal Measure fabric jug rims were seen at Conesby, Pl.40 No.42 and from Goxhill, Pl.24 No.4. Such imitations were rare. One example from East Halton Skitter, Pl.29 No.21 was almost certainly produced at Holme-upon-Spalding-Moor but few vessels could be directly provenanced to the Yorkshire kilns.

One of the reputed characteristics of the Humber ware jugs was the "kicked-up" ribbed oval handle (Le Patourel 1965, 113-114). Several examples were found (LM/9/Ep, Pl.132 No.13 or Stallingborough, Pl.31 No.88) but by and large the typical jug handle emerged almost perpendicularly from the neck with a sharply-angled bend to the lower body attachment (East Halton Skitter,

Pl.29 No.15 or HM/85/Hd, Pl.125 No.42). These ribbed oval handles (Habrough, Pl.24 Nos.67-71) were the most common type on the medium sized jugs, and almost invariably had two large lateral thumbings on their upper attachments which were often plugged into the neck. Thicker handles frequently, but not universally, had stabbing holes through their width (East Halton Skitter, Pl.29 No.28). Lower handle attachments were often indented although this proved more frequent on larger jugs. It often involved the use of several fingers, as in the East Halton Skitter example. On occasion this indentation was deep enough to fracture the wall of the vessel, when it was usually filled with a smear of clay (Brocklesby, Pl.22 No.43).

Jug decoration was rare on the Humber wares and was largely restricted to the medium-sized vessels. Bands of one or more incised shoulder lines were almost universally used (East Halton Skitter, Pl.29 No.25; Barton-on-Humber, Pl.18 No.50) and this has not been counted as decoration. One of the more common types was the relief-moulded ear of wheat and raspberry designs from the putative Harvest jugs (Barton-on-Humber, Pl.18 Nos.61-62; Habrough, Pl.24 No.63). Simple applied vertical ribs (Conesby, Pl.40 No.48) notched ribbing (Goxhill, Pl.24 No.14; Brigg, Pl.22 No.16), rouletting (Habrough, Pl.24 No.66) and applied thumbed strips (Habrough, Pl.24, No.65) were also found. Mayes' kiln at West Cowick produced a range of complex, but crudely executed applied decoration (Mayes, in prep.) although only one example of this was recorded in North Lincolnshire, at Thornton-Le-Moor (Pl.14 No.62). This decoration was restricted to the earlier phases at Cowick and its occurrence at Thornton-Le-Moor on the southern fringe of the Humber ware distribution

corresponds with the early rim forms occurring on this and other southern sites.

Medium-sized jug bases were usually plain and knife-trimmed (Grimsby, Pl.5 No.22) although a considerable number were untrimmed (East Halton Skitter, Pl.29 Nos.30-31). Several examples of the type II applied base occurred (Hayfield 1980, 34) (Goxhill, Pl.24 Nos.15-16). Examples of applied bases were uncommon and should probably be regarded as the repair or salvaging of pots from the potters wheel when throwing had reduced the thickness of the base to such an extent that it could not be safely fired or used.

Large jugs appeared rare amongst the unstratified material but their size partly diminished the likelihood of their recognition amongst the small sherds which usually made up these assemblages. The evidence from Cowick and Holme-upon-Spalding-Moor suggests that their shape and manufacture differed very little from the medium-sized jugs. Evidence for the small jugs was slightly more plentiful, especially their recognisable bases (Thornton Curtis, Pl.33 No. 73; Risby Warren, Pl.39 No.11; Humberston Abbey, Pl.5 No.48). Several shoulder sherds (Barton-on-Humber, Pl.18 No.54; East Halton Skitter, Pl.29 No.26) demonstrated that the shape of these vessels was, overall, very similar to those found at Cowick Moat (Pl.49).

Amongst the less usual jugs at Cowick Moat were the tall-necked forms (Pl.51), of which very few have been recorded in North Lincolnshire. A baluster base was found at Thornton Curtis (Pl.33 No.74) and a possible imported Cowick example was found at East Halton Skitter (Pl.29 No.29). It is possible that the form was never produced in North Lincolnshire and, indeed,

it was a jug shape which was more characteristic of the Yorkshire pottery traditions (for example, Holdsworth 1978, 28; Fig.12 No.149).

Ceramic cooking-pots may have been much less common in the late-medieval period than they had been earlier. It has been demonstrated above that the high-medieval shell and coarse sand-tempered fabrics had largely disappeared by the early-15th century and the only vessels available would have been the small number produced in Humber ware and the other late-medieval fine-ware fabrics. It is most unlikely that there was no longer a mechanism for their large-scale production. Their decline was more probably due to a drop in their demand. The Humber ware cooking-pots had very characteristic rim forms and overall shapes. One of the best ranges of cooking-pot rims came from Thornton Curtis (Pl.33 Nos.36-48). Although no complete profiles have been recovered from North Lincolnshire, a number have been found amongst recent excavations at Hull (for example, Armstrong 1980, 62; Fig.23 Nos.92-93). The principal characteristic of most of the Humber ware cooking-pot rims was their outward eversion with flat inner faces, often painted with a band of glaze (Kettleby Thorpe, Pl.21 No.41; Brigg, Pl.22 No.3). If these glaze bands had a function it must surely have related to the use of lids on these vessels. Where pottery lids occur in Humber ware they were usually too small for cooking-pots and were more appropriate for tripod pipkins. One can only presume that if cooking-pots were lidded these were made of other materials, such as metal or wood, although no obvious examples are known to have survived in the region.

Even if jugs were numerically, only marginally less important

amongst the late-medieval Humber wares, they may have been of considerably less commercial significance in comparison to the newer forms such as cisterns. The first of the two cistern types, was a basic jug form with a single handle and the bung hole placed frontally at  $180^{\circ}$  to the handle (East Halton Skitter, Pl.29 No.32). The second, and more common type was larger with two opposing handles and a central bung hole (LM/52/Bh, Pl.149 No.15). There seemed to be no chronological distinction between the two types as they occurred together in a contemporary kiln waste deposit at Holme-upon-Spalding-Moor (Pl.52 Nos.14-26).

The jug-shaped, single-handled cisterns had a very similar construction to the medium-sized jugs with plugged upper handle attachments and similar rim forms. The two-handled cisterns had a larger capacity and it was therefore surprising to note that most of the handles were simply smoothed on with no attempt at plugging or indenting (Thornton Curtis, Pl.33 No.77), although there were exceptions (East Halton Skitter Pl.29 No.35). This implies that these larger cisterns were not designed to have been carried by their handles, and presumably were placed on the floor or on shelves as storage vessels for fermenting liquids such as beer; the handles being used to tilt the vessel when required. Indeed, the position of the bung holes would seem to confirm their use for liquids which left sediments. They were usually placed several cms. above the basal angle, ensuring that sediments would be trapped beneath (LM/52/Bh, Pl.149 No.15; LM/30/Tp, Pl.141 No.9 and Goxhill, Pl.24 No.17). Medieval potters seemed to have made more attempts to decorate these vessels than with the majority of contemporary jugs. Applied decoration was particularly common, either in the form of thumbled strips

(Thornton Curtis, Pl.33 No.72) or applied stamped pads (Grimsby, Pl.5 No.24; Thornton Curtis, Pl.33 No.84). The use of applied stamped pads such as these were also found on jugs and cisterns in other fabrics (for example, Holdsworth 1978, 29; Fig.13, No. 160). In the early, post-medieval period it was common for metal vessels and even glass bottles to carry the seal or initials of the owners (for example, Coppack 1975, 26-27; Fig.10 Nos.101-102). This may also have been the case in the later medieval period, and these ceramic pads might have been no more than a further attempt to ape the customs of the wealthier peoples non-ceramic vessels. Combed decoration (Barrow-upon-Humber, Pl.16 No.20; Brigg, Pl.22 No.15) and stamped, applied strips (Kettleby Thorpe, Pl.21 No.52; Barton-on-Humber, Pl.18 No.71) made up the range of decorative types. It was also common to find an applied thumbled strip attached to the rim and neck of these vessels (Conesby, Pl.40 No.56; Thornton Curtis, Pl.33 No. 75; Grimsby, Pl.5 No.23; East Halton Skitter, Pl.29 No.36). At Holme-upon-Spalding-Moor there was evidence that the cistern glazes were brighter and clearer than those on the jugs (Hayfield 1980(a), 108-109). The more lavish attention associated with these cistern forms was probably reflected in the cost of the vessels. Once again the greater use of decoration can be associated with a developing fabric type and a new vessel form.

Drinking mugs were amongst the earliest Humber ware vessel forms to be recognised at Thornholme Priory in the latter part of the 13th century. (Pl.188). These were constructed in much the same way as the small jugs with untrimmed bases and smoothed-on handles, usually with no wraps for the lower attachments.

The forms continued almost unaltered into the 16th century. Near-complete examples occurred from Stallingborough (Pl.31 No. 95) and West Butterwick (Pl.35 Nos.6-7).

Pancheons were comparatively rarer in Humber ware than in Toynton/Bolingbroke fabrics of Central and Southern Lincolnshire. A complete profile occurred at Thornton Curtis (Pl.33 No.91) associated with a type II applied base. This was a fairly small example but larger examples occurred at East Halton Skitter (Pl.29 No.45).

Urinals were all of the later open-topped type, a complete example occurring from Humberston Abbey (LM/12/Hu, Pl.134 No.5) and a large rim sherd from East Halton Skitter (Pl.29 No.44). Other minor forms included lids (Humberston Abbey, Pl.5 No.50; Thornton Curtis, Pl.33 No.89 and Burton-upon-Stather, Pl.38 No. 55), basting dishes (Thornton Curtis, Pl.33 No.90; Kettleby Thorpe, Pl.21 No.58), and tripod pipkins (Kettleby Thorpe, Pl.21 No.59, Thornton Curtis, Pl.33 No.86). Examples of chafing dishes occurred at Habrough (Pl.24 No.73) and Brigg (Pl.22 No.23) and a lobed cup was found at Conesby (Pl.40 No.60). These lobed cup forms were possibly based on contemporary wooden mazer forms which usually had decorative silver mounts in the centre (St John Hope 1887, 136, Pl.13). Plate 33 No.87 from Thornton Curtis appeared to be some form of strainer. Such forms were rare in the medieval period although a little more common as colander forms in local Roman greywares (Buckland and Dolby 1980, 26). Amongst the unidentified forms was Pl.5 No.26 from Grimsby; the base of this vessel tapered to a thin edge and was coated on both surfaces and across the edge with a clear green glaze. It seems likely that this was the deliberate intention of the potter

as there was no evidence to suggest that it was a waster and it was too fine to have been any form of roof furniture.

A smooth, fine fabric (OC) and a gritty fabric (GC) type also occurred amongst the Cowick moat wasters. The relation of these two fabrics to the Humber ware wasters was discussed in chapter 2 where it was suggested that they both formed minor production variants at Cowick. This interpretation was strengthened by the presence of both variants amongst the material recovered from West Cowick by Philip Mayes (Mayes, in prep.; material in Doncaster Museum). It is possible that several forms in the H1 smooth Humber ware fabric, such as the chafing dish base from Habrough (Pl.24 No.73) would be more accurately categorised in the OC fabric, as would some of the apparently late orangeware forms found at Thornholme Priory (LM/21/Tp, Pl.136 No.12 or HM/36/Tp, Pl.107 No.12). Hull also produced examples of both types in groups dating to the mid-14th century or later at Monkgate (HM/89/H1, Pl.128 No.42). Many of the small fine-ware forms, such as cups, recovered from late-medieval contexts and described as Cistercian ware copies could have been produced from Humber ware potteries.

Regional Tradition : Toynton/Bolingbroke fabrics.

(including fabrics T1, TT, TB)

i: Date range

	1200	1300	1400	1500	1600
T1	-	-	-	-	-

This tradition represented a very distinctive type of late-medieval fabric which, in the case of Toynton-All-Saints, developed directly from high-medieval potting traditions. The earliest Toynton material from the "Roses" kiln had forms with affinities to Lincoln ware and its related fabrics. Only distinctive sherds of vessels similar to this Roses material were classified as fabric MT. All other material in this fabric type was listed as T1. The earliest stratified example of the T1 fabric in the region came from Thornholme Priory, Phase 5 (HM/38/Tp) dating to the end of the 13th century. Two jug rims and handles from the first half of the 14th century (Pl.191) already had rim forms characteristic of the Toynton/Bolingbroke tradition rather than the products of the Toynton-All-Saints "Roses/ kiln. Evidence from Lincoln:Flaxengate indicates the existence of the Toynton fabric in contexts dating before 1300 (Lauren Adams, pers. comm.). Further stratified examples of the T1 fabric from North Lincolnshire were rare before the 16th century. However, a jug from the Bishop's Palace site at Lincoln originally described as a Humber ware can now be re-classified as a T1 jug (contra Coppack 1975, 23-4, Fig.9 No.75).

Excavations at Old Bolingbroke Castle suggested that products of the Old Bolingbroke kilns were available from at least the late 15th or early 16th century through to the 17th century (Coppack 1976, 6-24). Throughout this period, the forms of these vessels showed a remarkable, indeed, rather alarming, retention of the late-medieval shapes. Production would seem to have survived at Toynton-All-Saints until the late 15th or early 16th century; Mrs. Rudkin has suggested (pers. comm.) that there may have been a deliberate move of pottery production from Toynton

to the nearby parish of Old Bolingbroke. All late-medieval forms in this fabric from the unstratified assemblages have been included in this thesis. Although a considerable number of these sherds may prove to be of post-medieval, rather than late-medieval date, at present there is no way of distinguishing between them.

## ii: Distribution

The distribution of the Toynton/Bolingbroke fabrics (Map 190) seemed to contrast that of Humber wares (Map 197). Again the boundary line between the two traditions would appear to run from Tetney through Market Rasen towards Gainsborough. Examples of the T1 fabric did occur north of this line and seemed to show some strengthening to the East. However, there may be some chronological perspective to this distribution. At Thornholme Priory the T1 fabric only started to form a significant proportion of the assemblage during the 16th century, although occasionally occurring as from the late 13th century. The same pattern seemed to emerge from Burnham Chapel. It could be suggested from this that the T1 fabric was only able to make inroads into the North Lincolnshire markets from the 16th century, implying a possible weakening of the hold of the Humber wares.

A detailed mineralogical analysis has yet to be made between the various known kiln products in this tradition, and the examples of the T1 fabric from North Lincolnshire. However, the density of the T1 fabric on the central wolds area (Map 190) suggests that there may have been a more northerly source than those kiln sites shown on the map.

iii: Forms and manufacture

CP	B	Bottle	CW	BD	J	P	Tri- pod P	PN	M	C	
3.2	0.1	.02	0.1	0.1	86.3	0.2	0.2	3.0	0.3	0.5	

Lid	CN	Flask	Urinal	Cocur-bit	Chaf-ing dish	OT	Combined Total
0.5	5.8	0.2	0.1	0.05	0.1	0.3	4273

Despite a wide range of vessel forms the jug was still overwhelmingly the most numerous, although, like other late-medieval fabrics, the percentage was slightly lower than that of the high-medieval finewares. There were also some differences compared with the percentage of Humber ware vessels. The percentages of T1 cooking-pots and pancheons were higher than the Humber wares, but the cisterns and drinking-mugs were considerably lower. Given the clear north-south distinction in the distribution of the two traditions, it is reasonable to ask why there should be geographical differences in the occurrence and therefore the demand for various vessel forms. This may even have been due to custom, or perhaps to differences in the agricultural emphasis between the two areas. The north of the county seemed to use more ceramic drinking mugs and cisterns, and the central area more pancheons and cooking-pots. There is no obvious explanation for this except perhaps that the ports of Barton-on-Humber and Grimsby had a reputation for the shipment of grain and malt to

to the north of England and Scotland (Gillett 1970, 26; Brown 1908, 185-188). However, it may be considered flippant to link the two and to suggest that the consumption of beer was greater in northern rather than in central Lincolnshire!

Although this was one of the more numerous fabrics amongst the unstratified assemblages, it was poorly represented amongst the stratified groups and the number of complete profiles is disappointingly small. In her study of Lincolnshire pottery, Hilary Healey included a range of forms in this fabric drawn from the later Toynton-All-Saints kilns. However, in conjunction with kilns from Old Bolingbroke, Coningsby and Kirkstead, these have yet to receive detailed study and publication, representing a major gap in the available ceramic evidence for central and southern Lincolnshire.

Small, medium and large jug categories were apparent. Unlike the Humber wares, there was no evidence for the production of the tall-necked jugs in this tradition, perhaps emphasising that this was essentially a Yorkshire form. The glaze used on these vessels in the Toynton/Bolingbroke tradition proved to have a particularly distinctive, highly pocked surface reminiscent of the pitting found on the earlier splashed glazes. In addition, the outer surfaces of these vessels often had a thin whitish-coloured skin caused, not by the addition of a slip, but from the oxides excreted from the surface of the clay during firing. Reduction of the cores and inner surfaces was perhaps more frequent than on the Humber wares. The firing temperature of this fabric may have been higher than that of Humber ware, producing frequent firing distortions and air blisters in the walls of the vessels.

Although a considerable variety of jug rims occurred in this tradition, there seemed to have been two principal types. The first was an upright form with an internal bevel (Grimsby, Pl.5 Nos.27-28; Thornton-Le-Moor, Pl.14 Nos.73, 78, 75, 69; Hawerby cum Beesby, Pl.7 No.8). The second was an upright rim with an outward fold (Goxhill, Pl.24 No.18; Swinehope, Pl.10 Nos.16,12,15,11; Thornton-Le-Moor, Pl.14 Nos.66,67,77). Although there were some quite different forms (Goxhill, Pl.24 No.19; Thornton-Le-Moor, Pl.14 Nos.72,79,80), most rims would appear to have derived from or been variations of those two basic types.

There were few cases of the upper handle attachments being plugged directly through a hole in the neck as there was in the Humber wares. The most common means of reinforcing the handles on these T1 jugs was to indent them, usually with a single finger (Hawerby-cum-Beesby, Pl.7 No.10; Thornton-Le-Moor, Pl.14 No.77; Swinehope, Pl.10 No.16). This indenting occasionally penetrated too far, in which case a small plug of clay was inserted into the cavity (Swinehope, Pl.10 No.17). It is possible that many of the handles which appeared to have been plugged in the Humber ware manner (Thornton-Le-Moor, Pl.14 No.7)) may also belong to this category. The handle sections were usually irregular and amorphous in shape, contrasting with the more regular ribbed ovals of the Humber wares, although there were some examples of the latter (Hawerby-cum-Beesby, Pl.7 No.8; Burton-upon-Stather, Pl.38 No.56). A selection of jug handle sections has been illustrated from Swinehope (Pl.10 No.18) and Kirmond Le Mire (Pl.42 Nos.42-53). It seemed common practice for the lower handle attachment to be indented as well (Thornton Curtis, Pl.33 No.113; Hawerby-cum-Beesby, Pl.7 Nos.19,21,23).

Whereas the Humber wares had a standard double outer thumbing for their lower handle attachments, there were some examples of T1 jugs with a single thumbing (Habrough, Pl.24 No.74; East Halton Skitter, Pl.30 No.28), although the double thumbing was more common (Grimsby, Pl.5 No.27; Hawerby-cum-Beesby, Pl.7 No.19).

Jug decoration had been common on the earlier Toynton products (Swinehope, Pl.10 Nos.19-24) but it became progressively rarer and less ebullient. The earliest decoration took the form of iron-stained plastic strips laid in whorls (Conesby, Pl.40 No.62), horseshoes (Swinehope, Pl.10 No.20) and more complex designs (Swinehope, Pl.10 Nos.21, 26). Later T1 designs also involved the use of plastic strips, now of self-clay and often with simple stamped decoration (Lm/40/Li, Pl.145 No.19; East Halton Skitter, Pl.30 Nos.29,30). By the 16th century this seemed to have degenerated to simple thumbed strips (Thoresway, Pl.15 No.28; Great Limber, Pl.31 No.45) whose use was generally restricted to cistern forms (LM/12/Hu, Pl.134 Nos.10-11). The use of one or more incised shoulder lines was as common on these fabrics in the late-medieval period as they had been on the Humber wares (Grimsby, Pl.5 No.27; Croxby, Pl.15 No.32) but again, this has not been counted as decoration.

Of all the features of the Toynton/Bolingbroke jugs it was perhaps the bases which showed the greatest divergence from the Humber ware forms. The Humber ware jug bases were usually knife-trimmed, although a large number of the small and several of the medium-sized jugs had untrimmed bases (East Halton Skitter, Pl.29, Nos.30-31; Cowick Moat, Pl.49 Nos.1-4). These untrimmed bases were also common with the T1 fabric (Habrough,

Pl.24 No.81; Sixhills, Pl.43 No.41), but in a large number of cases this was deliberately accentuated and tidied to form pedestal bases, types which were rare in Humberwares. These pedestal bases, ranged from shallow forms (Stallingborough, Pl.31 No.99; Kirmond Le Mire, Pl.42 No.57) to decorated examples (Habrough, Pl.24 No.82; Hawerby-cum-Beesby, Pl.7 No.24) through to exaggerated forms (Sixhills, Pl.43 No.4; Hawerby-cum-Beesby, Pl.7 No.25). Knife-trimming of the basal angles (Kirmond Le Mire, Pl.42 No.59; Sixhills, Pl.43 No.42) and the use of basal thumbings was rare in this fabric; North Owersby Pl.11 No.66 was one of the very few examples. A particularly unusual jug form from Hawerby-cum-Beesby (Pl.7 No.27) is only paralleled by a base in Lincoln ware (North Owersby, Pl.11 No.51); the overall form of these vessels is unknown but the strength of the bases suggests a vessel of some height.

The sole cooking-pot profile from North Lincolnshire, from Kettleby Thorpe (Pl.21 No.60), had a simple everted rim which would appear to be one of the two principal rim forms (Cabourne, Pl.6 No.1; Brigg, Pl.22 No.24; Humberston Abbey, Pl.5 No.51). The second type had a dished inner rim face similar to that on late-saxon cooking-pots of the region (Market Rasen, Pl.11 No.12; Swinehope, Pl.10 No.35; Thornton Curtis, Pl.33 Nos.98,99). As with the jug rims, there was a considerable degree of variation and overlap between the two types. The use of glaze was rare, even to the rim faces (Kirmond Le Mire, Pl.42 No.60) but several examples appeared to have a more deliberate external glaze (Cabourne, Pl.6 No.1; Swinehope, Pl.10 No.36). The use of knife-trimming was uncommon on the jugs, but seemed to have been more regularly used on cisterns and cooking-pots (Kettleby Thorpe

Pl.21 No.60; North Owersby, Pl.11 No.68). The Kettleby Thorpe example was one of the few in this fabric to show any trace of coil construction although the chances of recognising such evidence would have been minimised by the hardness of the fabric.

There were more complete profiles of cisterns than of any other vessel form in this fabric, and it is apparent that, like the Humber wares, there were both single-handled (Kettleby Thorpe, Pl.21 No.61) and double-handled (Stallingborough, Pl.31 No.101; LM/12/Hu, Pl.134 Nos.10-11) types. The rim forms from these vessels seemed to incorporate both jug and cooking-pot rims. The difficulties of distinction between cooking-pot and cistern rims may account for some of the discrepancy between the percentage of vessel forms in the Toynton/Bolingbroke and Humber ware fabrics alluded to above. Certainly, there would seem to have been no distinctive cistern rim form in this tradition. Apart from the handles, the easiest means of recognising cistern rims was the presence of applied, thumbled strips on the rim (Brigg, Pl.22 Nos.25-26) or, more usually, on the upper neck (Keelby Manor, Pl.24 No.96; Grimsby, Pl.5 No.31; Hawerby-cum-Beesby, Pl.7 Nos.32-35). As in the Humber wares, cistern handles were rarely strengthened although there were some examples of plugged upper attachments (Conesby, Pl.40 No.63; Thornton Curtis, Pl.33 Nos. 121, 124). Cistern handles themselves were similar to jug handles and offered no easy means of distinguishing between the two forms amongst loose handle sections. Cistern bases were generally knife-trimmed, with the bung holes set just above the basal angles, again, presumably, to form a sediment trap (LM/12/Hu, Pl.134 Nos.10-11; Thornton-Le-Moor, Pl.14 No.92; North Owersby, Pl.11 No.75). With the exception of Pl.18 No.74 from

Barton-on-Humber all the bung hole pads were plain with a wiped finish. Decoration was apparently more common on cisterns than jugs. The usual design was a simple swag of applied thumbled strips (LM/12/Hu, Pl.134 Nos.10-11) although some stamped designs occurred (LM/39/Li, Pl.145 No.19; Haverby cum Beesby, Pl.7 No.31) and there was a single example of a rather crudely-executed incised design (Thornton-Le-Moor, Pl.14 No.91).

Pantheon rims seemed to have been very simple in form, ranging from small (Thornton Curtis, Pl.33 No.114; Habrough, Pl.24 No.85) to larger everted types which barely altered direction from the angle of the vessel wall (Goxhill, Pl.24 No.22) Linwood, Pl.11 No.11; Swinehope, Pl.10 No.34). Several had dished inner rim faces similar to those found on some cooking-pot forms (Scrafield, Pl.41 No.13; Kirmond Le Mire, Pl.42 No.62; Thornton Curtis, Pl.33 No.119, 118). Only one rim face was decorated (Goxhill, Pl.24 No.21) although a number of the shallower everted rims were reeded (Kettleby Thorpe, Pl.21 No.62; Goxhill, Pl.24 No.20). The internal glaze was usually full and carefully applied. Several examples occurred of type II applied bases (Hayfield 1980, 34) (Barton-on-Humber, Pl.18 No.76; Stallingborough, Pl.31 No.100; Kettleby Thorpe, Pl.21 No.62); in each case the applied base would appear to have been coil-built. Despite the number of examples, it still seems unlikely that these were ever deliberate aspects of their manufacture, but rather were repairs to badly thrown vessels.

There were several examples of tripod pipkins which, like the Humber ware examples seemed to have been based on the contemporary imported forms from the Low Countries. However, despite a range of illustrated examples (Kirmond Le Mire, Pl.42 No.65;

Thoresway, Pl.15 No.30; Thornton Le Moor, Pl.14 Nos.94-96; Haverby-cum-Beesby, Pl.7 Nos.40-41), this was never a common vessel form although body sherds may have been unrecognised. Like the earlier medieval pipkin forms, these vessels usually displayed traces of burning and sooting which suggested that they were used in cooking. Both local and continental forms compare closely with known late-medieval bronze and iron cooking-pots (Lewis 1978, 32-33, 36; Drescher 1968, 23-33). This would seem to provide yet another possible example of pottery forms which bore a close resemblance to vessels in other materials.

Basting dishes were represented by illustrated examples at Sixhills (Pl.43 No.45) and Habrough (Pl.24 No.83). A further example from Thornton Le Moor (Pl.14 No.100) showed a particularly fine pulled lip at the bow of the vessel. All examples showed traces of burning and sooting. Examples of curfews occurred at Thornton Curtis (Pl.33 Nos.129-130) and Swinehope (Pl.10 No.38) and drinking mugs at Thornton Le Moor (Pl.14 No.97), although this latter form was comparatively rare in this fabric compared to the percentage which had occurred in Humber wares. A complete urinal form was recovered from Humberston Abbey (LM/12/Hu, Pl.134 No.8) whilst fragments are illustrated from East Halton Skitter (Pl.30 No.27) and Haverby-cum-Beesby Pl.7 No.45).

Two examples of lids were found (Haverby-cum-Beesby, Pl.7 No.42; Kirmond Le Mire, Pl.42 No.66) each being large enough to fit the rims of the tripod pipkins, several of which had lid seatings on the inner rim face (Kirmond Le Mire, Pl.42 No.65). These lids would also, however, have fitted the two cucurbit fragments which were recognised (Haverby-cum-Beesby, Pl.7 No.43;

Humberston Abbey, Pl.5 No.53). A complete ensemble in the M1 fabric being illustrated from Thornholme Priory (HM/24/Tp, Pl. 102 No.34), although the more usual matching vessel, the alembic (Moorhouse 1972(a), 79-121), has yet to be recognised amongst the region's ceramic forms.

Among the more exotic forms was a series of chafing dish fragments which most probably belong to the later-medieval period. They presumably copied the imported Saintonge vessels and these have yet to be recognised earlier than c.1500 in the region (Hurst 1974, 233). A reconstructed profile came from Thornton-Le-Moor (Pl.14 No.101). Unlike some of the Humber ware examples, the clear air vents would have enabled these vessels to function but none of the five examples showed any evidence of heat or burning to the vessel surface, and it is probable that these were essentially skeuomorphs for those who could not afford the finer examples. Other examples came from Kirmond Le Mire (Pl.42 No.67), Thoresway (Pl.15 No.31) and North Owersby (Pl.11 Nos.77-78).

Two-handled flasks or costrels were known in both Cistercian wares (Brears 1971, 18-23) and the imported German Stonewares (Beckmann 1974, 209-210) (and East Halton Skitter, Pl.30 No.45). Two examples were recognised in the Toynton/Bolingbroke fabrics (Humberston Abbey, Pl.5 No.52; and Thornton-Le-Moor, Pl.14 No. 98) although copies of Cistercian forms were generally less common in this fabric tradition than they had been in the Humber wares. A small pot for ointment or spices was recovered from Kirmond Le Mire (Pl.42 No.69) along with a handle from an unknown vessel form (Pl.42 No.68). Other unidentified forms occurred at Hawerby-cum-Beesby (Pl.7 No.44) and Edlington (Pl.41 No.14).

Like the Humber wares, this tradition saw the production of a wide variety of lesser vessel forms. However, this must not disguise the fact that jugs were overwhelmingly the principal vessel product in this tradition, as in all the late-medieval traditions of the region. If we can assume that the potters' production related almost directly to the demands of the contemporary consumer, then this indicates a conservative and restricted use of pottery forms in the late-medieval households.

#### Regional Tradition: Coal Measure Fabrics

(including fabrics CM1)

i: Date range

	1200	1300	1400	1500	1600
CM1		— — — — —			

These fabrics have been referred to here as the Coal Measure fabrics because the clays from the known production centres derive from the Coal Measure deposits of South Yorkshire. The tradition first appeared in Doncaster during the early 13th century as a soft white gritty fabric with bright, glossy green glazes, but examples of these early vessels have not yet been recognised in North Lincolnshire. The products of the Firsby Hall kilns in Conisborough Park (Magilton 1977, 30) were the first to achieve a regional rather than local distribution. The fabric was recorded at Thornholme Priory as early as the 14th

century, but does not appear to have occurred regularly on the site until the late 15th and early 16th century.

Vessels in this fabric tradition divide into two classes, oxidised (producing purple-red surfaces) and reduced (white fabrics). Whereas there would always appear to have been some chronological overlap between the two, it would appear that the white reduced vessels formed the earlier wares, whereas the oxidised purple coloured vessels did not become common until the later 15th century. As a generalization this distinction has been used to give approximate dates for the unstratified material, but because of the fewness of stratified examples this must be regarded as provisional.

Like the Toynton/Bolingbroke fabrics, this tradition continued well into the post-medieval period, with centres such as Rawmarsh producing pottery into the 17th century (Stephen Moorhouse, pers. comm.). However, in this case it was possible to distinguish late-medieval from post-medieval vessels with more confidence than could be done for the Toynton/Bolingbroke fabrics.

In terms of the fortunes of the "local" Humber ware industries of North Lincolnshire, it is probably significant that the late 15th and early 16th century saw a sudden increase in numbers of both the Coal Measure and Toynton/Bolingbroke fabrics in North Lincolnshire. The very occasional occurrence of both traditions in the area until the late 15th century suggests that the local fabrics had hitherto held a firm grip, almost a monopoly, on the local markets of North Lincolnshire. The increase in the number of regional imports in the late 15th century might suggest that this near monopoly was starting to slip.

ii: Distribution

As this was a particularly distinctive fabric tradition, its products could be reliably provenanced to the South Yorkshire region; in regard to the medieval products which occurred in North Lincolnshire, a more precise origin from the Firsby kilns can be suggested. There was certainly no evidence to suggest that any fabric in this tradition was produced either in North Lincolnshire or East Yorkshire.

The fabric never seemed to have penetrated into the central and southern Wolds area (Map 192). Its more northerly distribution at Barton-on-Humber, East Halton Skitter and Stallingborough may well reflect the coastal trade along the Humber. Perhaps unsurprisingly, the fabric was notably stronger in Axholme. Although the unstratified material from this Wapentake was small, the substantial stratified deposits from Epworth would seem to confirm its importance amongst the late-medieval deposits (LM/1-10/Ep).

iii: Forms and manufacture

	CP	J	PN	CN	Urinal	Chafing Dish	OT
CM1	7.5	59.5	8.1	23.1	0.6	1.2	173

The proportion of vessels in this fabric tradition differed markedly from the previously discussed late-medieval tradition. In particular, the number of jugs was considerably lower in relation to the other vessel forms. Unlike the Toynton/Bolingbroke and Humber ware fabrics, the CM1 fabric was not produced in the region. The proportion of vessel forms shown in the table above reflects pottery traded into the region and may bear

little relation to the proportions of vessel forms from the kiln sources. The products of the Rawmarsh kilns are currently under review by Stephen Moorhouse (pers. comm.) but those of the Firsby Hall kilns in Conisborough Park await study, although a collection of field surface wasters are lodged in Doncaster Museum. These fabrics were almost certainly marketed quite heavily into Doncaster in the late-medieval period as they form a particularly common find from excavations in the town (Buckland et al, in prep.). Although work on the Doncaster assemblages is not yet complete, jug forms would appear to be the dominant form in this fabric (ibid). However, it may be some time before it can be decided how typical the proportion of forms in the abovetable is to the kiln and other domestic assemblages from South Yorkshire.

All vessels in this fabric usually had thick walls and have an overall "heavy" appearance. Most of the examples in North Lincolnshire belonged to the later, oxidised phase of production and have thick purple glazes. The typical jug form of this late-medieval period can be seen from Epworth (LM/9/Ep, Pl.132 No.19). This bevelled rim form with bands of deeply incised lines at neck, shoulder and mid-body also occurred at Conesby DMV (Pl.40 No.65) and on numerous examples at Doncaster. A selection of jug forms in this fabric from Doncaster can be seen on Pl.45 Nos.3, 5-11. Unfortunately, very few of the vessels from the region can be reliably dated. The selection of Firsby jugs from Doncaster cannot be given any true chronological perspective although they almost certainly span a considerable period of time. Plate 45 No.9 could, on purely stylistic grounds, be assigned to the high-medieval period

although the form may well have persisted later. The thicker, heavier looking vessels, Pl.45 Nos.6,7,11 would probably be more at home in a late-medieval context but once again the earliest use of such forms are not known and the reduced/oxidised distinction can only serve as a general guide. Whereas the oxidised, purple fabric seems to be a late-medieval innovation, the use of the white, reduced fabric may have overlapped well into the same period. The late 15th/early 16th-century cess pit fill from Epworth was sealed by a large pancheon sherd in this fabric in the reduced form with pale buff-coloured surfaces (LM/5/Gp, Pl.131 No.10). It would be too convenient to dismiss such a sherd as being residual, especially as the residual element on the site appeared to be low in comparison with that in the late-medieval deposits at Burnham Chapel or Thornholme Priory.

A second vessel in this fabric from Conesby DMV (Pl.40 No. 64) may represent an earlier rim form as it appeared simpler in form to most of the oxidised rims (Pl.40 No.65). Only one jug, Pl.45 No.9, from Doncaster showed any form of decoration and this was similar in design to some of the more stylised decoration found on the 13th and 14th century jugs in the M1 medium sandy fabric (for example, HM/44/Tp, Pl.112 Nos.20-21). Pl.18 Nos.77-78 from Barton-on-Humber were two of the very few vessels to suggest the use of applied bases. In general form jug bases were similar to those of the Humber wares, falling into two basic types; knife-trimmed bases as seen on Pl.45 No.8 or 3, and narrower, untrimmed bases, Pl.18 Nos.77-78. Medium and large-sized jugs made frequent use of plugged upper handle attachments, again in similar fashion to the Humber wares.

Cisterns again fell into double and single-handled types. It had been noted that the single-handled Humber ware cisterns modelled themselves on the ordinary jug form and the single CM1 example so far recognised from the region (Pl.45 No.19) would seem to follow this trend except that it was somewhat larger. The double-handled types had rims with lid seatings (Wroot, Pl. 35 Nos.53-54; Doncaster Pl.45 No.20). As these lid seatings also occurred on both the Humber wares and the Toynton/Bolingbroke fabrics it would seem to have been a basic design feature for two-handled cisterns. The single illustrated lid in this fabric (Pl.45 No.15) would have fitted certain cistern rims but it would also have fitted several cooking-pots (Pl.40 No.67).

Several cisterns had applied pads of clay on the upper body bearing initials (Doncaster, Pl.45 Nos.17-22). These may well be post-medieval in date, but are some of the very few cistern forms to display any form of 'decoration'. It would be unlikely that these initials would be those of the potter. The Robert Stanney pancheons from Old Bolingbroke, Lincolnshire are one of the few instances of a potter marking his wares (Healey 1975). In a later 16th or 17th-century context, the seals of these cisterns would seem to correspond with those found on contemporary wine bottles. Research into these bottles suggests that the seals bore the initials of the merchant or publican for whose use the bottles were intended rather than those of the manufacturers (Charleston 1972, 128-152, Ashurst 1970, 124-129). As these cisterns seemed to have been designed to take liquids with sediments such as cider or ale, the link with the wine bottles becomes stronger.

Cooking-pots occurred at Epworth (Pl.35 No.29) and Roxby (Pl.39 No.43), pancheons at Epworth (LM/9/Ep, Pl.132 No.21); Doncaster (Pl.45 No.12) and Belton (Pl.35 No.5). A single urinal was recognised from Epworth (Pl.35 No.32) and a tripod pipkin from Brigg (Pl.22 No.34). Several fragments of chafing dish were found but these may be post-medieval (Brigg, Pl.22 No.35 and Doncaster, Pl.45 No.17). As with most regional copies of chafing dishes, these were particularly crude skeuomorphs with no sign of burning to indicate that they were ever used as plate-warmers. However, it was of interest that Pl.45 No.17 from Doncaster had both base and dish thrown as a single piece of clay with an applied base to the foot and an applied bottom to the dish. Other regional examples had been made in two sections, base and dish, which were then stuck together (for example, Thornton-Le-Moor, Pl.14 No.101).

The majority of the Firsby-type vessels to occur in North Lincolnshire were the later oxidised types with the characteristic purple glazes. These vessels had been fired to a comparatively high temperature in common with the other regional late-medieval, fabric traditions. Although wheelthrown, these vessels would seem to have had little aesthetic merit and, with only their practicality to commend them, almost defy their classification as "finewares". It was suggested in chapter 3 that the arrival of the Cistercian ware forms created a new fineware category relegating vessels in the traditional late-medieval fabrics to comparative coarsewares. The vessels in this tradition would amply justify such a re-definition.

Regional Tradition: Cistercian Wares

i: Date range

	1400	1500	1600
CIST	- - - - -		

The discussion of the Cistercian wares has been kept deliberately brief and generalised as a fuller study would more properly belong to the post-medieval period for, with the exception of a possible late 15th-century example from Lincoln, Bishop's Palace (Coppack 1975, 28), Cistercian wares have not been found in pre-1500 contexts in the region. This includes recent work at Lincoln, Flaxengate (Lauren Adams pers. comm.) and the numerous excavations at Hull (information Gareth Watkins). There is evidence to suggest that Cistercian ware was in production in Yorkshire from the second half of the 15th century (Brears 1971, 18-23) where it formed a sister tradition to the "Tudor Green" wares of central and southern England (Moorhouse 1979, 53-61). Cistercian wares continued well into the post-medieval period and eventually developed into the "blackwares" of the late 17th and 18th centuries.

ii: Distribution

The distribution of the Cistercian wares (Map 193) has been based on their proportional occurrence in comparison to other late-medieval traditions. However, as this tradition only barely extends into the period studied, Map 193 diminishes their significance. Nevertheless, the map accurately suggests their comparative rarity in their earlier decades of production. The

evidence from Kettleby Thorpe might suggest that the fabric became increasingly more common throughout the 16th century (Brears 1974, 26).

The seemingly heavy distribution of Cistercian wares at Somerby by Gainsborough (Map 193) was almost certainly due to the 'selection' of the retained sherds. Whereas most body sherds would appear to have been discarded, all Cistercian ware sherds seem to have been retained. In comparison, the high proportion at Barton-on-Humber is probably more genuine.

iii: Forms and Manufacture

C	Posset Pots	Lids	Costrels	Total
CIST 96.1	2.7	0.4	0.8	259

Despite the wide range of vessel forms in this fabric type (Brears 1971, 18-23) only four types shown in the table have been recognised in North Lincolnshire. The cup form (including types II and IV) formed the overwhelming proportion of these forms. The "newness" of these Cistercian ware forms has already been observed in the late-medieval discussion of chapter 3. The use of wire-cutting for the bases and saggars for firing was also new to the region. These advances in form and technology may have led to the range of Cistercian products outclassing the traditional fineware forms.

Many of the decorative designs used on the earlier products were also new. Common designs in the region included the stags head surrounded by a vignette of orbs or stars (Barton-on-Humber, Pl.18 No.79; Grimsby, Pl.5 No.33) and rather crudely incised, applied oak leaves (Epworth, Pl.35, No.44; Barton-on-Humber,

Pl.18 No.82). In each case the decoration was an applied iron-free clay producing a lemon colour under glaze. Decoration was rare and seemed largely confined to the earliest periods of production: perhaps the potters of a new fabric were trying to achieve a market. Such vessels must have initially been quite exclusive; they formed one of the two locally-made tablewares to occur in the Epworth Cess Pit group (LM/5/Ep, Pl.131 No.13) which was almost certainly derived from the household of the Mowbray manor.

Several fragments of posset pot occurred, usually characterised by narrow vertical bands of notched white clay seen on the example from Barton-on-Humber (Pl.18 No.80). These vessel forms were probably sold with a matching lid but only one fragment occurred, from Brigg (Pl.22 No.40). This was another new form which certainly had no ceramic predecessors but, like the mazer/lobed cup forms, there were contemporary wooden forms with lids of similar though often larger form called wassail bowls (Evan Thomas 1932, 9-29). Like the mazers these were prestigious vessels made from expensive imported woods. If the posset pots were used in a similar way, the ceramic vessels would have formed the cheaper 'copies'.

Examples of costrels occurred, from North Owersby (Pl.11 No.56) and Worlaby (Pl.34 No.77). A copy of this form has been recognised in Lincoln ware (LM/42/Li, Pl.146 No.22) probably also of 16th-century date and in the T1 fabric from Thornton-Le-Moor (Pl.14 No.98). Unlike many Cistercian forms this vessel type had earlier ceramic parallels from the continent, most notably in the Langerwehe stonewares (Hurst 1977) a local example being recovered from East Halton Skitter (Pl.30 No.45).

### Continental Imports

This final category is a loose grouping of all the vessels from the region which were of continental origin and which owe nothing to the potting traditions of the region. However, in their forms and prestige they may have had a considerable impact on the development of pottery in the region and they form a potentially useful means of determining possible trade routes.

A total of 31 unstratified assemblages contained imported pottery of the saxon and medieval periods (Appendix B). The majority of these imports were either French Saintonge, German stonewares or Low Countries redwares. Examples of all three types were reaching the region from the 13th century (Moorhouse 1972, 21-53) but the bulk of these vessels belong to the late-medieval period. A review of the large quantities of imported pottery at Hull and their dating has been prepared by Gareth Watkins (Watkins, forthcoming) and this forms the background against which the far more meagre numbers of imported wares from North Lincolnshire must be considered. Map 195 shows the total number of imports in these categories, as a percentage of the late-medieval fabric totals, based on the assumption that the great majority of these imports belonged to the late-medieval period.

Considering all the imports together, Map 195 shows that the majority occurred on either coastal sites or those which had direct access to a waterway. Bonby, Croxton and Thornton Curtis were exceptions, although Thornton Abbey made considerable use of East Halton Skitter (information Victoria Moore). The large percentage (15.5%) at Epworth reflects the site's atypical

location at the Mowbray manor house. Indeed, some groups from this site, such as LM/5/Ep had 41.7% imports in proportion to English fabrics. Such percentages could only be paralleled amongst the more exceptional burgage plots at Hull (Watkins, forthcoming).

Amongst the unstratified material from North Lincolnshire, the percentage never rose above 18%. Coastal sites such as East Halton Skitter or ports such as Grimsby seemed to produce the highest percentages. However, Barton-on-Humber could only boast 2%, though this might well reflect the waning importance of Barton as a port in the late-medieval period (Brown 1908, 182-3), during which Grimsby was on the ascendancy on the south bank of the Humber (Gillett 1970, 19-29). The seemingly high percentage from Somerby was biased by post-excavation 'sorting', a phenomenon which also distorted the distribution of the Cistercian wares (Map 193). However, its position close to the major inland port of Gainsborough (Stark 1843, 77-78) would also have increased the likelihood of imported pottery at the village. Croxton also has an anomalously high percentage (16.7%), for it was neither a market town nor had it access to a waterway. However, only fourteen late-medieval sherds were found (Appendix B) and the high percentage of imports is consequently less significant.

Only six of the 31 sites had no direct access to coastal or waterway navigation and on three of these navigable waterways existed along some part of the parish extremities. It strongly suggests that access to waterways could have been an important element in the distribution of imported vessels even as late as the late-medieval period. Against this it should be admitted

that many assemblages, some large, containing late-medieval pottery from either market towns or towns with access to waterways produced no imported pottery.

Before a more detailed study is made of the various categories of imported pottery several points should be emphasised. It was only towards the end of the medieval period that there is any evidence for the commercial importation of pottery vessels from the continent. Indeed, it was only in the post-medieval period that imported pottery seems to have been generally available on a commercial basis. Prior to this imports came either as containers for more valuable imported products, or perhaps as incidental goods, souvenirs or ballast. The concentration of these earlier imports in the households or tenements of the wealthy would suggest that certain categories of import may have had a certain prestige value. Such factors may have had an important bearing on the creation of a general market in England for imported vessels. At Southampton and Hull the burgage tenements produced the finest quality imports during the high-medieval period (Platt and Coleman-Smith 1975; Watkins 1978). While plots or tenements of lesser importance at ports such as Hedon produced very few imported vessels.

Map 196 shows the distribution of middle and late-saxon imports in the region. In North Lincolnshire these were limited to a Normandy-type pitcher from East Halton Skitter (Pl.25 No.44), the Frankish middle-saxon jug from Barton: Castledyke (Pl.194 ) and the red burnished pitcher from Barrow: Cherry Lane (HM/12/Bv, Pl.98 No.42). Elsewhere in the region another early/middle-saxon imported jug was recovered from near Driffield

(Evison 1979, 78) a fragment of Tating ware from Wharram Percy (Hurst and Hodges 1977, 249-250) and a considerable number of late-saxon imports from York: Coppergate (information Cathy Brookes) and Lincoln: Flaxengate (information Lauren Adams). York and Lincoln were major inland ports in the late-saxon period. The three North Lincolnshire sites were coastal and the Driffield site had access to the Humber via the River Hull. Only Wharram Percy seems anomolous in this respect especially since Tating ware had hitherto been restricted to ecclesiastical or secular sites of major importance (Hurst and Hodges 1977, 249-250). Generally, saxon imported pottery was rare and would appear to have been restricted to major ports and coastal sites.

For the early-medieval period (Map 197) the principal imported pottery of the region was either Rouen (Barton 1965) or blau grau (Dunning 1959, 56-60). Within North Lincolnshire the only import came from Thornholme Priory where several sherds of a blau grau pipkin occurred residually in a late 13th-century context (HM/40/Tp, Pl.111 No.23). Examples of both fabrics have been found at Lincoln (Adams 1977, 20 No.81 and, 28 No.117).

Regionally, Hedon and Beverley each produced several examples of both blau grau and Rouen types (HM/64/Bv, Pl.119 No.2; EM/58/Hd, Pl.90 No.26, HM/71/Hd, Pl.120 Nos.44-45) but both were absent from Hull, a fact which Watkins uses to suggest that the importation of Rouen pottery had ceased before c.1260, when the present site of the port of Kingston-upon-Hull was founded (Watkins, forthcoming).

The earliest occurrence of Saintonge pottery was a splashed green-glazed sherd (EM/59/Hd, Pl.91 No.37) dating to the second

half of the 12th century. It is possible that a single sherd could have been intrusive but there was no evidence of intrusion elsewhere in this deposit. Imports of Saintonge green-glazed jugs continued through to the 15th century where they still formed 7% or more of Hull's 15th century assemblages (Watkins, forthcoming). Their distribution in North Lincolnshire (Map 198) is again predominantly coastal and all the findspots represent the plain green-glazed jugs with the exception of Thornholme Priory (an early 16th-century chafing dish fragment, LM/32/Tp, Pl.142 No.14) and Doncaster where, in addition to the green-glazed jugs, the Elephant Hotel site produced a near complete polychrome jug with bird decoration (Buckland et al, in prep.). Generally, polychrome jugs were rare and restricted to the more important areas of Hull and the Lurk Lane site at Beverley.

The distribution of the Low Countries redwares is shown on Map 198. The earliest dated examples were 13th century at Hull and Boston (Armstrong 1980, 48; Moorhouse 1972, 27-28) but despite such early occurrences the large-scale importation of Dutch vessels into the region did not commence until the 15th century (Watkins, forthcoming). The earliest recorded cargoes of imported pottery into Hull are in the ports customs accounts for 1401 (ibid). Nevertheless, the distribution shown on Map 198 was still predominantly coastal and while the more complete forms can be roughly dated, the small fragments generally recovered from fieldwalking, which make up the bulk of the findspots, cannot. Indeed, all the findspots would appear to have had waterway access from the Humber or Humber mouth. Whereas it is assumed that the bulk of locally-made medieval pottery was

distributed and sold by the potters who made them, the mechanism whereby cargoes of imported pottery eventually reached the consumers has yet to be studied. Such cargoes possibly passed into the hands of local merchants or middle men who would then have passed them down the entrepreneurial chain until they reached the market stall. However, the limited coastal/waterway distribution in North Lincolnshire might suggest that there was no direct shipment of pottery cargoes to North Lincolnshire during the period studied. Had such vessels been widely available at markets such as Barton-on-Humber or Grimsby a wider dispersion in surrounding local sites would be expected. It can also probably be assumed that as the numbers of such vessels increased they would have become cheaper, or at least less exclusive and consequently become available to a wider market/range of consumer.

To complete this series of maps, Map 199 shows the distribution of the three principal German stoneware imports of the medieval period, Siegburg (Beckmann 1974), Langerwehe (Hurst 1977) and Raeren. Once again the dating of these imports is discussed in detail by Watkins in relation to the large quantities recognised from recent Hull excavations (Watkins, forthcoming). On a generalised basis, the Siegburg and Langerwehe types belonged to the 14th and 15th centuries and Raeren stoneware to the late 15th and 16th centuries. It is apparent from the North Lincolnshire distribution that they occurred over a far wider area with considerably more inland sites, although most of these had riverine links. Like the Low Countries redwares, the earliest occurrences of these stonewares were sporadic but increased in frequency

through time. The number of stonewares found amongst the early 16th-century desertion deposits at Epworth manor suggest that even at this time they commanded a place in a major manorial household. The cess pit group from Epworth (LM/5/Ep) produced examples of both Siegburg and Raeren stonewares in addition to an example of a Siegburg stoneware mug which had been refired with a green glaze, the only known example of this type from North Lincolnshire, although a pair of cruets of this type occurred at Boston (Moorhouse 1972, 40 Nos.89-90).

From the above evidence, one can postulate two principal considerations which might have governed the distribution and occurrence of medieval imported pottery in the region:

- a) the socio-economic status of the consumer;
- b) the proximity to a waterway or port which had direct or indirect trading links with the continent.

Studies of late-medieval Flemish paintings show that specific pottery types such as South Netherlands Majolica, first appeared as incidental background objects in paintings of people and settings of high socio-economic status. As time elapsed the same vessels were more often shown on paintings depicting less affluent scenes and people. This implies that, in the earliest years of its production, South Netherlands Majolica was sufficiently exclusive and desirable to be the commercial preserve of the better-off. Perhaps this itself created a demand for the same pottery amongst the less affluent, but nevertheless the numbers of such vessels increased and became available to households lower down the social scale. Only two examples of South Netherlands Majolica vessels have been recognised from

North Lincolnshire. A single example of an 'altar vase' occurred from the priory church at Thornholme (LM/36/Tp, Pl.143 No.12) whilst four examples came from the Mowbray manor house at Epworth, including a tazza form. In both cases the deposits are likely to be of early 16th-century date and both sites can be regarded as more wealthy than the majority of assemblages from the area. The fabric is only known in post-medieval contexts from Hull and at Beverley, Highgate (LM/45/Bv, Pl.148 No.12). The nature of this Beverley, Highgate site in the late-medieval/post-medieval period is unknown, but the high proportions of imported vessels from Europe and even some from further afield (LM/48/Bv, Pl.148 No.30) suggests that it was owned by people of some substance. Until the mid 1950s, a substantial timber-framed house occupied the frontage of the plot (Hayfield and Watkins, in prep.).

There would seem to have been a continuing trend in the history of pottery production in the region for a demand for pots which aped the vessel forms used by the social elite. This was perhaps first seen in the middle-saxon ceramic versions of bronze hanging bowls. By the 16th century one of the most obvious manifestations of this trend were the chafing dishes. Brass and bronze versions were undoubtedly available during this period but their cost would have made them a luxury item only for the wealthy. The brightly coloured, ornate, ceramic forms from the Saintonge (Hurst 1974, 233-247) also prove rare and were almost certainly not available to the generality of society. An example occurred at Thornholme Priory (LM/32/Tp, Pl.142 No.14) and several from 16th-century deposits at Hull (Armstrong 1977, p.46-47, Nos.159-161). However, it was a form which was soon aped by the local late-medieval pottery traditions, examples

occurring in Humber wares (Habrough, Pl.24 No.73), Toynton/Bolingbroke fabrics (Thornton-Le-Moor, Pl.14 No.101) and the Coal Measure fabrics (Brigg, Pl.22 No.35). It is unlikely that such forms would have been included in the potters' repertoire unless there had been a ready demand for such vessels. In almost every case these local vessels could only have been ornamental. No locally made example of a chafing dish with internal signs of burning or heat crazing of the glazes is known. As discussed in chapter 3, lack of proper ventilating holes would have prevented the majority of them from functioning properly. As such local copies were almost certainly aimed at the less wealthy in society, it is unlikely that the intended customers would have had the non-combustible metal plates used on such devices.

It has already been commented that the Mowbray manor house at Epworth produced a particularly high percentage of imports associated with the destruction and desertion deposits. Similarly high proportions of imports could only be matched in the medieval period amongst the more important burgage plots of Hull. Ports such as Hedon had their poorer quarters and the Middle Lane excavations exposed plots which almost certainly belonged to the less wealthy. Even amongst the 12th-century deposits, when the port was in its heyday, the number of imported vessels was surprisingly low: wealthier people were more likely to have possessed imported pottery than the less wealthy. This situation would only have changed when large-scale importation of pottery began from the 15th and 16th centuries.

Even though pottery was considered to be one of the cheaper

artifact materials in the medieval period it should not be surprising that certain categories of pottery were considered sufficiently desirable to be counted amongst the possessions of the wealthy. Items of turned wood or treen are also regarded as being one of the cheapest medieval artifact materials. It has even been suggested that treen items would have been cheaper than pottery, and that the late-medieval pottery platters and drinking cups represented an encroachment into the treen market as the comparatively wealthier peasantry could afford ceramic rather than wooden tableware (Dyer, forthcoming). Nevertheless, certain wooden items were considered prestige objects in the 16th century. These included maple wood mazers (St John Hope 1887, 129-193) *lignum vitae* wassail bowls (Evan Thomas 1932, 9-29), roundels (ibid, 63-67) and coconut cups (Pinto 1969, 193-4). Such vessels were prized, often embellished with silver mounts and frequently recorded in wills and inventories (chapter 4), whereas even the finest pottery vessels were rarely mentioned. *Lignum vitae* and coconuts were imported as raw materials, although the mazers are thought to have been imported from the Low Countries in finished form (Evan Thomas 1932, 1-3). Only the roundels would have been of native manufacture and these would have been decorated by professional artists. Delicately carved boxwood combs and girdles survive from the high-medieval period which again derive from the accoutrements of the wealthy (Pinto 1969, 25, 362-364). Thus wooden items as well as pottery were capable of providing goods worthy of the upper echelons of society despite their traditional mundane status. In both cases, most of these higher class items were imported from the continent.

c) Regional development of pottery manufacture, typology and forms.

Although this section will concentrate principally on the above three topics, a series of short discussions will also be included on the geographical links between Roman and medieval kilns and the broader artificial evidence that can be provided by contemporary wills and inquisitions.

Pottery typology

The method of dating vessels by relating changes in forms, especially rim form, to time is an uncertain basis for pottery dating (M.P.R.G. 1976). Nevertheless, the frequent absence of any other form of dating leaves it as the only available means of chronological sorting. Indeed, the results of the chronological study of North Lincolnshire pottery in Chapter 3 suggests that it may still have an important role to play in future pottery studies.

A synopsis of the regional traditions in the previous section of this chapter would suggest that significant changes took place within each tradition which can be regarded as effective criteria for dating. On a wider, regional scale, there were also several basic changes in pottery techniques which can now be related to chronology, including the transition from hand-finished to wheel-finished pottery and the changes from splashed glazes to suspension glazes. However, the bulk of these typological considerations relate to the changes within each separate fabric tradition and rarely achieve a wider significance. Such typological changes have been referred to en passant in section (b) of this chapter and therefore only a few illustrative examples will be described here.

In the coarseware traditions, the rims of the early-medieval coarse sandy fabrics were generally finer textured, simpler, more rounded and upright than later examples of the high-medieval period. The early-medieval, shell-tempered rims were usually very small, thin and everted in comparison with their later forms. Knife-trimming on the bases of shell-tempered cooking-pots was confined to the late-saxon period, although it was used on coarse-sandy cooking-pots throughout the medieval period. In some cases, details of manufacture would appear to have had very brief periods of use. The shoulder thumbings of the coarse-sandy cooking-pots, for example, would seem, on present evidence, to be confined to the second half of the 12th century.

In all of the region's fineware traditions, the use of splashed glazes would seem to be indicative of an early-medieval date, as was the use of knife-trimming to the lower, inner surfaces of the larger jug forms. Some features of jug manufacture can only be used for typological dating in the most generalised terms. Strap handles, for example, were usually found in early-medieval contexts, whereas rod and twisted-rod handles belonged to the high-medieval period. Yet there were numerous exceptions. The Doncaster, Hallgate A fabric jug wasters, which would appear to have been part of a contemporary kiln assemblage, were predominantly strap handled, but the wasters also included a small number of rod, and two twisted rod, handles (Buckland et al 1979, 16).

The list of detailed observations on typological features which can be related to chronology is considerable, although varying in number and authority for each tradition. Some general comment on rim forms is also appropriate since these were at one time regarded as the most diagnostic feature of typological change

(for example, Le Patourel 1965, Fig. 31, and 1979, Fig. 33).

In general terms, there would appear to have been a series of fundamental changes in rim form through time in most traditions. However, for each basic rim type, there was usually a myriad of minor variations which almost certainly have little or no chronological significance.

In contrast with this, some of the comparison plates, such as those for the Humberwares (Pl. 188, 189) and the orangewares (Pl. 174, 175), show that basic jug forms maintained an alarming consistency in form, decoration and manufacture for several hundred years. This conservatism would seem to have been more characteristic of the stronger regional traditions, but it emphasises that continuous typological variation was by no means inevitable.

In short, typology remains a useful, though limited, means of chronological identification. For any group of pottery, a series of typological deductions based on a number of vessel forms, preferably spanning a number of fabrics, will inevitably produce a more reliable chronological judgement than a typological assessment based on a single vessel. Hurst's conclusion that this was the least satisfactory tool for dating pottery (Hurst 1962-3, 135-155) is still valid, but at present it remains the most commonly employed method and as such should continue to merit serious study.

Some general aspects of pottery technology.

In a recent article, the writer drew attention to the numerous vessels in the region which provided evidence for their techniques of manufacture (Hayfield 1980). As almost all of the examples used have been included in this thesis, it is not appropriate to recount in full the arguments which were presented there. However, since the paper was written, new information, combined with a reconsideration of some aspects of that original work, merit further discussion.

It could be considered that the replacement of the late Roman potteries by those of the early-saxon period, represents a major technological regression in the industry, if indeed the word 'industry' is applicable to early-saxon pottery production. This regression seems indisputable, but the late-Roman pottery industry was far from technically uniform. Alongside the wheel-thrown greywares mass produced from such regional centres as Throlam (Corder 1930) and Crambeck (Corder 1928), there was a series of 'Romanised' native fabric traditions which were also produced in vast numbers in the late-Roman period. The native fabrics within this region were tempered with either shell or calcite. The shell-tempered fabrics, used for the Roman Dalesware industry of the 2nd and 3rd centuries, developed, in the 4th century, into a new range of forms based on the Lincoln, Swanpool H types (Webster 1947, 1960; Corder 1950; Darling 1977, 27-31). The calcite-tempered fabrics of East Yorkshire were producing jars of the characteristic late-Roman 'Huntcliffe' type along with a range of other more conventional Romanised coarseware forms (Rigby 1980, 92-94). The vessels in these Romanised, native traditions were still coil-built, despite the large numbers involved, although they were now finished

on a wheel (ibid, 81-88, Nos. 303-306). The 4th century, therefore, saw the co-existence, within the region, of two groups of major pottery industries; the one wheel-thrown, the other coil-built. The shell-tempered, Roman 'Dalesware' fabrics had been wheel-finished since the 2nd century (Loughlin 1977), having developed out of Lincolnshire's hand-finished, Iron Age, shell-tempered vessels (May 1970, 235-242). In Yorkshire, the local 'Iron Age' pottery, also hand-made, continued as a native tradition alongside the wheel-thrown Roman coarsewares until the late 3rd or early 4th century (Corder and Kirk 1932), when they finally succumbed to Roman forms and wheel-finishing. With the increasingly convincing evidence from Wharram Percy and Barton-on-Humber for both the shell and calcite fabrics re-emerging in hand-finished forms during the early-saxon period, the 'regression' of the early-saxon industry represented a move back to the techniques and technology of the region's pre-Roman, native potting traditions. This was particularly evident among the region's early-saxon domestic assemblages. The decorative techniques used on the burial urns was indeed largely continental in influence, but then the region's late-Roman pottery industries had never been geared to the large-scale production of cremation urns.

In 1980 the writer suggested that the products of the medieval coarseware industries within the region remained coil-built and wheel-finished, their production only terminating with the general decline in the demand for coarseware vessels in the late-medieval period (Hayfield 1980, 31). Some fabrics, such as the medium sandy, M1, produced a range of fineware forms, dominated by jugs, which were still being coil-built and wheel-finished until the decline of those fabrics in the later 15th or early 16th centuries

(ibid, 32). It was suggested by the writer that the thicker, coarser fabrics and the comparatively lower firing temperatures which characterises both the coarseware fabrics and the medium sandy, M1 fabric, may have been the critical factors which enabled their coil construction to be detected. The insinuation was that the finer fabrics, better finish and higher firing temperatures of the majority of contemporary fineware fabrics may have concealed similar evidence (ibid, 32). On reflection, it is perhaps more likely that wheel-throwing and coil construction techniques existed alongside one another during the medieval periods as they did in the late-Roman period. An example of this co-existence was provided by the Roman 'black burnished' pottery industries (Farrar 1973) which, by their accepted definition, were coil-built and hand-finished. Not only did factories producing such wares grow and expand alongside wheel-thrown kiln products, but they also achieved a particularly wide distribution which stimulated their production elsewhere in the country (ibid, 86-102). There is increasing evidence for the production of black burnished ware in the Doncaster, Rossington Bridge region alongside the wheel-thrown Cantly/Bessekar industries (Williams 1977, 194). Such was the success of these black burnished wares that their form's decoration and burnishing were deliberately copied by the, technologically more advanced, wheel-thrown vessels (Williams 1977, 175-176; Buckland and Dolby 1980, for example, 18-19, Nos. 69-70).

By the 15th century, with the possible exception of the M1 medium sandy industry, it is probable that most of the region's pottery was wheel-thrown. Although some forms such as basting dishes remained coiled or slab built because of their shape, the late-medieval period may have seen a considerable degree of technological uniformity in pottery production. Christopher Dyer has

recently suggested that, despite a major decline in the population from the 14th century, there was a rise in general prosperity which may have had a number of basic influences on the English pottery industry (Dyer, forthcoming). A comparative increase in real wealth meant that people could afford more or better pottery, including perhaps more specialised vessel forms to cater for greater varieties of foodstuffs now available to the lower levels of society. He suggested that the increase in wealth may even have expanded peoples 'expectations' (ibid). It may therefore be no coincidence that the late-medieval period saw a growth in the number of the more ambitious ceramic imitations of metal and wooden table wares such as chafing dishes or lobed cups. However, any increase in wealth would also have enabled a far greater proportion of the population to afford metal cooking vessels and tablewares (ibid). By the early 14th century some 44% of the population of Colchester owned one or more metal cooking-pots (Le Patourel 1968, 101-102).

Any increase in labour costs which may have resulted from a declining population would also have affected the medieval pottery industry and perhaps even its technology. Such conditions would have encouraged potters to make their industries less labour intensive and to speed up production. It would seem that in the 14th century both Cowick and Toynton potters employed servants and labourers (ibid, 110-111). Given the economic conditions described above, the decline of the more labour intensive coil-construction techniques becomes easier to understand. It may even explain the apparent decline in the aesthetic standards exhibited by so many of the products of the region's late-medieval fineware traditions. It may have been the potter's intention that the basic late-medieval ceramic vessel, the jug, should be produced as cheaply

and as quickly as possible. The careless glaze application, the untrimmed bases and the sparsity of decoration all point to the 'no frills, basic buy' jug which would seem to have formed the foundation of the region's late-medieval pottery industry.

In apparent contrast with this was the use of applied bases, of which type II, with the base fitted inside the vessel wall (Hayfield 1980, 34), proved both the most common and the one usually associated with the later medieval pottery fabrics. These have not yet been recognised in sufficient quantity to suggest that they were ever an integral part of normal pottery production (*ibid*, 34-35). Indeed, as potters could wheel-throw a complete vessel, such a technique would be incongruous with the suggested nature of the region's late-medieval pottery production. However, the technique of applied bases may be interpreted as a means of salvaging badly thrown vessels. Many of the additional internal and external bands of clay occasionally found added to the bases of late-medieval vessels (for example, Hall and Coppack 1972, 50, Fig. 10, No. 51) could be seen as 'first aid' to those pots which might not otherwise have survived firing. The large number of slightly overfired late-medieval vessels, often with small surface blisters or partial firing cracks, was noted amongst the products of several traditions. Jug decoration was probably now a luxury which could not be afforded by either potter or consumer on such a basic, established vessel form as the jug. Instead, the use of decoration was now generally confined to other, newer vessel forms such as cups or cisterns which represented new and expanding dimensions to the repertoire of most late-medieval potters' forms which were also likely to have cost more than the basic jug.

Chronological variations in the occurrence of the principal vessel forms amongst the region's stratified groups.

Section (b) of this chapter displayed in tabular form the percentage occurrence of vessel forms by fabric. It would seem appropriate to see how the percentage of each vessel form, in each fabric, varied through time. On this basis, a series of tables have been presented in Appendix C which, for each time-phase, demonstrates the percentage of vessel forms recovered from the groups of each stratified assemblage of that period. The overall totals of the major vessel forms have been presented in a simplified table below.

Table showing the percentage of ceramic vessel forms to occur amongst the stratified groups of Chapter 3.

Form	Middle-saxon	Late-saxon	Early-med.	High-med.	Late-med.
Cooking-pot	82.09	80.3	50.9	29.5	5.67
Bowls	11.19	18.0	5.2	0.57	0.3
Curfews	-	-	0.2	0.35	0.5
Basting Dish	-	-	0.04	0.27	0.5
Jugs	-	-	40.7	63.25	73.78
Pipkins	-	-	1.4	1.73	1.08
Pancheons	-	-	0.25	1.11	3.69
Cisterns	-	-	-	0.23	4.72
Drinking Mugs	-	-	-	0.5	2.88
Cups	-	-	-	0.06	2.07
Urinals	-	-	-	0.09	0.76

The tables of Appendix C demonstrate that there was considerable variation in the occurrence of forms between different sites. These may relate to the status and function of those parts of the sites that were excavated. It is assumed that each site would have been able to obtain whatever vessel forms it required at any time, given the necessary wealth. By analysing together the results from all the stratified sites included in Chapter 3 it is suggested that the differences between them becomes insignificant and that the results in the table above can therefore be regarded as forming the 'norm' for the region for each time-phase. This in turn could be used to determine the way in which a particular assemblage in Appendix C differed from the norm.

The table above reveals that the late-saxon and medieval period saw a steady decline in the numerical importance of the cooking-pot which correlated chiefly with the growing importance of the jug. This drop in the percentage of the cooking-pots corresponds with a similar, though less dramatic, decline in the number of plain, unglazed bowls. Essentially, these two forms represented the medieval coarseware industry and their relegation to a position of comparatively minimal importance by the late-medieval period is clearly demonstrated. The sudden arrival of the jug form in the early-medieval period is also quite dramatic; it then proceeds to grow in importance throughout the medieval period. The table also shows the slight but growing importance of other minor forms such as pancheons, cisterns, drinking vessels and urinals. In most respects, the results of this table mirror those produced by the analysis of the saxon and early-medieval pottery at Goltho Manor which also showed a similar decline in cooking-pot and bowl forms in relation to a rise in the number of jugs (Coppack 1980, 25).

Possible correlations between the location of Roman and medieval pottery kilns.

Map 200 was prepared in order to compare the location of medieval and Roman kilns in the region. It must be emphasised that this only represents the distribution of known kilns. The distributional evidence for both Roman and medieval fabrics, especially the latter, suggests that there are still many more kiln sites to be located.

The dearth of kiln sites on the south bank of the Humber and the eastern seaboard may not be archaeologically significant. Indeed, the clays and silts of the Humber bank proved ideal for potting and were heavily exploited from the 18th century for the production of bricks and tiles (White 1926). This area almost certainly saw some potting in both Roman and medieval times. For example, the distributional evidence of Map 173 suggests that the urban centres of Barton-on-Humber and Grimsby may have been centres for orangeware production whilst the East Halton/Goxhill area would seem from Map 159 to be a likely source for the coarse sandy C2 fabric. The modern brick and tile works in this area were particularly extensive, however, and may well have swept away any evidence of earlier pottery industries.

Nevertheless, a certain degree of correlation between the location of Roman and medieval kilns can be clearly seen on Map 200. Amongst the more obvious examples were the Throlam (Corder 1930, 12-14) and Holme-upon-Spalding-Moor (Mayes and Hayfield 1980, 99-100) kilns; the Torksey (Barley 1964) and Little London (Oswald 1937) kilns, and the Swanpool (Webster 1947) and Lincoln (Coppack 1980, 35-37) kilns. The Doncaster:

Hallgate potteries (Buckland et al 1979) were using essentially the same clays as the neighbouring Roman kiln complex of Cantley (Cregeen 1957, Annable 1960), Blaxton and Bessecar (Buckland et al 1980). Further afield, in the Vale of Pickering, the Staxton/Potter Brompton kilns (Brewster 1958) were located in the neighbouring parish to the Roman Knapton kilns (Corder and Kirk 1932). The documented medieval kiln at Yaddlethorpe (Lincolnshire Archives Committee 1957/8, 31) is situated amidst a line of Roman kilns which lay between the eastern bank of the River Trent and the limestone ridge (Rigby and Stead 1976, 136).

However, there would appear to be a second major belt of Roman kilns situated along the western springline of the Wolds scarp, starting at Barnetby Gap (Samuels 1979, 11) and continuing as far as Linwood (Bryant 1977, 6). This would seem to be a prime area for any future search for medieval kilns. The urban centre at Caistor forms a potential early-medieval source and a rural-based northern production centre for the Toynton/Bolingbroke fabrics, postulated in section (b) of this chapter, would be another potential candidate for a late-medieval kiln site in this area. Indeed, the correlation between the sitings of Roman and medieval kilns would seem to create a strong argument for the search for kilns of either period being concentrated in areas where kilns of one or the other period are already known. The only caveat to this would be to emphasise the potential of the southern bank of the Humber and the eastern seaboard which is unlikely to be truly devoid of kilns.

### The evidence of wills and inquisitions.

The overwhelming bias induced by the simple, numerical dominance of pottery sherds amongst most medieval artifact assemblages is hard to overcome (Le Patourel 1976). Two sources of information which have been used by the writer may go some way towards correcting this bias.

For the later medieval and early post-medieval periods, continental paintings have a great deal to offer the archaeologist (for example, Villain-Gandoszi 1979). Contemporary artifacts were frequently included as background detail in many of the paintings of both Hieronymous Bosch and Pieter Breugel the Elder. As it has not proved possible to reproduce photographs of such paintings here, it would not be appropriate to discuss them in detail. However, the variety of glass, metal, treen and wicker artifacts included in such paintings provide a source of information which English archaeologists have, on the whole, been slow to appreciate.

The second source of information, which can be discussed in more detail here, is the various types of household artifacts that are listed in a number of later medieval inquisitions, indentures and wills. The inclusion of two such documents in Appendix D is designed to demonstrate the potential which might lie in a more thorough study of such muniments. The references to pottery items appears restricted, both in number and in importance, in relation to the various other items of household accoutrements. This, in itself, is important in revealing the magnitude of the archaeological, artifactual bias both in terms of the role pottery played in domestic life and in terms of the importance attached to it by the medieval world.

The evidence from the Castleacre inquisition of 1397 (Appendix D a:) suggests that metal items were usually to be valued in shillings (8 brass pots worth 50s.) whereas wooden vessels (a wooden cup worth 12d.) and earthenware (4 earthenware pots worth 4d; 2 'pottes' of 'erthe' worth 12d.) were usually only measured in pence. The subject of the cost of medieval pottery, particularly bulk orders has been examined in some detail by Jean Le Patourel (1968, 124 Table V). In this respect the 'fryyng panne' worth 6d. may also have been ceramic, possibly even one of the imported Dutch vessels which were becoming increasingly common from the 14th century in the region (Watkins forthcoming). However, the 'goose pan' worth 2s. would almost certainly have been of metal.

The Thorpe indenture of 1396 (Appendix D b:) is unusually detailed and has the additional advantage of locating artifacts within particular rooms of the property, although unfortunately it does not provide their value. Treen would appear to have been the most numerous artifact type in this household; the storehouse containing some 448 dishes and platters of wood and a further 80 saucers. The pantry of the building contained some 55 earthen pots and an earthenware 'stene' in addition to various other items including 9 pots of leather, 12 wooden 'hanaps' (cups - c.f. St. John Hope 1887, 129) and numerous items of silver. With the possible exception of the two 'frying pannes' the kitchen would seem to have contained no ceramic items; the inventory for this room being dominated by '11 brass pottes'.

Both these documents represent the contents of comparatively wealthy households. As such, they were hardly likely to prove typical of the bulk of the peasantry except perhaps in such matters

as the numerical inferiority of pottery to treen and their financial value in relation to metal vessels.

An examination of some of the medieval Lincolnshire wills (Foster 1914) proved less rewarding. Although household inventories were common, and often quite detailed, none of the examples studied by the writer referred to the more mundane household accoutrements such as pottery. However, in 1283, a will of John de Bennington granted, 'Also to Lecia, wife of Wm. Sampsum and Alice de Colston all utensils belonging to the house both of brass and of wood...' (Foster 1914, 3). It seems likely that any ceramic items were ignored although this is surprising because basic treen items were probably of lesser value than ceramic (Dyer forthcoming). The inventory of Christina, the wife of the above John Bonnington, included 'Also j brass pot; Also ij small brass pots, Also two posnets (pocenet), Also ij pans (Patellas), Also j basin (pelvium), Also j laver (lavaterum) etc.' (*ibid*, 3). In such cases it seems likely that all these vessels would have been of metal.

However, if pottery rarely featured in such wills, the higher class of treen vessels appears more frequently. Alice de Crossely, a widow of Lincoln, left in 1327 'To Aubree, my sister, my best mazer goblet (ciphum)'. The fate of at least one metal vessel was described in the same will; 'one very little leaden vessel to mend the eves or gutter of the Church of St Cuthbert' (*ibid*, 5). In 1382, Geoffrey de Scrope, a canon of Lincoln, left an impressive inventory of valuable household chattels including numerous silver chalices and goblets but including, 'And to Sir Robert, a black mazer goblet from which I am accustomed to drink' (*ibid*, 16-17).

Thomas Johnson of Barrow-upon-Humber in 1504 left 'To the abbot and convent of Thornton, one old piece of silver with its cover and one 'Le Maser' which shall remain there forever' (ibid, 22). Once again, such wills tended to be confined to the more affluent members of society.

In general, pottery vessels are rarely found amongst wills and inventories, although on occasion the value of an article may suggest a pottery vessel. A possible example of this was 'a wine jar worth 4d.', included amongst the goods of Richard Ruston, a friar minor of Westminster (Cal. Inqu. Misc. V. 63-64, No. 87). However, the occasional, more detailed inventories, such as those listed in Appendix D offer a rare glimpse of pottery in its context within a medieval household, something which archaeology rarely, if ever, achieves.

d) Regional traditions - a geographical assessment.

Section (b) of this chapter has gone some way in demonstrating the physical existence of regional traditions as expressed by the fabric, form and style of the vessels themselves. It now remains to be seen how far the distribution of the various pottery fabrics will help strengthen the concept of regional traditions by enabling such traditions to be considered as geographical entities which could then be linked to other aspects of medieval life.

A study of the distribution maps of the various fabric traditions revealed that for each there are two zones of concentration or 'zones of influence'. There is a zone of major influence where the fabric made up a substantial part of the contemporary fineware or coarseware assemblage (more than 20%) and a zone of minor influence where the fabric was present but in smaller numbers (less than 20%). Although these are essentially arbitrary distinctions, they could be used to interpret areas where a tradition was regularly marketed and areas where it occurred as a 'stray'. Maps 201 to 204 have been drawn up to display, in generalised terms, the respective zones of influence of each of the medieval, regional traditions to occur in North Lincolnshire.

The maps revealed that contemporary, competing zones of major influence rarely overlapped. However, their zones of minor influence generally overlapped one with another, and also frequently intruded into opposing areas of major influence. A comparison of the four maps also reveals various similarities in the boundaries of those zones between the coarseware and fineware traditions of various periods.

Coarsewares and finewares are not regarded as competing traditions because their vessel forms and functions differed. Although

it is likely that contemporary finewares, such as the orangeware, fine sandy and medium sandy fabric traditions, would have been potential market competitors. It is therefore interesting that, with one exception, there was little overlap between the zones of major influence of each competing tradition. The exception being the orangewares and fine sandy wares whose zones of minor influence coincided almost completely. However, in their zones of major influence, the fine sandy fabrics were more localised than the orangewares. For example, in the East Riding, in the heart of orangeware 'territory' the fine sandy fabric had a localised zone of major influence around Hedon.

Although the use of time-phases allows some chronological sorting, it must be assumed that these boundaries were never entirely static, a certain amount of fluctuation being inevitable. In addition, these boundaries are probably somewhat arbitrary, although the more detailed fabric distribution maps will enable readers to make their own judgement as to their validity. The unstratified assemblages, which formed the basis of this distributional study, were not evenly spread across North Lincolnshire, nor were they of uniform size. The area around Bradley Wapentake and the entire West Riding of Lindsey, with the exception of Manley Wapentake, was generally sparsely represented and this might bias the picture.

Map 201: The medieval coarseware traditions.

This map contrasts the zones of influence of the two principal medieval coarseware traditions, the coarse sandy and shell-tempered fabrics whose more precise distribution was plotted on Map 155. Their zones of major influence had a common boundary stretching approximately from Grimsby, through Brigg, westwards towards Burton upon Stather (Map 201). The zone of minor influence of the shell-tempered tradition extended to the southern banks of the Humber estuary but did not cross it. The zones of minor influence of the coarse sandy tradition ran along a line west from the coast of Tetney Lock, across the Wolds around Binbrook, past Market Rasen and the upper stretches of the Ancholme, across to the Trent above Gainsborough. This line formed the approximate southern boundary of several other 'northern' traditions' zones of minor influence.

Map 202: The early-medieval fineware traditions.

This map incorporates the splashed glazed phases of the medieval finewares and the early-medieval gritty tradition. The distinctions between their zones of major and minor influence were not sufficiently distinct (Maps 162, 165, 172, 177) to plot separately, so Map 202 merely demonstrates the total areas of a fabric's influence. Nevertheless, it can be seen that in the early-medieval period, the zone of influence of the medium sandy fabrics did not quite reach the Humber. The orangewares and gritty wares had as their common southern boundary the Tetney Lock - Gainsborough line discussed above. The fine sandy fabric, which numerically was the more dominant of these four traditions, had the most southerly boundary of any of the 'northern' traditions throughout the medieval period encompassing most of the Wolds area, the upper headwaters of the River Till and other tributaries of the Witham.

Map 203: The early/high-medieval fineware traditions.

This map considered the total number of vessels in the orange-ware, fine and medium sandy traditions and produced more distinct zones of influence. Numerically, the two dominant fabrics were the orangewares and the medium sandy fabrics. With one minor loop of overlap, the boundary of their respective zones of major influence ran from Tetney through to Caistor and then northwards towards the Trent at Burton upon Stather. The north-west part of this boundary reflects the distribution of the M1 medium sandy fabric. All the vessels in this fabric have been counted as part of the medium sandy tradition although in c. 1350 the fabric altered its allegiance to the Humberware tradition and this boundary would then have corresponded more closely with that of the Humberwares on Map 187.

Like the shell-tempered tradition, the zone of minor influence of the medium sandy fabric extended to the Humber whereas that of the orangewares followed the Tetney, Market Rasen, Gainsborough line. Transposed on top of the orangewares was the fine sandy tradition, its zone of minor influence corresponding almost exactly with that of the orangewares. However, its zones of major influence were more localised and restricted to areas in the vicinity of Doncaster and Hedon, with no apparent area of major influence in North Lincolnshire although there was probably at least one production source in that area.

Map 204: The late-medieval fineware traditions.

In the late-medieval period, the principal fabric tradition in North Lincolnshire was the Humberwares and once again the southern boundary of minor influence for this tradition was the Tetney Lock, Market Rasen, Gainsborough line. In this respect it corresponded

with that of the orangewares and fine sandy wares; however, its zone of major influence was more extensive in North Lincolnshire than the orangewares had been. This was due to a westerly, rather than southerly, extension of its importance, reflecting perhaps the influence of the major potteries at Cowick and Holme-upon-Spalding-Moor.

To the south, the Toynton/Bolingbroke tradition, if combined with the declining urban industry at Lincoln, offers a geographical successor to the medium sandy tradition, particularly in regard to its zone of minor influence. Its zone of major influence was somewhat restricted in comparison with the medium sandy tradition, extending from Tetney Lock to Caistor, through Willoughton southwards towards the Fosdyke.

The third tradition, the coal measure fabrics, was numerically less important, but reflected the growing influence of the pottery kilns of South Yorkshire which achieved a wider market in North Lincolnshire than the earlier Doncaster, Hallgate industries.

The region shown on these distribution maps incorporates the Humber boundary between the historic counties of Yorkshire and Lincolnshire. In this respect the various fabric traditions can be divided into either 'Yorkshire' or 'Lincolnshire' based traditions, viz:

Yorkshire

Grit-tempered

Coarse sand-tempered

Orangewares

Fine sandy fabrics

Humberwares

Coal Measure fabrics

Lincolnshire

Shell-tempered

Medium sandy fabrics

Toynton/Bolingbroke fabrics

On the basis of this division, it can be observed that the south bank of the Humber represented the northern limit of the zones of minor influence of the Lincolnshire traditions and that the Tetney, Market Rasen, Gainsborough line represented the southern boundary of the zones of minor influence of the Yorkshire traditions. The resulting segment of North Lincolnshire caught in between these two boundaries acted as an interface between the two groups of traditions. The influence of the Lincolnshire fabrics never extended into Yorkshire, even in a minor form. The Yorkshire fabrics, however, had major influence zones in North Lincolnshire throughout the medieval period which were always more extensive for the fineware traditions than the coarsewares. With a single, minor exception there was also no overlap between the zones of major influence of the Yorkshire and Lincolnshire traditions.

It can now be considered whether this distribution pattern has any wider significance in terms of regional culture. It could be argued that the influence of Yorkshire fabrics in North Lincolnshire merely reflects the availability of similar potting clays on both sides of the Humber. However, Section (b) of this chapter demonstrated that the shape, style and manufacture of these vessels had a Yorkshire allegiance far beyond that dictated by the nature of the clays. Jean Le Patourel has suggested a model of pottery trade whereby "The normal radius for marketing products (from a kiln site) is believed to be some 32Km." (Bellamy and Le Patourel 1970, 113 and Fig. 43). Assuming, momentarily, that that is a valid assumption, it could be argued that if kiln sites in North Lincolnshire centred on a limited number of clay sources throughout the medieval period, then a similar pattern of distribution would inevitably result. The urban to rural change in potting would make this unlikely, but the apparently stable nature of the zones of minor

influence is too consistent for such a simple interpretation. Returning to Mrs Le Patourel's marketing model, the 32Km. radius is unsubstantiated and the distribution hampered by the lack of demonstrable findspots. In fairness, the purpose of the model was originally to demonstrate the means by which pottery ideas could be spread by intersecting marketing zones, but it is unfortunate that this has been taken up as an example of a model for the distribution of medieval pottery (Hodder 1974, 355).

- The position of markets would seem to have had no specific influence on the boundaries of the regional traditions (Map 206). Whereas some, such as Lincoln or Louth, were always within a totally 'Lincolnshire' area and Barton-on-Humber always within the major influence zones of the Yorkshire fabrics, there were some, such as Caistor or Market Rasen, which appeared to be on an interface, marketing several contemporary northern and southern pottery traditions. It would certainly seem that medieval markets, great or small, did not necessarily form a monopoly area for any specific pottery tradition.

The Humber estuary may have been an important influence on pottery trade but it presents something of a dichotomy. On the one hand it formed a barrier for the distribution of the 'Lincolnshire' traditions, while on the other, it did not prevent the 'Yorkshire' fabrics from extending into Lincolnshire. Nevertheless, the Humber was a trading artery, a function which will be more fully examined in Section (f) of this Chapter. It may be no coincidence that the southern boundaries of the minor influence zones of the Yorkshire fabrics included the upper headwaters of the River Ancholme but, with the exception of the early-medieval phase of the fine sandy tradition, this did not extend to the upper tributaries of the Witham.

From the early 13th century it can be stated with some confidence that the coastal ports of the south bank of the Humber (Barton, Immingham, Grimsby) never matched the economic importance of those of the north bank (Hedon, Hull and later Ravenserodd) (Gillett and MacMahon 1980). Even with the decline of Hedon (Poulson 1840, 105) and the loss of Ravenserodd (Boyle 1889, 39-41), Hull's growing dominance easily maintained this superiority. Thus, for the port of Barton-on-Humber, for example, trading and commercial links would always have been greater with Hull and the North than they would have been with Lincoln and the South from the 13th century or earlier. This may not have always been the case, however, as Lincoln was a major inland port during the late-saxon and early-medieval periods, when Hull had not achieved any prominence and Barton itself was probably the pre-eminant Humber port (Hill 1948).

If the ports of the south bank of the Humber had, in the high-medieval period, looked to the north bank for their commercial and trading links, then why not also for their cultural links? This cannot represent a complete explanation for the phenomenon revealed on Maps 201-204. It requires further work on other aspects of medieval culture such as folk lore, customs, dialect and architecture (Jope 1963) to determine whether this pottery distribution was part of a wider cultural boundary or something which derived exclusively from the internal ceramic development of the region. Yet if it is accepted that 'choice' formed the principal basis for the occurrence of a regional tradition, then it would be easier to accept 'choice' as a fundamental aspect of cultural affinities (Pierpoint 1980, 38-44).

In 1963, Jope noted that culture could be dynamic, in that it was continually evolving, and that each 'cultural area' had one or more epicentre and that each had boundaries marked by fringe areas linking cultural units (Jope 1963, 327-8). He questioned whether aspects of cultural distinction would manifest themselves uniformly within a given spatial area in all the various aspects of that culture. That is, whether the boundaries for dialectic or architectural variations and traditions would correspond with one another to form a spatially distinct cultural region. Work on this aspect of medieval life in the Yorkshire and Lincolnshire region has not yet been carried out, even on the level of basic data, let alone in relation to cultural affinities. As such, Jope's hypothesis cannot be tested here, nor at present can it be debated whether these ceramic boundaries correlate with any other aspects of medieval life, but this study of the region's pottery may at least be a brick in the fabric of such a wider investigation.

e) Marketing and Distribution Models.

It can be assumed that there would have been a variety of ways in which pottery could have been distributed from its place of manufacture to the consumer. Such means might have included:

- 1) By purchasing direct from the kiln site, either on behalf of a large institution such as a monastic community or manor, or by a middle-man.
- 2) By a potter or middle-man taking the pots direct to the consumer by hawking them around from village to village.
- 3) By the potter or a middle-man taking the pots to a fair or market and selling both to local inhabitants and visiting folk from neighbouring settlements.

With the exception of the Yaddlethorpe reference discussed below, there is still no historical evidence from the region to support any of these possibilities. The Yaddlethorpe potter's failure to honour his contract to supply Robert Beaumont of Appleby in 1338 with 2000 pots would seem to fall into category (1) above (Lincolnshire Archives Committee 1957/8, 31). Robert Beaumont may well have represented a stallholder at Appleby market (chartered in 1267) or a steward or similar official at Thornholme Priory. In South Lincolnshire, there is more convincing documentary evidence for middle-men bulk buying from the potteries of Toynton-All-Saints during the 14th century for resale in the market towns to the south (Mrs. E.H. Rudkin pers. comm. and Le Patourel 1968, 119).

At any given market it would be reasonable to assume that, for a particular commodity, the locally produced examples would have been the most commercially successful because they would have had the advantage of lower transport costs over their more distant rivals. Thus, for example, at Doncaster, York or

Lincoln the local pottery products would be expected to dominate local assemblages. If pottery vessels were to be traded into a market from some distance away one would have expected them to have fulfilled one or more of the following conditions:

- 1) That there was not a more local source of pottery.
- 2) That the pottery could be sold at the same, or lower prices than the local pots.
- 3) That if it were to be sold at a higher price than the local wares, it would have to have been sufficiently attractive, superior to local products, or unusual to attract buyers away from the cheaper local wares (Le Patourel 1968, 121).

Apart from the actual costs of manufacturing the pots, such as clay rents, fuel and labour, the cost of transport and the stallage or tollage of the markets would also have heavily affected the price. Jean Le Patourel estimated that transport costs could amount to some 25% of the cost of a consignment of pottery (1968, 120). The profits of any middle-men would have been an additional factor. All these would have been the subject of variation. Labour costs probably rose quite sharply after the mid-14th century (Mate 1975) and the complex system of toll exemptions at each market would have favoured merchants from certain areas in preference to other, possibly closer based, competitors. The following study of pottery distribution and marketing is based on the assumption that there would have been a commercially valid reason for the occurrence of a particular pot in a particular assemblage. Possible exceptions to this assumption such as gifts, souvenirs or the like, must inevitably have occurred, but for the purposes of this discussion they are assumed to have been insignificant.

The evidence for medieval markets relies almost entirely

on surviving historical sources. These are chiefly charters granting or reaffirming rights for a particular person or institution to hold a market and passing references to market rights in Inquisition<sup>e</sup>s Post Mortem, lawsuits and similar documents. The bias of surviving manuscripts offers a clearer picture for the high-medieval period than it does for the early-medieval (Britnell 1978; 1981). These documents do not allow for any assessment of the extent of unchartered markets or other forms of unofficial trading. However, market tolls were an important source of income for the grantee and also a form of status, and as such, market rights were likely to have been zealously guarded. The few instances of litigation against unofficial marketing in the region would suggest that, from the high-medieval period onwards, it formed little threat to the officially based marketing network.

Knowledge of the chartered markets remains largely incomplete. Whereas the charters commissioned the right to hold a market, it does not necessarily imply that there had not been a previous market held (Britnell 1981, 209). Unless a charter was reaffirmed or otherwise referred to in later documents, there is no means of assessing how long it survived or whether or not it ever proved a viable commercial proposition. Like grants of free warren or crenellation, market grants almost certainly had an element of status associated with them in addition to their more mundane fiscal advantages.

Markets were the subject of tolls on goods entering or leaving the market, although comparatively little information remains of the administration which lay behind them (McCutcheon

1940, 97-125). Individuals or the inhabitants of a particular place could be granted exemption from toll; in 1201 the merchants of Grimsby were exempted from toll in all the markets in the country save London itself (Gillett 1970, 11). These exemptions were often hotly disputed as, for example, when the merchants of Lincoln tried to claim freedom from toll in Barton-on-Humber (Ball 1856, 9-20). This could have had an effect on which markets a merchant or potter may have chosen to sell his wares. It is even possible that a more distant market may occasionally have been chosen in preference to a more heavily tolled local one. This represents a whole dimension of medieval trading for which there would appear to be very little available information.

There has been no study of Lincolnshire markets to parallel the work carried out on Yorkshire fairs and markets (McCutcheon 1939). However, the writer has included in Appendix A a list of the Lincolnshire fairs and markets recorded in the Calendar of Charter Rolls. It is not suggested that this list is exhaustive, but it probably incorporates the majority of medieval markets to have existed, or been granted charters in North Lincolnshire. Correlation with the lists of post-medieval Lincolnshire markets published elsewhere, demonstrates which of these survived the medieval period (Owen 1770; Saunders 1836, 177-178).

There is no reason to suspect that there was any uniformity in the status of markets; indeed, the available evidence would point to the contrary. By the Conquest it seems certain that there were already important urban centres within the

region such as York and Lincoln and, on a lesser scale, places such as Barton-on-Humber and Torksey. These urban centres almost certainly had markets and for the most part, given some fluctuations in their economic fortunes, they remained important urban centres throughout the medieval period. However, there were market grants to places such as Bonby, Appleby or Goxhill (Appendix A) which represented average-sized, rural settlements. These markets were usually granted at the behest of the lords of the manor or other major landholders as a potential, additional source of income. The lack of confirmation for both the Bonby and Appleby markets would suggest that they were never of any lasting economic consequence.

The general distribution and boundaries of the various regional traditions has already been discussed in the previous section (Maps 201-204). They would seem to have represented something more fundamental than simple groupings of market hinterlands (Chisholme 1979, 15-17) because the boundaries of their major and minor zones of influence seemed to show little respect for market centres. Markets could therefore be encapsulated within a zone of influence or lie on an interface between them. Indeed, pottery production within some market towns, such as Doncaster, included a number of different, contemporary, competing fabric traditions. Doncaster lay within the zones of influence of the gritty wares, the Yorkshire white wares and the Humberside fine sandy fabrics. The Hallgate A, B and C fabrics each conformed to one of these three traditions (Buckland et al 1979, 57-59).

Each regional tradition comprised one or more potting centres within a zone of influence, each making similar pottery.

In chapter 1 these were terms "local traditions". It is possible that these local traditions might reflect the pattern of marketing and distribution more clearly than the regional traditions if it is assumed that pottery was principally distributed through the market systems. A successful medieval potter may have enjoyed a share of, even a monopoly of the ceramic interests within one or more market centres. For the early-medieval period, the majority of potters would seem to have been urban based. These urban centres almost invariably had markets, giving the potters an automatic outlet for their wares with negligible transport costs (Le Patourel 1968, 119). The distribution of the products of the Hedon and Doncaster kilns would suggest that the wares of these towns were probably never commercially marketed in other market centres.

Rural industries abandoned this automatic market catchment in favour of easier fuel, clay, and water supplies. It would also have given the more enterprising potters the opportunity to exploit several markets (*ibid*, 119). It has been argued that many urban centres underwent a period of decline and stagnation during the late-medieval period (Bridbury 1981) and that this, combined with a rise in labour costs, may have been an influential factor in persuading potters that future commercial success lay outside the towns (Dyer, forthcoming).

In his study of the ceramic industries of the Malvern region, Vince (1977) suggested that the medieval potters would have sold their wares to the nearest available market and that any further extension of the distribution of those wares rested in the hands of an entrepreneurial class of middle-men who, in some cases,

would have bulk-purchased direct from the kiln site (ibid, 289-290). Evidence for the activities of middle-men in this region is very limited and the pottery distribution would suggest that the potters were probably far more directly involved with the distribution of their own wares than may have been the case in the Malvern region.

Studies of coarseware distribution in the Roman period have emphasised the importance of a market-orientated dispersal system which was, in some cases, extended along major routeways (Hodder 1974, 341, Model 1). In his remaining three models of pottery distribution, Hodder considered that a larger, commercially-based pottery industry could break out of the simple one market distribution system and dispose of wares across a wider area (ibid, Model 2). His third model consisted of a series of small local kilns engaged in small-scale production overlapping many of the market areas of the larger coarseware concerns and, in this respect, he quoted as a parallel Jean Le Patourel's model of pottery distribution in relation to the Winksley kilns of northern Yorkshire (Bellamy and Le Patourel 1970, 113-116). His final model involved the patronage of a major commercial force, in particular the Roman army which, with its own commissariat could disperse the wares of one factory over a far greater distance than normal market forces would have allowed (Hodder 1974, 355). Hodder's four models would seem to have been based on the assumption that pottery distribution would have been predominantly land-based. However, for the medieval period there is extensive evidence for a series of water-based trade routes supplementing the road network. Nevertheless, it seemed worthwhile to examine Hodder's four

models as part of the study of North Lincolnshire's pottery distribution.

### Hodder Model 1

The distribution of the early/high-medieval fineware traditions (Map 203) was probably based on urban pottery production systems, with the exception of the early industry at Toynton-All-Saints and the Yaddlethorpe pottery. This sort of urban-based production and marketing system would seem to fall into Hodder's Model 1, involving production centres based on a single market centre and being distributed within its natural catchment area or market hinterland (Chisholme 1979, 15-17). Within this region, the towns of Doncaster, Lincoln, Hedon and Beverley, each with their own pottery kilns, offer a chance to examine this model. The foremost of these four urban centres, in terms of size, wealth and economic influence, was the city of Lincoln. Although discussing the development of Lincoln's pottery industry in some depth, Coppack had not sufficient regional evidence to discuss the wider regional distribution of its products in any depth (1980, 135-154). Map 178, demonstrates the distribution of Lincoln ware in North Lincolnshire in relation to the other medium sandy, fineware fabrics whose total distribution was shown on Map 176. A number of sites, such as Somerby, Grayingham, West Rasen or Hemingby, had a considerable number of Lincoln ware sherds. These sites may well have fallen within the zone of major influence of Lincoln ware but the fabric never seemed to have dominated their assemblages. The relatively high proportion from Nettleham is almost certainly biased by the Bishop's Palace assemblage

(Russell and Moorhouse 1971, 22). Although Somerby, Grayingham, West Rasen and Hemingby each fell within the zone of major influence of the medium sandy fabric tradition, an examination of Maps 180, 183 and 184 suggest that Lincoln ware itself did not form the major fineware fabric during the early/high-medieval period.

The concept of zones of major and minor influence for each regional traditions discussed in the previous section can now be extended to include zones of major and minor occurrence for each pottery production centre. Fineware fabrics usually had both major and minor zones of occurrence, but coarsewares were generally confined to a zone of major occurrence.

The absence, in this thesis, of rural sites in the immediate vicinity of Lincoln prevents one from seeing if there was ever a close hinterland around the city which was ceramically dominated by Lincoln potters. Map 178 shows that Lincoln ware products were capable of reaching the Humber although these were largely confined to the west of the Wolds. They formed a thin, but widespread, zone of minor occurrence as "strays" in local assemblages. A low but consistent porportion of Lincoln ware was recovered from Thornholme Priory, which was probably bulk-buying most of its ceramics. As Thornholme owned land in Lincoln, (Glyn Coppack and Victoria Moore, pers. comm.) the incidence of Lincoln ware at the priory may be atypical for the area. It could be suggested that although Lincoln ware occurred in limited numbers across most of North Lincolnshire, it was never available on a regular, commercial basis. However, Lincoln merchants were active over a wide area and the documents record a regular presence at both Barton-on-Humber (Ball 1856,

19-20) and Grimsby (Shaw 1897, 86).

In addition to the weekly markets that most market charters conferred, there was usually an annual fair of three days, but this could be extended for several weeks in the more important or favoured places (Appendix A). The larger the fairs, the wider would have been their catchment area in terms of both customers and merchants. It is not known whether urban potters would have ever attended other fairs and markets for the purposes of selling their wares. However, the northern distribution of Lincoln ware (Map 178) could be related to the Ermine Street which linked the city to the Humber at Winteringham and formed a major medieval land route (Stenton 1936, 3). Major roads, Hodder suggested (1974, 349) could lead to a corresponding axial extension of pottery distribution.

Doncaster, Hallgate A products in North Lincolnshire are shown on Map 168 and, given the difficulties of recognising odd body sherds amongst the region's more numerous fine-sandy fabrics, the distribution appears rather sparse. The fabric was marketed on a regular basis to Axholme, which had no pottery industry of its own, but even here it did not have a monopoly. Map 171 shows that the region's orangewares also found a considerable market there. The occurrence of the A fabric at Alkborough, Burton-upon-Stather and Haythby suggests the influence on local trade of the Humber/Trent confluence; the Turnbrigg dyke enabled Doncaster to keep coastal trading links along the Humber/Trent river system.

The white, 'B' fabric from Doncaster achieved a wider distribution in the region than the A fabric even although the

zone of major influence of the whitewares was restricted to Yorkshire. Examples of the B fabric occurred at Hedon, East Halton Skitter, Thornholme Priory, Worlaby, Alkborough, Thornton Curtis and West Rasen. However, with the possible exception of Hedon, the low numbers make it unlikely that there was ever a regular traded supply of the fabric. Nevertheless, the majority of the findspots would emphasise river or coastal trading links, although the occurrence of Hallgate B at the inland village of Worlaby is more intriguing. A detailed distributional study of the Doncaster fabrics has not yet been undertaken to the north, west or south of the town, but if the eastern distribution is representative, a similar pattern would emerge to that of Lincoln. If there was a market hinterland around Doncaster in which the Hallgate fabrics had a near monopoly of contemporary finewares, it did not extend into Axholme despite the 'open' ceramic market there. This would suggest that such a hinterland could have been less than 12 miles in radius. However, like Lincoln ware, Doncaster's fineware products achieved a thin zone of minor occurrence across a far wider area than that of its major occurrence.

The distribution of Hedon's wares in East Yorkshire has yet to be studied in detail. Only a few vessels in these fabrics have been recognised in Beverley but as this was also a major potting centre, it would perhaps have been surprising had there been more. There was a considerable chronological overlap between the putative Hedon pottery industry and the foundation of the new site of Kingston-upon-Hull in c.1260 (Watkins, forthcoming) but very few Hedon products have been recognised from the port's assemblages. Despite this, Hull was importing most

of its 'local' pottery from the orangeware kilns at Beverley during the 13th and early 14th centuries. Although Hedon was closer to Hull, Beverley's water links via the river Hull was probably the determining factor. Across the Humber, fine sandy fabrics only formed some 30% of the early/high-medieval finewares at East Halton Skitter, but the great majority of these were from Hedon. However, this proved to be the exception. Elsewhere in North Lincolnshire Hedon's products were rare and there was no attempt to market the wares on the south bank; the difficulties of the Humber crossing (Barley 1936, 12) and the presence of a local fine sandy tradition in North Lincolnshire would have made this a most unlikely proposition.

The distribution of the Beverley orangewares remains largely unknown except for the aforementioned large-scale pottery trade to Hull from c.1260 to c.1325, possibly carried along the River Hull.

The overall picture of this urban-based fineware pottery distribution would largely support Hodder's model 1, in that the principal, perhaps the sole market for a pottery was the town where it was being produced. Roadways such as Ermine Street, or waterways such as the River Hull, could considerably extend such a distribution but usually only in terms of a zone of minor occurrence. Hodder's model was based on the distribution of Roman coarsewares and this study on medieval finewares, although the coarseware/fineware distinctions are not directly compatible between the two periods. In general, the source of the medieval coarsewares is less certain than that of the finewares, however, Hedon's coarse sandy fabrics suggest their distribution may

have been even more tightly confined to an area immediately surrounding their production centres.

### Hodder Model 2.

In this model Hodder postulated that a large-scale, commercially based, Roman coarseware industry, trading cheaper products, could break out of the single market confines of Model 1 and achieve a wider distribution (Hodder 1974, 352-355). This model could be used to analyse the region's late-medieval fabric traditions (Map 204), where it can be shown that pottery was being produced from rural centres which incorporated more than one potter. Jean Le Patourel demonstrated from the court rolls of Cowick that the village had up to 5 potters working there in the mid-14th century (1968, 110). At Toynton-All-Saints, Mrs. Rudkin (pers. comm.) found extensive archaeological evidence of pottery production during the high/late-medieval periods; the court rolls also show up to 7 contemporary working potters during the mid-14th century (Le Patourel 1968, 111). Fieldwork by Ben Whitwell at Holme-upon-Spalding-Moor suggested the presence of several other kiln sites in addition to that excavated by Greenfield (Mayes and Hayfield 1980, 99). The surface scatter of wasters at Firsby Hall (Magilton 1977, 30) would also point to large-scale production, although the extent and date range of this complex is more obscure.

The emergent pattern is of the region's three late-medieval traditions each encompassing a number of pottery centres which, in turn, contained anything up to seven or more contemporary potters. The resemblance to the larger late Roman coarseware

pottery industries in the region, such as Throlam (Corder 1930), Crambeck (Corder 1928, 1937) or the Cantley/Bessekar/Rossington Bridge complex outside Doncaster (Buckland and Dolby 1980; Buckland et al 1980), is striking. The late-medieval pottery industries would indeed seem to fit into Hodder's concept of large-scale, more commercially based, pottery industries. It has already been demonstrated that the move to rural based industries had started by the high-medieval period. It was also suggested that such a move would have provided cheaper access to the potters' basic requirements of clay, water and fuel and allowed them to exploit more than one market centre; many of the traditional urban centres being in decline by the end of the 14th century (Bridbury 1981). This can now be examined in more detail.

Given that many new market foundations failed to survive as viable economic enterprises, the grants of market charters in the region proved of great interest. Having made a list of market grants taken from the Calendar of Charter Rolls for North Lincolnshire (AppendixA), the writer made a further study of the dates of first-time grants which are presented in the bar-graph below. This therefore excluded confirmation of existing charters or those markets which had originated in the saxon or early-medieval periods, such as Barton-on-Humber, Gainsborough or Torksey.

The Incidence of New Grants of Market Charters in  
North Lincolnshire (based on the Charter Rolls).

No. of grants						
12						
11						
10				1340		
9				1335		
8			1278	1334		
7			1271	1332		
6			1270	1329		
5			1268	1318		
4		1245	1267	1317		
3		1235	1265	1314		
2		1234	1258	1305		
1		1227	1252	1304	1383	1441

A.D. 1150 > 1200 > 1250 > 1300 > 1350 > 1400 > 1450

This bar-graph demonstrates that recorded market charters for North Lincolnshire began in 1227 and that, for a little over a century, they continued in increasing numbers until c.1340 when a dramatic drop occurred. This was followed by a single late 14th-century grant in 1383 at Epworth almost certainly linked to the raising of Thomas de Mowbray to Earl of Nottingham in the same year (Cal. Charter Rolls, V, 3 Edw.III 1383). The last grant in 1441 was a switch in market site from Garthorpe to Crowle. Thus to all intents and purposes, the

granting of market charters in North Lincolnshire had ceased by c.1340, a date which could correlate with the Black Death incursions of 1348 and the resulting economic problems (Zeigler 1969, 178-80). This pattern of market grants is similar to that encountered for other areas of the country (Britnell 1981, 210).

It may be no coincidence that this period from the mid-13th century to the end of the 14th was almost certainly a time when many of the rural pottery industries were founded which subsequently dominated the region's ceramics in the late-medieval period. The rise in the number of market grants may have appeared to have been creating the right economic opportunities for potters to achieve a wider distribution for their wares.

Not all of the new markets created during this period survived the end of the 14th century, but by then the rural industries had been largely established; some for several generations. The economic problems of the traditional urban centres, combined with the survival of many, perhaps most, of the new market foundations into the late-medieval period no doubt catalysed the success of these rural industries. Although urban potteries survived in places such as Lincoln and Nottingham (Coppack 1980, 226-227) they had died out at Hedon, Beverley, Scarborough and Doncaster by the end of the 14th century.

Because of the close visual similarities between the products of the various local traditions, such as Cowick or Holme-upon-Spalding-Moor, which made up these late-medieval regional traditions, it was not usually possible to comment upon the distribution of an individual pottery centre. Nevertheless, the size, location and scale of these late-medieval potteries

would suggest that they may have conformed, in general terms, with Hodder's second model.

### Hodder Model 3

Hodder was less detailed in his discussion of his remaining two models, but Model 3 involved the concept of small scale, rural-based pottery production with restricted market areas which overlapped both with each other and with the larger production concerns (Hodder 1974, 355). The analogy that Hodder drew on was the marketing model proposed by Jean Le Patourel for the Yorkshire kiln groups (Le Patourel 1970, 113-116). In some ways this was unfortunate because the Yorkshire evidence was based on the proximity of market towns and kiln sites rather than on any known distribution of pottery types.

Most of the region's known medieval kiln sites would seem to fall into either Hodder's Model 1 or Model 2, but there were some early-medieval, rural-based kilns such as the Staxton/Potter Brompton complex and the documented, though unlocated site at Glentworth (Stenton 1922, 85). Map 201, which shows the boundaries of the medieval coarseware traditions, contrasts the shell and coarse sand-tempered fabrics. It shows that both had zones of major influence which met without appearing to overlap. In addition, both traditions had zones of minor influence which completely overlapped within the opposing tradition's zone of major influence. It was suggested in the foregoing discussion of Model 1 that the coarsewares produced from urban centres were restricted to a zone of major occurrence and that it was only the finewares which were able to achieve an extended

zone of minor occurrence. Such a suggestion would, superficially, seem to conflict with the existence of minor influence zones of the shell and coarse sandy coarsewares on Map 201.

However, further examination of Map 156 for the shell-tempered tradition and Map 159 for the coarse sand-tempered tradition, reveals a possible answer to this dilemma. For the coarse sandy fabrics there was a single fabric, C2, which dominated the zone of major influence and a second fabric, C3, whose occurrence was restricted to the zone of minor influence. The same phenomenon was revealed for the shell-tempered tradition where the S3 fabric occurred within the zone of major influence and the S4 fabric within the zone of minor influence. Thus the two numerically more important fabrics, C2 and S3, rarely occurred outside the zone of major influence for their respective traditions forming a corresponding zone of major occurrence. The production sources for these two fabrics are unknown although links have been drawn in this thesis between the production of the coarse sandy fabrics and the fine sandy fabrics based on their common production at Hedon.

The S4 and C3 fabrics would both seem to have been produced and distributed within the zones of minor influence for their traditions. Although their distributions was fairly wide, their numbers were comparatively small. If each was produced from a single kiln site then the small numbers involved make their distribution seem surprisingly extensive. It has been suggested above that such minor fabrics could also have been produced from the same centres as more important coarseware or fineware fabrics. The variety of fabrics produced from a number of the

regions urban centres such as Doncaster, Scarborough or Hedon provides the background for such an interpretation. Such minor fabrics would probably have been able to exploit the same marketing network as their more successful urban pottery fabrics along the lines of Hodder's model 1. This may go some way towards explaining the surprisingly wide distribution of these minor fabrics.

The Staxton/Potter Brompton kilns would also seem to represent additional candidates for Model 3 especially in their earlier phases of production. Current evidence would suggest that this series of kilns was in operation by the 12th century (Le Patourel 1979, 84) and that they were specifically geared towards the production of coarsewares which the experience of other similar fabrics would suggest should only have achieved a distribution within a limited area of major occurrence. The siting of these kilns close to Malton might seem intentional in order to exploit the town's markets. However, the Staxton/Potter Brompton kilns were situated on an outcrop of natural clays which was also used by the Roman coarseware kilns at the neighbouring village of Knapton (Corder and Kirk 1932). Production continued at the Staxton kilns until the late 14th or early 15th centuries, surviving, and no doubt taking advantage of the general move to rural industries and the expanding market opportunities. The nearby village of Sledmere, for example, was granted market rights in 1303 (McCutcheon 1939, 166). These fabrics only disappeared early in the late-medieval period with the general decline of the medieval coarseware industries.

Although there were some links with a number of the region's minor fabrics, there was not the same convincing evidence for Hodder's Model 3 that there had been for Models 1 and 2. In this respect it is worth emphasising that the system of pottery marketing and distribution proposed by Jean Le Patourel was entirely conjectural and lacked the real substance of distributional evidence to serve as a credible working hypothesis of pottery dispersal (Bellamy and Le Patourel 1970, 113-116).

#### Hodder Model 4

There were no comparable medieval parallels for Hodder's final model, that of large-scale commercial patronage, provided in the Roman period by the army. However, there is some evidence of bulk-buying on a lesser scale during the medieval period. The 14th century Yaddlethorpe reference has already been much discussed in this thesis, but as Robert Beaumont does not appear to have been connected with the Manor of Appleby, two possible explanations for the order were proposed. The first was that he may have been a stallholder at Appleby market (chartered 1267, Appendix A) or secondly, that he may have been an ecclesiastical or lay official of Thornholme Priory which was situated in Appleby parish. The French name Beaumont, even in the 14th century, would perhaps seem less likely to have been connected with a market stallholder than a priory official. There exists the possibility, therefore, that this order of 2000 pottery vessels could have been linked with bulk-buying from the priory, although this is essentially speculative. However, such direct orders from kiln sites by major secular or

ecclesiastical centres are better documented elsewhere in the country (Le Patourel 1968, 119-120) and must have been a much valued source of income for a potter, especially if they proved to be regular contracts. In such cases, however, it would be usual for the consumer to place his order with a nearby pottery, so that, unlike the Roman army contracts, such patronage would not necessarily greatly extend the distribution of a potters wares (ibid. 120).

The examination of Hodder's four marketing models has also allowed a general synopsis of the marketing and distribution of locally made pottery in North Lincolnshire. Hodder's models can be shown to have been applicable within the region's pottery industry in terms of the location and size of the kiln operations. However, Hodder's thesis was that the Model 2, large-scale industries could break out of the basic market hinterlands and achieve a wider distribution. This would also seem to have been the case in the medieval period, but distribution was limited within the boundaries of the various regional traditions.

#### The medieval fair in North Lincolnshire

The medieval fair has been described as "a kind of glorified market" (Salzman 1931, 142). Almost all the 13th and 14th century market grants included a fair, and the following discussion seeks to assess their possible role in North Lincolnshire's economy. Most fairs were granted for three days on the "vigil, feast and morrow" of a given Saints day (Appendix A). However, some fairs were granted for a considerably longer period; Grantham's lasted three weeks and Hull's six weeks. Fairs could

also be granted to a separate person or institution to those who held the market rights, although this was perhaps more common amongst the older urban centres than the lesser market sites granted in the 13th and 14th centuries.

Map 205 was prepared to demonstrate the relative sizes of the fairs in North Lincolnshire. Some serious imbalances occur regarding the size of the fairs at Grimsby, Caistor, Louth and Lincoln which are not known to the writer. Louth had three fairs but their size is not recorded (Goulding 1891, 4). Also the map makes no concessions to time scale; the fair size being the largest period recorded for each place during the medieval period. Nevertheless, the pattern which it presents is an interesting one. The location and number of the larger fairs is biased towards the west of the county. The dominance of the fairs bordering onto the River Trent is particularly noticeable as they include the region's only two-week fairs at Torksey, Gainsborough and two at Burton-upon-Stather. The other two larger fairs in the area occurred at Winterton and Kirton Lindsey, both being granted two, week-long fairs. Their location next to the Ermine Street is also unlikely to be a coincidence. Given the lack of knowledge concerning Grimsby and Caistor, the North Riding of Lindsey appears to have had only the one week-long fair at Barton-on-Humber. The location of known medieval markets (Map 206) also reveals a similar, numeric bias towards the west of the county.

None of North Lincolnshire's fairs counted amongst the great fairs of England, such as St Ives (Hunts.), Northampton, Boston or the St Giles fair at Winchester (Salzman 1931, 154). However, in

1293 the newly founded port of Kingston-upon-Hull was endowed with a six-week fair (Cal. Close Rolls, 292). Statutes of 1328 and 1331 demanded that the Lord of each fair was to proclaim its duration at its onset (Stat. 2 Edw III, c14; 5 Edw III, c5; Salzman 1931, 146). Once the fair had been proclaimed, normal market trading within the town was usually severely restricted or, on occasion, halted for the duration of the fair in order not to detract from the revenues of the fair itself (ibid, 145).

The larger fairs would inevitably attract merchants from all over England and could also bring in continental merchants, some having regular booth positions at the largest fairs. The distribution of Lincoln ware on Map 178, and to some extent that of medium sandy wares as a whole (Map 176), reflects the same geographical imbalance of the fairs in North Lincolnshire. It is quite possible that merchants from Lincoln would have attended the larger fairs of North Lincolnshire, such as Gainsborough and Burton-upon-Stather or even Winterton and Kirton Lindsey. However, it is far from certain whether these merchants traded such lowly wares as pottery. Although in this respect, it could be observed that the great majority of Lincoln ware vessels within their zone of minor occurrence were jugs, frequently highly decorated. Such vessels, being slightly above the ordinary, may well have ensured successful sales in the more distant parts of Lincolnshire. Indeed, as a general trend regional strays found in their zones of minor occurrence were frequently better than average for their types. It is difficult to resist equating this northerly spread of Lincoln wares with the

corresponding northern density of fairs which in turn could be directly related to the position of the Trent and Ermine Street. It implies that the Trent and the land between its eastern bank and the western Wold scarp acted as a form of trade funnel linking Lincoln with the Humber.

Salzman suggested that the 13th century was the heyday of the English medieval fairs, and by the early 14th century a decline had set in which was to be accelerated by the Black Death (Salzman 1931, 156). At Boston, one of England's four great medieval fairs, there was a complaint in 1335 that foreign merchants were no longer attending the fair and by 1416 it was no longer held. Although attempts were made to revive it, it was never to regain its former importance (*ibid*, 156). The same proved true of the other great fairs at St Ives, Northampton and Winchester which all suffered serious decline in their fortunes during the early 14th century (*ibid*, 156).

In North Lincolnshire, grants of fairs continued unabated until the mid-14th century, but most were on a small, three-day scale although, in some 14th century confirmation of grants, the size of fairs were reduced. Torksey, in 1282, had been granted a two-week fair, but in 1345 it was reduced to 8 days (Appendix A). Nevertheless, the fortunes of the 'Lincolnshire' regional traditions show some geographical contraction between that of the high-medieval, medium sandy wares (Map 176) and that of the late-medieval Toynton/Bolingbroke tradition (Map 190). The principal area of contraction between the two traditions was the north-west part of Lindsey, and it may be no coincidence that this included a substantial part of the area covered by the belt of larger, high-medieval fairs between Lincoln and the

Humber (Map 205).

The medieval fairs of North Lincolnshire cannot yet be shown to have had a direct link with pottery distribution although they must surely have exerted an influence, if only in the diffusion of ideas enabling local people to identify new market trends. In terms of distribution, they probably had an influence on the zone of minor occurrence of fineware fabrics, but it is less certain to what extent they affected the basic distribution pattern for each tradition. However, the possible correlation between the larger northern fairs and the boundaries of the medium sandy fabrics suggests that it could have been considerable.

A further indication of the influence and importance of the larger fairs is provided by the following extract from Walter of Henley's account of the rules of St. Robert Grosseteste, Bishop of Lincoln which were prepared for the widowed Countess of Lincoln in 1240. "I advise that at two seasons of the year you make your purchases, your wines and your wax at the fair of St. Bartolph ..... your robes purchase at St Ives....". (Lamond 1890, 145).

f) The possible influence of river and coastal trade on the region's pottery industries

The production, transport and marketing of pottery was a small but integral part of the industrial and commercial activity within the region during the medieval periods. Whenever pottery was marketed away from its source of production, two modes of transport were available; road and water. This study makes no attempt to review or redefine the full archaeological or historical evidence for medieval transport within the region. However, some general observations on its mechanisms and extent, within the confines of the available evidence, are essential to an understanding of the means of pottery distribution. International pottery trade has been the subject of considerable study both for the medieval periods (Dunning 1956, 1968; Hodges 1977) and for the Roman occupation (Fulford 1977, 1978). However, little work has yet been undertaken on the internal trading mechanisms of medieval pottery.

The Yorkshire and Lincolnshire region is fortunate in having a large number of extremely useful antiquarian studies on various local towns. The most important of these for East Yorkshire include Frost 1827; Poulson 1840/1; Boyle 1889, 1895; and for Lincolnshire, Ball 1856; Brown 1906/8; Saunders 1836; Stark 1843; Shaw 1897; Hill 1948 and Gillett 1970. Despite variation in quality and authority, these works often went into considerable detail on aspects of trade and navigation along the Humber river system.

Maurice Barley drew heavily on these sources in his important paper summarising the evidence of river trade and navigation in

Lincolnshire (Barley 1936). It is unfortunate that despite the seminal nature of that article, the subject has rarely been pursued except in recent revisions of local histories (Hill 1948, Gillett 1970). Nevertheless, Barley's work remains a fundamental basis for any consideration of the river and coastal trade of the Humber. By comparison, the medieval roadways of the region have only been discussed as part of a national synopsis (Stenton 1936) and therefore the ensuing review of trading mechanisms in the region rests heavily on the more plentiful evidence for waterborne trade.

Barley's work relied almost entirely on historical sources which were themselves biased towards those aspects of medieval trade and transport which rendered itself the subject of recorded petition and litigation. Within North Lincolnshire, this historical evidence was largely confined to events on the principal rivers of the Trent, Don and Ancholme and within the more important ports of Barton-on-Humber, Grimsby and Gainsborough. On occasion archaeological evidence can now go some way towards correcting that bias through the study of several minor sites.

There is no surviving, contemporary account of local coastal or inland trade, either descriptive or fiscal. However, numerous petitions, fiscal demands, inquisitions etc. referring to specific incidents, cast some light on the subject. With the exception of some of the 15th-century port books for Hull (Watkins 1978, 43-46) none of the documented medieval sources for the region refer to the trade in pottery. However, it is hoped that a general summary of the evidence for waterborne trade will demonstrate the integral part it played in the region's economy.

The evidence falls into two classes, the first covering in-

land waterways and the second coastal waterways, the latter subdividing into English coastal traffic and foreign trade.

Any investigation into the medieval river and coastal trade of the region requires a brief comment on the current state of evidence for the size and form of the medieval boats that could have been involved in such trade. In a national survey of the English Customs system, Norman Gras noted a variety of names which were commonly used to describe various types of boats and ships engaged in both national and international trade (Gras 1918, 115). However, current research on Roman and medieval shipping is largely based on the archaeological evidence (Cleer 1978; McGrail 1979) and, to a lesser extent, iconographic evidence (Villain-Gandossi 1979; Farrell 1979).

Within the region covered by this thesis, evidence for medieval shipping was limited to passing documentary references. In planning the scouring of the River Eau, it was described as being suitable for both ships and boats (Barley 1936, 14). The Torksey inquisition of 1228 levied varying rates of toll for ships with rudders (navis cum remo), ships without rudders (navis sine remo) and small boats (pavum batellum) (Gras 1918, 155-158; Barley 1936, 14). Barley translates remo as oar, but in this context it is more likely to mean the steering oars or rudders found on the "cog" type vessels than the conventional rowing oars. In 1372 a description of the ferry at Barton-on-Humber included "one great boat with three men and a cogboat belonging and also one small boat with two men..." (Brown 1908, 54 - "Treasury Rolls").

It is evident that there were several vessel sizes ranging from the larger merchant ships used principally for foreign trade, to small dug-outs or "logboats" which were little altered from

the prehistoric period. One assumes that the smaller the boat, the further up the river system it could penetrate. Excavation of part of the riverbed associated with the small inland harbour of Port Berteau on the River Charente in the "Saintonge" area of France, revealed an almost complete medieval logboat (Rieth 1979). Port Berteau is thought to have been a harbour principally involved with the transport of cargoes of Saintonge pottery to larger vessels on the French coast for shipment to England. It was suggested by Rieth that such logboats would have been the principal mode of transport for the pottery up-river to the coast (ibid, 144). Recent research can now demonstrate that logboats were also active on some of the major English medieval rivers such as the Mersey (McGrail and Switsur 1979). It would seem reasonable to assume that logboats could also have been used as a means of transport along the minor rivers of Lincolnshire, although whether they can be associated with the "small boats" of the Torksey inquisition is uncertain.

One of the smaller and commoner plank-built boats was the "cog" (Elmers 1979) whose use was referred to above in the description of the Barton ferry. This, perhaps, was likely to have been the most common vessel used on the major rivers, the Humber and for coastal trading. Considering the projected Port Berteau trade, it could be postulated that logboats, carrying cargoes destined for the continent, would have come downstream transferring cargoes to coastal craft for journeys along the major rivers to a Humber port where the cargo would have been transferred again to ocean going ships for the final leg to the continent. Such a process would be assumed to have operated in reverse for the diffusion of incoming cargoes.

### Inland waterways

The natural drainage of the region is shown on all the distribution maps in relation to the basic relief. The fundamental problem in any assessment of inland water trade is how much of this natural drainage system was navigable during the medieval period (Barley 1936, 8).

To the West, the Isle of Axholme was drained by the Don, Idle and Bykersdyke. The river Don was divided into two channels, - the first joined the Aire at Turbridge between Radcliffe and Snaith; this branch has been referred to as Turnbridge Dike (Gaunt 1975). The second channel flowed near Thorne, joined the Idle at Santoft to form the Old River Don and, progressing via Crowle, Eastoft and Fockerby, it joined the Trent at Addingfleet (Dunston 1909, 23). Further south the Idle also divided into two branches, the main stream descending from Retford and Bawtry entered Axholme through the Misson marshes before dividing. The first branch, called Bykersdyke, passed through the Carrs of Haxey and Misterton to enter the Trent at Stockwith. The second entered the parish of Haxey, near Wroot where it was joined by a tributary of the River Thorne and expanded into a shallow lake called the Messic Meres at Epworth from there it passed close to Santoft to empty into the Southern Don (ibid, 24). At first it would seem that Axholme was well endowed with river systems, which provided almost every parish with access to a waterway. However, it is less certain how many of these were navigable. Dunston records that the low lying nature of the land produced considerable meandering of the drainage which was constantly liable to silt up or flood in the winter season (ibid, 23). This continual state of flux in the location and condition of Axholme's waterways would have made navigation arduous. It was only during

the 17th century drainage schemes that the present drainage system took shape. There is some indication that a number of these medieval rivers and streams were navigable because of the continual appointment of commissioners to scour and cleanse the rivers in order to maintain their navigability (Dunston 1909,10).

The Trent itself was navigable at least as far as Nottingham and from 1121, when the Fossdyke was reopened, there was a navigable link from the Witham at Lincoln to the Trent at Torksey (Barley 1936, 10). Various lesser rivers and streams joined the Trent on its progress to the Humber, these included the Idle, the Old River Don and Eau. Barley records that in 1342 a Gilbert de Umfraville had petitioned that the Eau was convenient for ships and boats but the channel was silted. He undertook to cleanse and maintain the banks of the Eau if he was allowed to levy certain customs on those using the river (Barley 1936, 14). The village of Scotter was situated on the Eau; it had been granted a market and fair in 1270 which was reaffirmed in 1332 (Appendix A). Gilbert may well have hoped to take advantage of the additional trade to Scotter fair and market even though the market rights belonged to the Abbot of Peterborough. The practise continued for some years because in 1375 his right to charge custom was challenged, but he was able to produce his letter of patent (Barley 1936, 14). From an archaeological point of view, it may be no coincidence that a near complete Lincoln ware jug and a large Humber ware sherd were recovered from the beds of the River Eau at Scotter (Plate 36 Nos. 2, 3).

The River Ancholme was also an important navigation route during the Middle Ages. In 1290, Commissioners of Sewers were appointed to clear the Ancholme of silt obstruction between

Bishop's Bridge and the Humber so that "ships and boats laden with corn and merchandise might then go from the Humber to the parts of Lindsey as they were wont to do" (Pat. Rolls, 400; Barley 1936, 9).

It has been observed that the river system through Axholme had been constantly bedevilled by silting which made tracts of water unnavigable until cleared. Silting appeared to have been a general problem in Lincolnshire rivers. The Fosdyke, although reopened in 1121, was so obstructed by 1335 so that a Commission of Sewers had to be called (Barley 1936, 10). By 1365 the problem had arisen again as the difficulties of navigation were the subject of complaint by the merchants of York, Nottingham and Hull (*ibid*, 10); in 1376 the same merchants were again complaining with the addition of the merchants of Newcastle (*ibid*, 10). The earliest record of major silting on the Ancholme was the Commission of Sewers in 1290 referred to above. Barley records that further commissioners were called in 1294, 1295 and twelve times between 1312 and 1391, leading him to conclude that "by this time (1532) navigation of the Ancholme had been for so long difficult, if not impossible, that we may doubt if any revival followed" (Barley 1936, 10). However, in the early 15th century, timber had been required to repair a watermill in Grimsby, and it is recorded that the timber came from Broughton via the Ancholme (Gillett 1970, 3). Thornholme Priory had major drainage links with the Ancholme which were no doubt linked with their ferry interest at South Ferriby (information Glyn Coppack and Victoria Moore). It could be speculated that if the orangeware, which dominated the priory's 12th-century groups, came from Barton-on-Humber area, then river transport of the pottery down the Ancholme

was more than likely. Could it be that the general move to more local pottery sources for the priory in the 13th and 14th centuries was aided by the increasing difficulties of navigating the Ancholme?

It would appear that whereas large stretches of North Lincolnshire's river systems were potentially navigable, this was the subject to continual fluctuation linked almost directly with the process of silting. The clearance of the Eau had referred to navigability by ships and boats. Although the medieval boat forms will be discussed more fully later in this section, silting may have, at times, restricted the size of vessel rather than rendering it completely unnavigable. In the same vein, whereas a river may only have been navigable by "ship" to a certain point "boats" could have been used to move goods further up river.

This synopsis of inland waterways would not be complete without some mention of the more important inland ports. There is some archaeological evidence to confirm that both Lincoln and Torksey were important trading centres during the late-saxon period (Adams 1979; Coppack 1980, 138-9). Although Torksey seemed to show a comparative decline during the medieval period Lincoln flourished until the late-medieval period (Bridbury 1981, 8-10), but in 1203/5 King John's quindecima suggests that Lincoln was still one of the country's major ports (Gras 1918, 221-222).

An inquisition of 1228 gives some indication of the local customs and trade at Torksey; this is printed in full in Gras (ibid, 155-158). It states that all merchandise coming downstream from Newark and upstream from Gainsborough were not to

unload before reaching Torksey. If ships contained cargoes then they were the subject of toll but the ships were not. Empty ships were tolled at the following rates, viz:

Ship with an oar	( <u>Navis cum remo</u> )	iiiiid
Ship without an oar	( <u>Navis sine remo</u> )	iid
Small boat	( <u>Parvum batellum</u> )	id

It is also stated that the Lord of Torksey was able to charge thourthtoll and overthuerttoll from which the merchants of London, Lincoln, Nottingham, York, Beverley and Torksey were exempt (ibid, 155) although the specific meaning of the names of these two tolls is still uncertain. Although it is almost certain that Torksey had a fair and/or market earlier in the early-medieval period, the earliest chartered grant was in 1286 which granted John de Balliol a fifteen-day fair (Appendix A). However, in 1345 this charter was redefined with John Darcy as the grantee and although granting two weekly markets, the annual fair was reduced to nine days (ibid).

The early history of the port of Gainsborough is less detailed (Stark 1842, 77-78). The earliest reference to a fair was a grant in 1242/3 of a three-day fair to a John Talbot (ibid, 64). In 1336, an inquisition recorded a ferry over the Trent, a market and a fair (Cal I.P.M., Vol.4,713). The port of Gainsborough evidently gained some success. In 1323 it was included in one of the many Port Lists to supply ships for royal military purposes, though it failed to be included in several other 14th-century lists (Brown 1908, 204, 212). During the 16th century London merchants established factors at Gainsborough in order to receive and sell incoming foreign goods (Stark 1842, 84). This was evidently sufficiently successful for the merchants of Hull to

complain to the Star Chamber in 1589 and 1596 that it was depriving Hull of its trade (ibid, 85-87).

If the rivers of North Lincolnshire were capable of acting as trade routes they were also capable of forming barriers to land bound trade. It seems likely that the lowest medieval bridging point of the Trent during the medieval period was Newark, a bridge only being established at Gainsborough in the 18th century (Barley 1936, 2). However, by the 14th century, there were active ferries across the Trent at Burton-upon-Stather, Marsdike, Kinnard Ferry, Gainsborough, Lee, Littleborough, Torksey and Clifton (ibid, 7). Across the Ancholme, there was a bridge at Glanford Brigg by 1218 and also at South Ferriby by 1312 (ibid, 3). However, it probably mattered little to most merchants whether rivers were crossed by bridge or ferry, as both were usually subject to toll. In 1275, Gilbert de Nevil claimed the right to take toll over all the traffic using the bridge at Glanford Brigg (Brown, 1906, 128). Nevertheless, although rivers may not have proved a major obstacle to land transport, they would have had the effect of funnelling trade to the various crossing points of each river.

#### Coastal trade: Havens

The banks of the Humber and the North Sea coast were riddled with small creeks and inlets known locally as "Havens". They have been included as part of the natural drainage of the region on the distribution maps. Most had a nucleated village settlement within a mile inland of the haven mouths; Winteringham, Barrow-on-Humber and Killingholme being among the many Lincolnshire examples. These havens were important trade arteries in

their own right. At present their silted banks and shallow stagnant pools makes it difficult to visualise their former commercial importance. Numerous details the regular packets and steamers operating to and from these small haven ports are recorded from 1826 in White's Directories of Lincolnshire (for example, White 1826, 153-155 and liii). It was probably no coincidence that at Barrow-upon-Humber the 12th-century motte and bailey castle was sited not in the centre of the village, but to the north along the haven, attesting to the latter's economic and strategic importance (Loughlin and Miller 1979, 184-185).

The medieval documentation for these havens was slight. Fortunately there is a growing body of archaeological evidence from these haven sites as a result of the imaginative programme of fieldwalking diligently pursued by Ron and Elsie Newton of Barton-on-Humber. Such fieldwalking involved the methodical collection of surface scatters from the Humber foreshore at the mouths of several of these havens at low water. The most archaeologically productive of these haven sites was at East Halton Skitter.

East Halton Skitter formed the parish boundary between the parishes of Goxhill and East Halton where it entered the Humber. However, its headwaters originate in Keelby parish where it passes through the parishes of Brocklesby, Habrough, Killingholme and Thornton Curtis before reaching East Halton. As late as the 19th century, the Skitter mouth was a ferry point across to Hull, and Barton-on-Humber (White 1826, 152-153). Some medieval documents refer to a "Skottermuth" which Brown translated as

Skitermouth and identified with East Halton Skitter (Brown 1908, 206). However, the more common medieval name was probably Twygrayn or Twyngreyn; although the association was made by both Brown (1906, 96) and Barley (1936, 5), it remains essentially circumstantial. In an Order in Chancery of 1371 it was mentioned that the ferries of Barton and Barrow were the only ferries across the Humber between the bounds of Radcliffe and Twygrayn (Brown 1906, 96). Radcliffe was in the parish of North Ferriby and therefore Twygrayn presumably lay to the east of Barrow. There are, however, earlier charters which seem to pinpoint Twyngreyn more closely. In a charter of 1154-1179 the nuns of Nun Coton were granted "that the ships belonging to the nuns shall ply to his haven of Paull and Hedon and sail therefrom, quit of all custom and demand" (Farrer 1916, III 39-40). When referring to this charter, Barley observed that Nun Coton was one of the few East Yorkshire and North Lincolnshire religious houses which did not appear to hold estates across the Humber, and that therefore this grant might be linked with the nunnery's need to dispose of its wool which could thus have been shipped to Hedon for trans-shipment to the continent (Barley 1936, 7). Like Thornton Abbey, the Nunnery of Nuncotham lay close to East Halton Skitter which emptied into the Humber at a point almost opposite Paull. East Halton Skitter would therefore have made the obvious south bank ferry point to Paull; it was also the closest to Hedon. A slightly later 12th-century charter of 1190 was a notitia of gifts confirmed to the canons of St Mary of Thornton which included the grant of "transitium Humbre apud Paglam et Twyngreyn sibi et hominibus suis et omnibus rebus suis sine naulo...." (Farrer 1916, III, 41-42).

Barley referred to this charter as a further example of free ferry rights granted to religious houses to cross the Humber (1936, 6), but apparently failed to appreciate the significance of the Paull/Twyngreyn crossing in relation to the Skitter. Thornton lay alongside the Skitter which in turn would have formed the obvious crossing point to Paull. Thus the case for the identification of the medieval "port" of Twyngreyn with the junction of East Halton Skitter to the Humber becomes considerably stronger. It would suggest that East Halton Skitter may have seen considerable traffic from the 12th century. In addition, there is now an impressive body of archaeological evidence which would confirm extensive trade from the mouth of the Skitter.

A stretch of land of about 100 yards from the northern mouth of the Skitter, northwards along the foreshore towards Goxhill, has been extensively 'walked' by the Newtons. This resulted in the collection of several thousand pottery sherds dating from the 1st to the 19th centuries, the saxon and medieval material being presented in chapter 2, and Pls.25-30. Apart from varying amounts of marine deposits, the sherds were generally large, unabraded and fresh in appearance. There were also a considerable number of fitting sherds. Their condition would seem to deny the possibility of their having been washed up from elsewhere in the Humber. Also their number and chronological range would suggest that they owed their existence to a continuous occupational presence around the mouth of the Skitter. At present there is no archaeological or historical evidence to suggest that there was ever a settlement there, although there was an Inn recorded there in the late 19th century (Eleanor Russell, pers. comm.). This explanation cannot be entirely

ruled out. Barrow-upon-Humber developed an independent hamlet along its haven mouth which still exists as Barrow Haven. At Barton-on-Humber, the town was to expand along the length of its haven inlet, the area now known as Waterside. There are then several local parallels for minor settlement developing along these havens. Indeed, the port of Ravenserodd was supposed to have developed in similar fashion (Boyle 1889, 10-11).

It could reasonably be supposed that the pottery assemblage from East Halton Skitter derived in some way from trading activity. The high proportion of regional and continental imports, including a large number of vessels from Hedon and slightly lesser numbers from Scarborough, Beverley and Hull would also strengthen such an interpretation. Whether this trading activity derived from settlement activity at the haven mouth, or whether it derived from debris cast from ships is uncertain. However, the Skitter would never have been able to handle boats of any size and goods travelling to the Skitter from the Humber would almost certainly have had to have been transferred to smaller river craft at the Skitter mouth. It is perhaps unlikely that boats capable of reaching Nun Coton would have been of sufficient size to have handled the Humber crossing to Paull or Hedon as the Humber was regarded as a dangerous water (Barley 1936, 12). The range of Roman, saxon and post-medieval pottery indicates that this was an active trade artery and suggests that the 12th-century charters were merely the indicators, rather than the instigators, of trade along it. However, it raises the question of how typical the Skitter was in comparison with other havens.

There is a growing body of similar archaeological evidence from a number of other sites, although none have produced the quantities of ceramic evidence of East Halton Skitter. South Ferriby, Barton, Barrow and Goxhill foreshores have also provided small but significant ceramic assemblages; most included Roman and saxon material. At East Halton, the combination of low tides and an easterly wind removes most of the soft silts of the foreshore to reveal a firmer base on which the pottery was revealed. On none of the other sites are the silts so completely swept away for the duration of the low tides, so it is impossible to ascertain whether the actual quantity of ceramic debris is, or was, greater than that at other havens. So far, all of the haven foreshores investigated by Ron and Elsie Newton, which include South Ferriby, Barton-on-Humber, Barrow-upon-Humber and Goxhill, reveal some archaeological debris. At present, it would seem that East Halton Skitter is likely to be typical of most havens in the presence and date range of its pottery, but whether it is typical in the quantities it produced remains to be seen. However, a study of the East Halton pottery assemblages in relation to the distribution of the regional assemblages would seem to confirm that there was never a deliberate trade in pottery across the Humber, rather that the high proportion of regional strays at the Skitter represents an incidental by-product of the trade that passed along it.

#### Coastal trade : ports.

This section will examine some generalised aspects of trade from some of the more important ports of the Humber, and in doing so avoid the need to define which of the Humber settlements qualify for the description of 'port'. Gras observed that "The custom

accounts show the town or the seaport not the centre of an independent area but the nucleus of a district which is linked up with other districts, foreign and domestic, each in turn with its own town centre" (1918, 119). Indeed from 1275, for fiscal purposes, the whole coast was divided into sections each of which was headed by a chief port and included other "member" ports (*ibid*, 105). From the 13th century Kingston-upon-Hull was the principal Humber port and in the 14th century it became the staple port for the region (Power 1933; Pelham 1936; Scammell 1961). Unlike foreign trade, coastal trade was not the subject of national custom dues, but it was usually recorded to prevent avoidance of customs by using the pretext of local trade to ship goods abroad (Gras 1918, 144-5). It is unfortunate that no such records survive for the Humber region. One of the earliest indications of the relative importance of the Humber ports was King John's quindecima in 1203-5, this was included by Gras and the following list of the region's ports has been transcribed from it (Gras 1918, 221-222).

Port	Total Levy			Ranking (of 35)
	£	s	d	
Boston	780.	15.	3	2
Lincoln	656.	12.	2	4
Hull	344.	14.	4	6
York	175.	8.	10	7
Grimsby	91.	15.	0	9
Hedon	60.	8.	4	11
Barton	33.	11.	9	15
Scarborough	22.	0.	4	18
Immingham	18.	15.	10	20
Selby	17.	11.	8	21
Whitby		4.	0	35
(London	836.	12.	10	1)

This quindecima represented a cash levy of one fifteenth on the value of all imports and exports during this period of which the only item exempt was tin (ibid, 217-218). It proves a useful document in providing an insight into the relative fiscal importance of the ports it included. With the interesting exception of Lincoln, Hull was the heaviest contributor in the region and this was some fifty years before it was "re-founded" by Edward I as Kingston-upon-Hull (Gillett and MacMahon 1980, 1-5).

For the south bank of the Humber, Grimsby was probably the more important port by the 13th century, although it was never of sufficient stature to attract the Hansa (Gillett 1970, 23). Some of the earliest documentary evidence for the port involved its trade with Scandinavia and in particular Norway. Trade links with Norway were mentioned in the 11th century and later in 1216 (Frost 1826, 97; Gillett 1970, 8). One of the early 12th-century Augustinian foundations in Grimsby was dedicated to St Olaf of Norway (Gillett 1970, 8). There is some indication that Scandinavian trade may have been more widespread in the region for Henry II declared that all Norwegians coming to Grimsby and other ports of Lincolnshire had to pay their toll at Lincoln (ibid, 9). In 1228 Grimsby merchants were to fall foul of the prise dues by selling wine from Spain (ibid, 15) and in 1258 French and Flemish merchants were recorded as selling fish at Grimsby (ibid, 16). Only a few scraps of French pottery from the port provide any form of archaeological confirmation of such trading links. During the 15th century there were imports of "pots, pans and glass" from Norway in Holland in 1469 (ibid, 25) and fishing voyages to Iceland were recorded between 1429 and 1449 (ibid, 35 and Carus Wilson 1933).

Generally the trade of Grimsby was far more mundane, its principal items of trade were corn and fish. Corn was regularly shipped from Grimsby either north to Newcastle and Scotland (Gillett 1970, 26,37) or south to London (ibid,34). In return the northern trips imported back coal in large quantities and also fish such as herrings and salmon (ibid,31,37). Indeed, Gillett concluded that the men of Grimsby were probably more interested in the trade of fish rather than conducting the actual fishing (ibid,35). Like Barton, the merchants of Grimsby had a corporate body for regulating trade called the Common Hall of the Men of Grimsby, (ibid,26) which was in existence by 1286. In 1201 Grimsby merchants had been granted freedom from toll (local tolls) in every port except London, a privilege which was never to have been extended to Barton-on-Humber. In 1395 the Common Hall was rebuilt and the bricks were brought by boat from Beverley (ibid, 2). Later in 1424/5 when a watermill in the port was built, the timber was brought by river from Balne near Doncaster, via Snaith and along the Rivers Aire and Ouse. (ibid,3). At a later stage this mill was repaired and in this instance, the timber was recorded as having come from Broughton along the Ancholme (ibid,3). It is interesting to note that this river and coastal route from Broughton to Grimsby covered a far greater distance than the more direct road link via Brigg.

Some of the more colourful documentation for the port of Grimsby involved the longstanding feud between the port and Ravenserodd. The latter was thought to have been situated on or around the present Spurn Head (Boyle 1889,64-5; Sheppard 1912,91-96). It would thus have been situated sufficiently close to the mouth of the Humber to be able to forestall incoming ships.

Judging by the vitriol of the disputes the Ravenserodd merchants proved quite successful in this activity. This forestalling by Ravenserodd resulted in a loss of toll revenue at Grimsby which was their principal grievance (Shaw 1897, 79-85).

Barton-on-Humber was the other major port of the south bank of the Humber. It was one of the few ferry and market places recorded in Domesday book for Lincolnshire and in later centuries it is recorded as having been the southern base for the Royal barge across the Humber (Barley 1936,4). Like Grimsby, the principal export from the town from the late 13th century at least, was wheat and barley (Brown 1908,185). The bulk of surviving documentation refers to shiploads of corn and malt being sent northwards to supply the king's armies on the Scottish border (*ibid*, 185-188) but in 1351 there were also supplies of grain being sent to London for purely commercial reasons (*ibid*, 188-189). Once again the principal imported commodity from the north would appear to have been coal, and provisions to prevent the forestalling of coal are among the few aspects of coastal trade alluded to in the town books of Barton (Chambers,1980) and the neighbouring village of Barrow-upon-Humber (Barley 1938/40, 13-33).

In 1359 the merchants of London complained that the men of Barton unjustly took toll of their ships entering the port, and in 1442 the merchants of York, Lincoln, Nottingham and Derby complained about their degree of access to the ports of Hull, Hedon, Beverley, Barton, Grimsby and London (Brown 1908,169). There are also details of Barton merchants trading with the continent but it is uncertain whether this necessarily involved trade to the port of Barton or simply the enterprise of Barton

merchants. For example, in 1336 a Thomas Senerby of Barton was granted a Royal license to trade with Gascony and to return with wines, but he was sailing a ship of Ravenserodd (ibid,180).

Leyland had observed that "Treuth is that when Hull began to flourish, Hedon decaied" (Smith 1964, Vol.I,62) and this was the line adopted by several of the region's 19th-century anti-quarians (for example, Poulson 1840,104). Hedon was held to have been a "New town" deliberately founded to exploit the trade of the Humber and for a time it may have been an international port of some substance (Craven 1972, 6). However, it would seem that any pre-eminence was short lived. The quindecima, referred to above, suggests that by the early years of the 13th century Hull was overwhelmingly the most important Humber port. In 1272, Edmund Crouchbank, Earl of Lancaster had been granted an eight-day fair at Hedon (Poulson 1840,107), but as early as 1251 a royal charter conferred on William Fortibus a weekly market and 16-day fair at Ravenserodd (Boyle 1889,12). Indeed, by 1229, Ravenserodd had been created a borough and now had two weekly markets with its fair being extended to a total of 30 days (ibid, 20).

It would appear that Hedon had been relegated to a port of comparatively minor importance by the 13th century and even when Ravenserodd was flooded and lost in c.1346 (ibid,38) there was no improvement in Hedon's fortunes. However, the port of Beverley would appear to have prospered in the vanguard of Hull's rise in prosperity. In 1269 a grant was made to improve the navigability of the river Hull to ensure that "ships as well as boats" could pass without interruption between the Humber and Beverley (Frost 1827, 130-131). Trade was still active in 1534

when the merchants of Beverley tried to claim free passage through Hull haven (ibid,32). From a ceramic viewpoint, the high percentage of Beverley orangewares in assemblages of the 13th and early 14th centuries at Hull would suggest a deliberate ceramic trade between the two towns. Although it cannot be demonstrated that this was a waterborne trade, the evidence would suggest that this was likely.

Regionally, these localised, documented aspects of trade were overshadowed by the wool trade (Power 1933). From the 14th century Kingston-upon-Hull was the staple port for the region, with York as its staple town. For Lincolnshire, Lincoln became the staple town and Boston its staple port. However, it would appear that North Lincolnshire generally used Hull as its means of exporting wool. The Nunnery of Nun Cothan and Thornton Abbey both exported their wool northwards via Hull rather than south via Lincoln and Boston. It may be no coincidence that the wool trade in North Lincolnshire was Yorkshire orientated, so too were many of its ceramic traditions. This is not to suggest that the two were inextricably linked but that both were symptomatic of the sway that the Humber and its trade may have exerted on life in North Lincolnshire.

An examination of the pottery assemblages for the region's ports, however, reveals "strays" from other parts of the region for which there are no documented trade links. Doncaster: Hallgate pottery occurred on numerous sites including Barton-on-Humber, Hedon and East Halton Skitter, but this was not confirmed by any documented trading contacts. Nor was there any recorded trade with Scarborough and yet Scarborough pottery occurred at most Humber ports. If the writer is correct in assuming that

none of these wares were ever deliberately traded on a commercial basis throughout the region, they were therefore likely to have been accidental by-products of normal coastal trading contacts. The concentration of regional imports at the ports and villages bordering the Humber and its major rivers would suggest that these were principally waterborne trading contacts.

Conversely there are no known ceramics in the region from Newcastle or Scotland, indeed, from anywhere north of Scarborough, nor is there any medieval Scandinavian or Icelandic pottery from Grimsby or elsewhere in the region despite the known trading links. A single Surrey ware vessel from Epworth is the only vessel from the London region and its occurrence at the Mowbray manor house is more likely to reflect the cosmopolitan contacts of the Earls of Nottingham rather than the documented corn and fish trade between the region and the medieval English capital.

It would seem that trade did not necessarily result in the import into the region of ceramics from those places. Although at present, the writer does not know whether Scotland, Newcastle, London or Iceland have any ceramics from this region. However, vessels from this region including a Lincoln ware aquamanile and a Doncaster:Hallgate B aquamanile have been identified from recent excavations at Exeter.<sup>4</sup> Finds from excavations at Bergen, Norway included a number of English ceramics of the 13th and 14th centuries (Hertig 1968,76). Amongst these was a decorated Toynton-type jug (*ibid*,77). Bergen was a Hanseatic port during this period and such Lincolnshire vessels almost certainly arrived via Boston. Indeed, the same site also produced several examples of Scarborough-type pottery (Dunning 1968,39-40) almost certainly derived either from Scarborough itself or from one of

the region's orangeware production sources.

Some aspects of documented international trade within the region were represented by ceramic finds. There were passing references to the Gascon wine trade, and Saintonge pottery was the most common imported fabric during the high-medieval period, although the finer, polychrome wares would seem to have been restricted to Hull (Watkins forthcoming). The wool trade was principally directed towards the Low Countries (Power 1933, 39-48) and again the Low Countries redwares formed one of the two largest groups of later medieval imports (Map 198 and Appendix B).

For the Roman period, Fulford considered that the study of imported ceramics provided the best archaeological opportunity to study the trading contacts of late-Roman Britain (Fulford 1977, 1978). The evidence for the medieval period within this region, however, would suggest that not all trading contacts were to leave their ceramic markers.

#### NOTES

1. The responsibility for the preparation of the Lurk Lane pottery report will rest with Gareth Watkins of the Humberside Archaeological Unit. The writer is grateful to him and to Peter Armstrong for allowing prolonged access to this material in recent months. In particular the writer was able to examine the material associated with the AD 851 coin board. The identification of the various fabrics and the conclusions drawn from them remain the responsibility of the present writer.
2. The writer is grateful to Peter and Nita Farmer for allowing him to examine a large number of this "white-ware" waster material and for providing a number of sample sherds.
3. This important material remains in the possession of Mrs. H.E.J. Le Patourel and it unfortunately remains unpublished. However, the writer is grateful to Mrs Le Patourel for allowing him to examine several sample sherds.

NOTES (Cont'd.)

- 4, The writer has recently prepared a note on the Yorkshire and Lincolnshire material to have been recovered from the various excavations in the city of Exeter. The writer is grateful to John Allan of the Rougemont Museum for allowing him the opportunity to study this material. Apart from the Lincoln and Doncaster: Hallgate B aquamaniles, there were a number of probable Scarborough sherds and several others of possible Yorkshire origin. So far no Exeter vessels have been recognised in the Yorkshire and Lincolnshire region.

## CHAPTER 5

### SUMMARY AND FINAL DISCUSSION

CHAPTER 5SUMMARY AND FINAL DISCUSSION

This thesis is composed of three basic though related units. The first two are catalogues of the unstratified and stratified pottery assemblages from North Lincolnshire and the third a series of discussions on the analysis, significance and implications of that material. Each unit was written with the intention that it would be complete in itself and thereby keep the need for concluding remarks at a minimum. The discussion which follows includes the writer's personal conclusions as to the use and merits of this research and the way in which future work might elaborate upon it.

The unstratified material

In the initial stages of this research, the writer had been sceptical as to the value of the region's unstratified pottery. It had been random in its discovery and collection, both in terms of the extent of each site and their geographical distribution. The pottery itself was usually undated, abraded and highly fragmentary. Nevertheless, a programme was devised to analyse this material and to illustrate a series of vessels from each site that would be representative of forms and fabrics. Its immediate uses seemed limited to an extension of the series of forms provided by the stratified groups and in the distributional studies for each fabric.

However, as analysis of this unstratified material progressed, it rapidly became clear that it would be possible to study each fabric types distribution proportionally in relation to other contemporary or related fabrics using the stratified material to give each fabric type a firmer chronological perspective. The resulting distribution maps formed the basis of

a far more searching look at regional traditions, distribution and trade than would have been possible had the evidence been limited to stratified groups.

Joep's work demonstrated the range of evidence that was available in any consideration of regional cultures (1956, 1963). It would be interesting to see if any other aspects of medieval life in this region could be defined in terms of bounded areas of occurrence or influence. Ceramically the various traditions had orientated into "Yorkshire" and "Lincolnshire" fabrics and although the wider significance of this division cannot yet be assessed, it would seem to be a rewarding avenue for future research. It may be a result of the more "cosmopolitan" way of life in the 20th century that the importance of regional and local culture figures less prominently in current archaeological research, being very much subordinated to the discovery and definition of 'national' trends. Yet in adopting such a course there is surely a danger of divorcing ourselves still further from the nature of the lives of the people we are seeking to understand.

#### The stratified material

It was observed in chapter 1 that the principal reason for studying pottery from an archaeological site is because it is still the most widely used evidence for dating a site and relating the features within it. However, pottery itself is undated; it requires to be dated before it in turn can be successfully used as a dating tool. Chapter 3 demonstrated how very few of the region's sites could provide any form of reliable dating for their pottery. The paradoxical situation is thereby reached where pottery is relied on for archaeological

dating but yet its own dating remains insecure, based on a fragile infrastructure of cross-parallels and near circular arguments. To all intents and purposes, most pottery dating still effectively rests on the experience and opinions of individual pottery workers. If pottery is to remain a credible dating tool with the increasingly more scientific and objective approaches to archaeology its own dating must surely be somehow placed on a sounder footing.

It could be argued that for each region there should be a deliberate programme of archaeological investigation and excavation for which one of the declared objectives would be the recovery of stratified sequences of datable pottery. Whatever the moral merits of the concept of "Rescue Archaeology"; excavating only what is threatened and leaving the unthreatened for posterity, it rarely provides a sound basis for pottery studies. The pottery researchers are faced with a series of pottery assemblages chosen only by the threat to their sites existence. The pottery from such assemblages is usually of varying stratigraphic quality, generally undated, though often occurring in large numbers. The pottery assemblage from Hedon, Middle Lane was an excellent example of the problems that this creates. The assemblage was large but on the whole, poorly stratified with no independent dating evidence. Dating rested almost entirely on typological deduction and innumerable cross-parallels with other, equally poorly dated, pottery from elsewhere in the region. However, the ceramic dates, both relative and absolute remained crucial to the archaeological interpretation of the site.

From the point of view of pottery research, the ideal site would be one with deeply stratified pottery groups with additional organic samples to provide radio-carbon or dendro-chronological dating. It should also be a site of sufficiently high socio-economic standing to have attracted documentation and the likelihood of finding coins and other datable artifacts associated with the pottery. The Beverley, Lurk Lane site has, so far, proved an excellent example of this ideal, and the resulting pottery groups should enable the pottery traditions of the East Riding of Yorkshire to be placed on considerably firmer foundations than has hitherto proved possible. To a lesser extent Thornholme Priory and Goltho Manor have proved additional examples. Goltho was ceramically a particularly interesting site; excavation of village tofts produced a very poorly dated and poorly stratified pottery sequence (Beresford 1975), whereas the more affluent manor site provided better stratification and a considerably greater number of coins and other independently dated artifacts (Beresford 1976).

Until the research work began on this thesis, many of the North Lincolnshire pottery fabrics, even some of the traditions discussed in chapter 4, had not been recognised or defined. Hopefully this thesis will have provided an interim definition of the various pottery fabrics in the area, their range of forms and their date. However, the gaps in the knowledge of each fabric is still considerable and what evidence there was, was biased in favour of some traditions, such as the orangewares or Humber wares, at the expense of others, such as the gritty or fine sandy traditions. There will probably always be scope

for further research to broaden and redefine the various fabric types included here, for example, this study involved no detailed mineralogical analysis. Now that some of the region's ceramic problems have been defined, there is a need for a programme of thin sectioning and heavy mineral analysis to test and compare the various fabric groupings which have been suggested here.

There was also a corresponding geographical bias in the distribution of the various stratified and unstratified assemblages from North Lincolnshire. This was perhaps most marked by the comparative dearth of evidence in and around the towns of Grimsby, Louth and Gainsborough. It is probable that had the ceramic assemblages from these three areas been greater, the boundaries for several of the fabrics and traditions may have differed from those presented here.

The correlation of trade, marketing and production techniques between the Roman and medieval period within the region has suggested interesting similarities. Hopefully it will emphasise the potential for a continuing comparison of results, especially in regard to such aspects as kiln location. This research would undoubtedly have benefitted from a similarly detailed regional comparison of the production and marketing of other medieval artifact types such as glass, metals, stone, wood or leather. In this respect, pottery studies are possibly in danger of suffering the penalties of increasing specialisation. The study of later-medieval, domestic paintings and household inventories proved a very salutary exercise in placing pottery studies in a more realistic perspective regarding their role in medieval life.

Were the writer to undertake another similar regional study

using the experience of this work, certain changes in approach would probably be made. The use of computers for simple data <sup>an</sup> storage and retrieval would be/integral part of that study. This present work was devised and developed over several years on a card index system. Despite the flexibility of such a system, the continual sorting, re-listing or rearranging of fabrics and numbers to accomplish the various aspects of the subsequent analysis, proved largely mechanical in nature and very laborious in practice. Simple computer data storage and sorting programmes would almost certainly have removed a depressingly large amount of the drudgery from the analysis of the accumulated pottery statistics which was involved with this present research.

The approach to the stratified groups would probably remain very similar. However, for the unstratified material, the principal value was found to lie in its distributional data. Drawings of the unstratified material would, in any future regional study, be limited to the compilation of a single form series for the region, based on each identified fabric type. The large series of drawings presented here in chapter 2 for each unstratified assemblage undoubtedly extended the range of illustrated material for each fabric and type, but it inevitably included an enormous amount of duplication. As there proved to be no demonstrable geographical variation in forms for each fabric type, the illustrated range of vessels for each separate assemblage proved to be of only intrinsic interest for the study of the particular site from which the assemblage was derived; an aspect of study with which this thesis was rarely involved.

On a more generalised note, all the many explanations and

models which have been made in the following chapters have been based on the assumption that historical events progressed in a reasonable, rational and logical manner. This has always been, and remains, an inherent weakness in all archaeological interpretation because it ignores the effect of 'twists of fate' and the whims of human nature. Potteries may have declined, not through inevitable market forces, but simply because the potter was ill, inefficient, incompetent, lacked the necessary business acumen or decided to make good his wealth by turning to full-time agriculture. Potters may have died suddenly without leaving any suitably qualified apprentice or successor. They may have traded their wares into some markets rather than others for no other reason than that they liked a place or knew people living there, or for a whole host of other, seemingly irrational motives. In certain respects, many of our present interpretations are also almost certainly anachronistic such as vessel use, aesthetics or marketing models. We will almost certainly never know why medieval people chose to buy a particular shape or style of pot, the various uses they put it to or the many ways in which it may have terminated its useful life and been discarded. Although the possible reasons are almost limitless, the archaeologist must try to seek rational arguments to account for all these aspects of pottery study.

If a medieval potter could be told of the many recent advances in the 20th century study of medieval English pottery, he would almost certainly shake his head and, with a chuckle, comment that we really still know very little about medieval pots and potting.

## **APPENDICES**

GRANTS OF FAIRS AND MARKETS IN THE NORTH RIDING OF LINDSEY  
TAKEN FROM THE CALENDAR OF CHARTER ROLLS

<u>Year</u>	<u>Place</u>	<u>Grantee</u>	<u>Appointed Days</u>
1234	Laceby	John Nevill	Fair on the VFM of St Margaret (19-21 July)
1235	Brigg	Ernisius de Nevill	Fair on the F of St James and the 3 days following (25-28 July) Market on Thursday
1236	Irby	William de Ireby	Fair on the VFM of St Matthew (20-22 Sept) Market on Thursday
1252	Thoresway	Elias de Rabayn	Fair on the morrow of Whit- Sunday and the 3 days following Market on Monday
1258	Goxhill	Giles de Gousell	Fair on the VFM of All Saints (31 Oct - 2 Nov) Market on Thursday
1317	Thoresway	Isabel Vesay	Fair on the VF of the Nativity of St Mary and the 2 days following (7-10 Sept) Market on Monday
1318	Bonby	Bishop of Ely	Fair on the VFM of SS Philip and James (24-26 July) Market on Wednesday
1340	Binbrook	William de Gaunt	Fair on the VFM of the translation of St Thomas the Martyr (6-8 July) Market on Friday

GRANTS OF FAIRS AND MARKETS IN THE WEST RIDING OF LINDSEY  
TAKEN FROM THE CALENDAR OF CHARTER ROLLS.

<u>Year</u>	<u>Place</u>	<u>Grantee</u>	<u>Appointed Days</u>
1227	Knaith	Walter de Evermue	Fair on the VFM of St Werburg Market on Monday
1245	Broughton	Oliver de Albinaco	Fair on the VFM of Holy Trinity Market on Tuesday
1265	Messingham	William de Marescall	Market on Monday
1267	Appleby	Geoffrey de Nevill	Fair on the VFM of St Margaret (19-21 July) Market on Wednesday
1268	Stow	Prior of Sempringham	Fair on the VFM of St John the Baptist (23-25 June)
1270	Scotter	Abbot of Peterborough	Fair on the VFM of SS Peter and Paul (28-30 June) Market on (date unspecified)
1271	Bottesford	Hospitallers	Fair on the VFM of SS Peter and Paul (28-30 June) Market on Monday
1278	Glentham	William de Brakenbergh	Fair on the VFM of St Mary Magdalene (21-23 July) Market on Monday
1286	Torksey	John de Balliol	Fair on the VFM of Holy Trinity and the 12 days following Market on (date unspecified)
1292	Gainsborough	William de Valencia	Fair (date unspecified) for 16 days
1304	Fillingham	Hugh Bardolf	Fair on the VFM of St Bartolph (16-18 June) Fair on the VFM of All Saints (31 Oct. - 2nd Nov.) Market on Wednesday
1305	Crowle	Abbot of Selby	Fair on the VFM of St Oswald (4-6 Aug.) Market on Wednesday

<u>Year</u>	<u>Place</u>	<u>Grantee</u>	<u>Appointed Days</u>
1314	Burton Stather	Thomas, Earl of Lancaster	Fair on the VF of All Saints and the 13 days following (31 Oct - 14 Nov) Fair on the VF of the Holy Trinity and the 13 days following Market on Friday
1317	Wintringham	John Marmyon	Fair on the VFM of St Mary Magdalene (21-23 July) Market on Wednesday
1328	Glentham	William de Snarford	Fair on the VFM of St Mary Magdalene (21-23 July) Market on Monday
1329	Stow	Bishop of Lincoln	Fair on the VFM of the Assumption (14- 16 Aug) Fair on the VFM of the Nativity of the Virgin (7-9 Sept) Fair on the VFM of Michaelmas (28-30 Sept)
1330	Knaith	John Darcy	Fair on the VF of St Barnabas and 4 days following (10-15 June) Market on Saturday
1332	Scotter	Abbot of Peterborough	Fair on the VFM of SS Peter and Paul (28-30 June) Market on (not spec- ified)
1333	Wintringham	John Marmyon	Fair on the VFM of Translation of St Thomas the Martyr (6-8 July) Market on Saturday
1334	Winterton	Earl of Cornwall	Fair on the VFM of SS Philip and James and the 6 days following (24-31 July) Fair on the VF of All Saints and the 6 days following (31 Oct - 7 Nov) Market on Thursday

<u>Year</u>	<u>Place</u>	<u>Grantee</u>	<u>Appointed Days</u>	880
1334	Kirton Lindsey	Earl of Cornwall	Fair on the VF of St Thomas the Martyr and the 6 days following (6-13 July) Fair on the VF of St Andrew the Apostle and the 6 days following (29 Nov-6 Dec)	
1335	Lea	John de Breouse	Fair on the 3 days before the feast of St Laurence (7-9 Aug) Fair on the 3 days before the feast of St Matthew the Apostle (18-20 Sept)	
1345	Torksey	John Darcy	Fair on the VF of St Thomas the Martyr and the 6 days following (6-13 July) Markets on Monday and Wednesday	
1383	Messingham	Michael de la Pole	Fair on the Feast of Holy Trinity Market on Monday	
1383	Epworth	Thomas de Moubray	Fair on the VFM of the Decollation of St John (28-30 Aug) Market on Thursday	
1441	Crowle	Abbot of Selby	Fair on the VFM of Martinmas (10-12 Nov) Fair on the VFM of St Oswald (4-6 June) Market on Monday	

## APPENDIX B (see above p. 786)

List of unstratified assemblages producing the principal types of late-medieval imported pottery

Site Name	Total Late-Medieval Pot	Total L-M Imported Pot	Percentage Imported Pot	Saintonge	Low Countries Red-ware	Sieburg Stoneware	Langerwehe Stoneware	Raeren Stoneware	Market Site	Port Site	River/Waterway Access
E.H. Skitter	171	30	17.5	7	12	3	4	4		-	-
Croxton	12	2	16.7			1		1			
Somerby	102	16	15.7					16			-
Epworth	84	13	15.5	1	3	3	3	3	-		-
Grimsby	48	5	10.4	1	2	1	1		-	-	-
Humberston	11	1	9.1				1			-	-
Caistor	28	2	7.1			1		1	-		-
Alkborough	15	1	6.6	1							-
Risby	23	1	4.3					1			-
W. Ravendale	59	2	3.4			2					-
Skidbrooke	29	1	3.4					1			-
Brigg	368	12	3.3				2	10	-		-
Killingholme	30	1	3.3		1						-
Conesby	32	1	3.1					1			
E. Halton	71	2	2.8		2						-
Haverby cum Beesby	482	10	2.1	1	4	1	1	3			
Goxhill	288	6	2.1				1	6	-		-
Barton	253	5	2.0	1			1		-	-	-
Goxhill Haven	57	1	1.7		1						-
Burton upon Stather	83	1	1.2		1				-	-	-
Kirmond Le Mire	551	5	0.9		3	2					-
Habrough	436	3	0.7	2			1				-
Swinehope	506	2	0.4	1			1				-
North Oversby	293	1	0.3			1					-
Kettleby Thorpe	884	3	0.3			1					-
Thornton Curtis	1820	5	0.3	1	4				-		-
Thornton Le Moor	1426	3	0.2			1		2			-

The proportion of vessel forms from the stratified assemblages.

The figures given in the following tables are all percentages with the exception of the far right hand column of each table which gives the actual number of vessels from each site for each time-phase.

a: The percentage occurrence of forms for the middle-saxon period.

Site	Cooking-pot	Bowl	Pitcher	Quaitch	Urn	Totals
Barton: East Acridge	94.4		5.5			18
Barton: Vicarage	100.0					22
Barton: St Peters	87.1	6.4			6.4	62
Barrow: St Chads	54.5	27.3	13.6	4.5		22
Lincoln: Saltergate	50.0	50.0				10
TOTALS	82.09	11.19	2.98	0.75	2.98	134

b: The percentage occurrence of forms for the late-saxon period.

Site	Cooking-pot	Bowl	Pitcher	Lamp	Total
Barton: East Acridge	90.0	10.0			20
Barton: Vicarage	89.5	10.5			19
Barton: St Peters	69.2	30.8			13
Barrow: St Chads	81.25	15.6	3.1		32
Burnham:Chapel	80.0	20.0			15
Goltho: Manor	69.6	26.1		4.3	23
TOTALS	80.3	18.0	0.8	0.8	122

c: THE PERCENTAGE OCCURRENCE OF FORMS FOR THE EARLY-MEDIEVAL PERIOD.

Site	Cooking Pot	Bowl	Curfew	Dish	Pitcher	Jug	Pipkin	Pancheon	Basting Dish	Storage Jar	Lamp	Flask	Cruet	Other	Unident.	Total
Barton, St Peters	17.6					82.4										17
Barton, East Acridge	66.1	9.1				24.6				0.2						460
Barton, Vicarage	66.7	3.7				29.6										27
Barrow, St Chads	72.8	6.2		2.5		18.5										81
Burnham, Chapel	66.6					33.3										6
Epworth Manor						100.0										2
Grayingham	53.3	6.7				40.0										15
Hayes Priory	46.6	7.6				45.0	0.8									131
Thornholme Priory	2.7	0.5	0.5			87.6	6.5	1.1	0.3						0.8	370
Goltho Manor	42.7	21.3				30.3				2.2	1.1	2.2				89
Lincoln, Bishop's Palace	33.3	10.0			10.0	36.7				6.7		1.33				30
Doncaster, DQ	55.7					44.3										79
Beverley, Lurk Lane	82.3	5.8				10.6	0.3					1.0				311
Beverley, Highgate	46.8	1.6				50.0	1.6									124
Hedon, Middle Lane	49.0	3.2	0.4			43.4	1.2	0.4			0.4		0.2	1.8		500
Wharram Percy	65.6	3.2				31.2										157
Totals %	50.9	5.2	0.2	0.1	0.12	40.7	1.4	0.25	0.04	0.2	0.12	0.25	0.04	0.5	0.12	2399

4: THE PERCENTAGE OCCURRENCE OF FORMS FOR THE HIGH-MEDIEVAL PERIOD.

SITE	Cooking Pot	Bowl	Curfew	Basting Dish	Jug	Pipkin	Pantheon	Cistern	Mug	Cup	Urinal	Condiment	Tripod Pipkin	Cauldron	Lid	Cucurbit	Lamp	Bottle	Ladel	Crucible	Pitcher	Skillet	Cruet	Mortar	Aquamanile	Other	Total
Epworth, Manor	11.8	0.9			80.0	4.5							0.9									0.9				0.9	110
Barrow, St Chads	100.0																										2
Barrow, Cherry Lane	41.0	4.7			49.4	2.2	0.4	0.2		0.2								0.2			0.4					1.1	449
Burnham, Chapel	24.6				68.1		1.4	4.3	1.4																		69
Kettleby Thorpe	60.0	20.0																			20.0						5
Thornholme Priory	8.4	0.3	0.9	0.5	76.8	3.1	2.5	0.4	0.8	0.1	0.3	0.1	0.04	0.1	0.08	0.08	0.04	0.2	0.04	0.04			0.1			5.08	2629
Nettleham, Bishop's Palace					100.0																						5
Boston, Dominican Friary	25.9	3.7			48.1				5.5				1.8								1.8		1.8	3.7		7.4	54
Conisburgh Castle	75.0				8.3	8.3																				8.3	12
Beverley, Highgate	12.5		2.5		75.0	6.2	2.5																		1.2		80
Hedon, Middle Lane	41.03	0.3	0.06	0.18	56.56	0.9	0.44	0.04	0.14		0.02		0.02		0.02		0.04		0.02							0.18	4970
Hull, Blackfriar Gate	10.0	5.0			75.0					5.0																5.0	20
Hull, Monkgate	7.9	0.6		0.6	76.8	0.6	0.6	2.4	7.3																	3.0	164
Total %	29.5	0.57	0.35	0.27	63.25	1.73	1.11	0.23	0.5	0.06	0.09	0.03	0.05	0.03	0.03	0.02	0.03	0.07	0.02	0.01	0.04	0.01	0.05	0.02	0.03	1.85	8569

c: THE PERCENTAGE OCCURRENCE OF FORMS FOR THE LATE-MEDIEVAL PERIOD.

SITE	Cooking Pot	Bowl	Curfew	Basting Dish	Jug	Pipkin	Pantheon	Cistern	Bottle	Mug	Cup	Urinal	Skillet	Tripod Pipkin	Cruet	Mortar	Costrell	Flask	Dish	Lobed Cup	Chafing Dish	Lid		Tazza	Other	Total
Epworth, Manor	4.44				68.33		3.33	5.0	1.11	6.66	8.33	1.11		0.55				0.55						0.55		180
Somerby, Gully 6	53.8	23.1			23.1																					13
Humberston, Abbey					54.5			18.2		9.1		18.2														11
Burnham, Chapel	4.0	0.8			56.3		6.3	27.0		1.6	3.2	0.8														126
Thornholme Priory	5.79	0.14	0.82	0.75	80.93	1.57	3.13	1.97	0.07	1.5	0.6	0.54		0.07	0.07	0.07			0.07	0.07	0.07	0.07	0.07		1.71	1468
Boston, Dominican Priary	13.0				30.4					21.7			13.0	4.3	8.7	4.3									4.3	23
Lincoln, Bishop's Palace	9.4	1.9			67.9	1.9		3.7			1.9	7.5			1.9		1.9								1.9	53
Old Boling- broke Castle	5.3			5.3	21.0		36.8			10.5	10.5							5.3							5.3	19
Beverley, Highgate	4.4				43.7		6.3	10.1		5.7	8.9		1.9	3.2				1.3	1.3	0.6	3.8		1.3		7.6	158
Brough, Station Rd	3.1				77.9		3.1	6.7		6.7	0.6		1.2	0.6												163
Hull, Mytongate					66.7			22.2									11.1									
Total %	5.67	0.3	0.5	0.5	73.78	1.08	3.69	4.72	0.13	2.88	2.07	0.76	0.36	0.4	0.18	0.09	0.09	0.18	0.04	0.09	0.3	0.04	0.09	0.04	1.69	2223

APPENDIX D (See above p. 808)a: Inquisition of the goods of William Castelacre of Great  
Everesdon, Cambridgeshire taken in 1397.

William Castelacre, knight, had in Great and Little Everesdon 300 quarters of new and old wheat by the lesser hundred worth 6s. a quarter, 140 quarters of malt by the lesser hundred worth 5s. a quarter, 360 quarters of dredge by the lesser hundred worth 4s. 6d. a quarter, a stack of pease worth 10l., 12 oxen worth 15s. each, 6 cows worth 10s. each, 12 horses worth 10s. each, 2 stirks worth 4s. 6d. each, 9 calves worth 3s. 4d. each, 120 sheep by the lesser hundred worth 18d. each, 80 pigs worth 2s. 6d. each, 100 capons by the lesser hundred worth 3d. each, 20 cocks and hens worth 2d. each, 38 geese worth 3d. each, 2 bulls worth 15s. 12 'bacouns' worth 18s., a quarter of salt 'beof' worth 2s., 'salt fyssh, stokfyssh, heryng, salt eel and sturjoun' worth 33s. 4d., 3 vessels of 'verjous, vynegre and eysell' worth 6s., a 'tounne' and a 'bareyll' with salt worth 20s., a 'mustard querne' with all its gear worth 5s., an axe for 'larderye' worth 12s., a 'doser' with 2 'costers', 3 'bankers' with 10 'coysshynes' worth 4 marks, a board with a set of 'tresteles' worth 3s. 4d., 2 'sydtabeles' worth 3s., a 'stol' for the hall worth 2s., a 'fuirforke' worth 12d., an 'ewer' with 4 'basynes' worth 16s., 2 sets of 'chenys' worth 12d., a chair worth 12d., a piece of silver with a 'covercle', 3 silver 'spones' worth 4l., a 'borcloth' and 'towayll' worth 13s. 4d., 6 'clothes' for 'sydtables' worth 10s., 6 'shorte towayll' worth 4s., 5 'botell' of 'leder' worth 5s., 18 'bareyll' worth 10s., a vessel full of wine worth 60s., another half full worth 30s., 2 'pottes' of 'erthe' worth 12d., an 'empty tounne' worth 2s.,

worked (facta) and unworked wax worth 13s. 4d., 10 'candel-  
 stekes' of 'latoun' worth 6s. 8d., a 'salt saler' with a 'covercle'  
 worth 12d., a wooden cup worth 12d., a 'chalys' with 2 'cruettes',  
 3 vestments, 2 'parayles' for an altar, 5 'towardyll', 2 bells, an  
 alabaster image of St. Mary, a board for an altar, worth 8l.,  
 6 'fates', a 'tappetrogh' worth 26s. 8d., 8 'kemelynes' worth  
 6s. 8d., a 'leed' worth 13s. 4d., 3 'cowueles' worth 2s., ... 2  
 bowls worth 8d., 4 earthen pots worth 4d., a 'knedyng trogh' worth  
 2s., a 'bultyng tounne' worth 2s., a bolting cloth worth...., a  
 'malt querne' worth 20s., a 'brasene mortar' with a pestle of  
 'yrene' worth 13s. 4d., 4 'doseyn garnysshed de peuvre vessel'  
 (worth) 53s. 4d., 8 'bras' pots worth 50s., a 'posnet' worth 20d.,  
 6 scoops worth 20s., a 'flessh hook' worth 3d., a ... of 'latoun'  
 worth 8d., 2 'skomours' of 'latoun' worth 12d., 3 'trevedes' worth  
 2s., a 'spete' and a 'broche' of 'irene' worth 2s., ... of 'feston'  
 worth 4s., a 'sars' worth 18d., 3 'grederenes' worth 2s., a  
 'dressyng knyf' worth 12d., a 'fryyng panne' (worth) 6d., a 'gose  
 panne' worth 2s., 2 beds with 'curtynes, testers and sylours'  
 worth 4l., 6 'cochours' worth 30s., 8 sets of .... (worth) 4 marks,  
 6 'blanketes' worth 15s., 6 covers for beds worth 33s. 4d., 7 beds  
 with all their apparel worth 5 marks, ... for the stable worth 13s. 4d.  
 a 'bolstre, beddeshed and 8 pelewes' worth 20s., 3 'haberjouns'  
 worth 5 marks, 2 'eventayll' worth 20s., a 'pauncs' worth 6s. 8d.,  
 a 'basenet' worth 20s., 'vombras and rerebras' worth 10s., a set  
 of 'cloves' of 'plate' worth 6s. 8d., a 'brest ...' worth 26s. 8d.,  
 a 'launcegay' worth 6s. 8d., 2 'speres' worth 3s. 4d., 5 'arblastes',  
 2 'baudrykes', worth 20s., 9 bows ...? 10 'shef de arwes' worth  
 21s., 2 swords worth 13s. 4d., a 'pollex' worth 3s. 4d., an 'ex' and  
 'billes' worth 6s. 8d., ... 'cartes' with all their gear worth 60s.,

2 'barwes' worth 20d., 'berleppes, skeppes and ...pes' worth 3s.4d., a 'dragge' worth 40s., a boat worth 20s., a 'trameyle' worth half a mark, 'hayes pursenetes' worth half a mark, ... worth 12d., new boards worth 40s., timber for building houses worth 20 marks, a stack of fuel worth 100s., pease of divers kinds worth 10 marks, hay worth 100s., 30 quarters of oats worth 4l. 10s., straw growing and not growing worth 60s., 6 'coferes and trussyng panyeres', whose value and the amount of treasure contained therein the jurors do not know. They all came to the hands of William Hoo, knight, because he entered on the manor of Great Everesdone on Friday after the Assumption of the Virgin last and has occupied the goods ever since. 8 stirks worth....1s. 6d. each and 4 yearling calves worth 4s. each have come to the hands of Elizabeth, William Castelacre's wife.

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b: An indenture of goods delivered to Watkyn Borton, constable of Chaustell Philipp on the 15th of January 1396.

In the chamber: a bed of red silk with gold lions and a coverlet of 'scarlet' and 10 'tapites' to match (de mesme la suyte), a bed of blue silk with gold 'faucons', 10 'tapitz' without 'faucons' and 6 silk cusions, a bed of blue and red striped (pale) silk, 8 'tapitz' of 'worstide' and 3 cushions, a red bed with 'crabbes' and 4 'tapitz', a bed with a 'perk', 7 'tapitz', another coverlet of white 'worstede' and a green bolster (travesyn), a bed of blue 'worstede' with a 'tapit', a cushion, 3 'curteyns' and half a celure (seel) of red 'worstede', 7 beds with 7 'testers' of divers patterns (suytes), 12 'blanketes', a coverlet of 'ermyn', 2 check cushions and 4 mattresses, 5 'faldynges', 6 'canevas', a green 'curtyn' to hand around my lord in the chapel, a blue 'curtyn' of lined (dowble) 'carde' for the 'closette', 3 'fetherbeddes', 3 'bolsters', a 'tapit' of Spayne, a pair of sheets with a sheet for the head of cloth of Reynes, 2 pairs of sheets with 2 sheets for the head of longcloth, 6 pillows, 3 cloths (pailletz), 2 old 'selurs' of beds, a great piece of 'canevas', a war-axe, 2 axes for cutting firewood, 2 'andires' for my lord's chamber, 2 'andires' in the high tower, an iron bucket, an iron 'forke', 7 'bordes', 4 long 'fourmes', 6 pairs of 'trestles', 2 'stoles' of Loundres, 2 'launternes', a 'posnette', 44 'visers', a 'cake de suwet', and a 'stillatorie' of lead; for my lady's carriage, a 'tapite' with a crowned M, 8 cushions, 4 of them of cloth of gold and 4 of 'scarlet motle', 6 'howses' for the carriage-horses, a 'fetherbed' and a brass bucket (paille derym).

In the hall: a seat (sale) with 2 'costers' of tapestry work without 'bankers', a seat with 2 blue and red striped 'costers' and 3 'bankers', an old seat with 2 'costers' embroidered (embrowdez) with 'mermaydenes', a 'doser' of arras which came with my lady, with

a lion carrying a 'giant', 2 tables for the high 'deys', 2 tables for yeomen (vadletz), 8 'fourmes' and 5 pairs of 'trestles', 8 hall-tables (tables pur hales), 18 'fourmes', 12 pairs of 'trestles', and 2 large 'andires' for the hall.

In the Chapel: an altar of silk called 'clone', 2 cloths for the altar, 2 towels, one single and the other with a frontal, an alb, an amice, a 'stole', a 'phanon', a girdle, a 'caas', a 'corporas', 2 'ridels' with 2 cords, a table with an alabaster 'crucifix', an alabaster image of Our Lady, 3 portable altars, 9 'stoiles' great and small, 7 lecterns (lettrons), 9 'tyn' cruets, 5 bells for 'sakering', 4 iron candlesticks, an iron coal-bucket, 4 pieces of waxed (ensirez) 'canevas', a bell for the 'clocke', 6 'sconces', 12 escutcheons of divers arms, a waxed table, another table which the companion (of) brother Thomas gave to my Lord, a 'sepulcre', 2 'bordes' with 2 'trestles', a 'judas' with 24 'hokes', a 'claper' for Lent, a portion of 'wyer', 3 'hokes', 2 ladders, 2 'orgenes', 4 red 'spershaftes' and 2 other 'verges' and 12 'mattes' great and small.

In the pantry buttery and cellar: 2 silver 'pottes' each holding a 'potell', 2 silver-gilt 'hanapes' with covers, a silver 'hanap' with a cover, a silver 'saler' without a cover, 6 silver spoons, 10 pieces of silver, 2 silver 'bacyns', a pair of silver 'bacyns' with covers, 2 silver 'ewers', 4 silver chargers, 3 dozen silver spoons, a dozen being of the larger sort, 12 silver 'saucers', 3 round silver 'salers', 2 of which have covers, 2 silver 'pikes', 2 silver 'vases', a remnant of 'malvesy' 8 inches (deep) and a remnant of vinegar 8 inches (deep), 9 pots of leather, 4 iron-bound (ferrers) barrels, 2 'tankardes', 2 beer-barrels, 2 'jobbes' of leather, 55

earthen 'pottes', 3 funnels, 10 pipes for beer, an eathenware 'stene', 2 'tobbes', 2 worked table-cloths (napes), 3 linen table-cloths, a 'canevas' table-cloth, a 'savenape', 3 'canevas' 'hangers', 3 long linen towels, a short linen towel, a worked table-cloth, a 'surnape' with the towel, a 'savenape', a new linen cloth of  $7\frac{1}{2}$  ells, 3 short towels, 4 new linen 'bruers', 2 linen cloths for the dresser, 2 new trays (portours) for the pantry, 12 wooden 'hanaps', a pair of saddle-bags (j besage) and 2 bundles of wax candles.

Pewter vessels: 2 dozen of the larger sort, 2 dozen and 11 spoons of the lesser sort, 18 'saucers' and a coffer for spoons.

In 'le storhous': a great brass 'morter', an iron 'pestell', a 'sarce', 3 barrels, 448 'disshes' and platters of wood and 80 'saucers'.

Of wax: 11 'torches', 3 'stompes', 10 'torteys', 3 'torteys de broche', 6 'prekettes', 5 tapers for the chapel, 4 'morters' for pounding (pois), in all (sic).

In the kitchen: 11 brass 'pottes', 4 'posnettes', 7 buckets, 2 'fryingpannes', 2 'gredyrnes', 4 'cobardes', 4 square spits, 2 great round spits, 3 small spits, 2 axes, one for the 'larder', a 'dressyngknyf', a 'lechyngknyf', a 'skumer', a broken 'ladel', 2 'coueles', a 'leep' for coal, 2 pipes for salt, 8 large 'fates' fixed (estandardes) in the 'larder', 3 'tubbes', 2 'covers', 3 'flakettes' for 'sauce', a 'grate', 2 'fleshhokes', 2 wooden 'bolles', a 'mustardqwerne', a little barrel of 'stourgeon' and 4 salted fallow-deer.

In the bakehouse: 2 'sakkes', 3 'covertures' for 'past', an iron 'pele', a 'boltyngtonne', 4 'fates', a tun, and 3 'bolles'.

29 new chests lately bought at Chester. A large 'ree', 3 other 'rees', a cart with all its gear, a tun, a 'fat', a bushel, a 'pekke' and an iron-bound cart remain at Felton in the keeping of Hockekyn the bailiff. An estimated 12 quarters of charcoal (charbons de silvestr), 30 cartloads of brushwood. French.

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## BIBLIOGRAPHY

## Bibliography

- Adams 1977 L.T. Adams "Medieval Pottery from Broadgate East, Lincoln, 1973". Lincoln Archaeological Trust Monograph Series 17/1.
- Adams 1979 L.T. Adams "Imported pottery of the 9th-11th centuries from Flaxengate, Lincoln" Lincoln Archaeological Trust Annual Report 1978-79, 30-34.
- Adams 1980 L. Adams "Chinese Pottery from Dark Age Lincoln": Lincolnshire History and Archaeology, 15, 89-90.
- Addyman 1964 P.V. Addyman "A Dark-Age Settlement at Maxey, Northants": Medieval Archaeology, 8, 20-73
- Addyman and Whitwell 1970 P.V. Addyman and J.B. Whitwell "Some Middle Saxon Pottery Types in Lincolnshire": Antiquaries Journal, 50, 96-102.
- Aitken and Hawley 1966 M.J. Aitken and H.N. Hawley "Magnetic Dating-III: Further Archaeomagnetic Measurements in Britain": Archaeometry, 9, 187-197.
- Annable 1960 F.K. Annable "The Romano-British Pottery at Cantley Housing Estate, Doncaster, Kilns 1-8": Doncaster Museum and Art Gallery Publication, 24.
- Armstrong 1977 P. Armstrong "Excavations in Sewer Lane, Hull 1974": East Riding Archaeologist, 3; Hull Old Town Report Series, I.
- Armstrong 1980 P. Armstrong "Excavations in Scale Lane/Lowgate, 1974": East Riding Archaeologist, 6; Hull

- old Town Report Series, 4.
- Ashurst 1970 D. Ashurst "Excavations at Gawber Glasshouse, near Barnsley, Yorkshire": Post-Medieval Archaeology, 4, 92-140.
- Baker and Hassall 1979 E. Baker and J. Hassall "Pottery" in D. Baker et alia "Excavations in Bedford 1967-77": Bedfordshire Archaeological Journal, 13, 147-240.
- Ball 1856 H.W. Ball The Social History and Antiquities of Barton-upon-Humber (Barton-upon-Humber).
- Barley 1936 M.W. Barley "Lincolnshire Rivers in the Middle Ages": Lincolnshire Architectural and Archaeological Society Reports and Papers, 1, 1-22.
- Barley 1938/40 M.W. Barley (ed) "The Barrow-on-Humber Town Book": Lincolnshire Architectural and Archaeological Society Reports and Papers, 2, 13-33.
- Barley 1964 M.W. Barley "The Medieval Borough of Torksey: Excavations 1960-2": Antiquaries Journal, 44, 165-187.
- Barker 1970 P.A. Barker The Medieval Pottery of Shropshire from the Conquest to 1400 (Shropshire Archaeological Society).
- Barton 1956 K.J. Barton "Medieval Pottery at Rouen". Archaeological Journal, 122, 73-85
- Barton 1974 K.J. Barton "The medieval blackwares of northern France" in V.I. Evison et alia (ed) Medieval Pottery from Excavations: Studies presented to Gerald Clough Dunning. (London), 167-181.
- Barton 1975 K.J. Barton Pottery in England (London).

- Barton 1979 K.J. Barton Medieval Sussex Pottery (London).
- Beckmann 1974 B. Beckmann "The main types of the first four production periods of Siegburg Pottery" in V.I. Evison ~~et alia~~ (ed.). Medieval Pottery from Excavations: studies presented to Gerald Clough Dunning (London), 183-220.
- Bencard 1970 M. Bencard "Medieval pottery imported into Denmark": Chateau Gaillard, 5, 13-19.
- Beresford 1975 G. Beresford "The Clay-Land Village: Excavations at Goltho and Barton Blount": Society for Medieval Archaeology Monograph Series: No.6.
- Beresford 1976 G.T.M. Beresford "The excavation of the deserted medieval village of Goltho, Lincolnshire"; Chateau Gaillard, 8, 47-68.
- Beresford 1967 M.W. Beresford New Towns of the Middle Ages: Town Plantation in England, Wales and Gascony (London).
- Bellamy and Le Patourel 1970 C.V. Bellamy and H.E.J. Le Patourel "Four Medieval Pottery Kilns on Woodhouse Farm, Winksley, near Ripon, W. Riding of Yorkshire": Medieval Archaeology, 14, 104-125.
- Boden and Whitwell 1979 J.M. Boden and J.B. Whitwell "Barrow-upon-Humber": Lincolnshire History and Archaeology, 14, 66-67.
- de Boer 1973 G. de Boer "The Two Earliest Maps of Hull": Post-Medieval Archaeology, 7, 79-87.
- Boyle 1889 J.R. Boyle The Lost Towns of the Humber (Hull).
- Boyle 1895 J.R. Boyle The Early History of the Town and Port of Hedon (Hull).

- Brears 1967 P. Brears "Excavations at Potovens, near Wakefield": Post-Medieval Archaeology, I, 3-43.
- Brears 1971 P. Brears The English Country Pottery: its history and techniques (Newton Abbot).
- Brears 1974 P. Brears "Cistercian and Later Drinking Wares": in E. Russell et al "Excavation on the site of the deserted medieval Village of Kettleby Thorpe" Journal of Scunthorpe Museum Society Series 3 No.2, 26-28.
- Brewster 1952 T.C.M. Brewster "Two Medieval Habitation Sites in the Vale of Pickering": Studies in Yorkshire Archaeology, I.
- Brewster 1958 T.C.M. Brewster "Staxton ware - an interim report": Yorkshire Archaeological Journal, 39, 445-6.
- Brown 1906, 1908 R. Brown Jun. Notes on the Early History of Barton-on-Humber (Barton-on-Humber). Vol.I 1906, Vol.2 1908.
- Bridbury 1981 A.R. Bridbury "English Provincial Towns in the Later Middle Ages" Economic History Review 2nd Series, 34, 1-24.
- Britnell 1978 R.H. Britnell "English Markets and Royal Administration before 1200": Economic History Review 2nd Series, 31, 183-196.
- Britnell 1981 R.H. Britnell "The Proliferation of Markets in England, 1200-1349": Economic History Review, 2nd Series, 34, 209-221.
- Bryant 1969 G.F. Bryant et alia "Excavations at the Deserted

- Medieval Settlement at Lyvedon": Journal of the Northampton Museum and Art Gallery, 5, 3-50.
- Bryant and Steane 1971 G.F. Bryant and J.M. Steane "Excavations at the deserted medieval settlement at Lyveden": Journal of the Northampton Museum and Art Gallery, 9, 3-94.
- Bryant 1977 G.F. Bryant "A Romano-British Pottery Kiln at Claxby, Lincolnshire: Excavations Discussion and Experimental Firings": Lincolnshire History and Archaeology, 12, 5-16.
- Bryant 1981 G.F. Bryant The Early History of Barton-upon-Humber (Barton-on-Humber)
- Buckland et al 1979 P.C. Buckland, M.J. Dolby, C. Hayfield and J.R. Magilton "The Medieval Pottery Industry at Hallgate, Doncaster": Archaeology of Doncaster 2/1.
- Buckland et al 1980 P.C. Buckland et alia "The Roman Pottery Industries of South Yorkshire: A Review": Britannia, II, 145-164.
- Buckland and Dolby 1980 P.C. Buckland and M.J. Dolby "A Roman Pottery Kiln Site at Blaxton Quarry, Auckley": Archaeology of Doncaster, 4/1.
- Buckland et al in prep. P.C. Buckland et alia Doncaster: The Medieval Town in preparation.
- Carrington 1975 P.Carrington "Some types of late Saxon pottery from Chester": Cheshire Archaeological Bulletin 3, 3-9.
- Carus Wilson 1933 E.M. Carus Wilson "The Icelandic Trade": in E. Power and M.M. Postan (ed.) Studies in English Trade in the 15th Century (London), 155-182.

- Chambers (ed.) 1980 M. Chambers (ed.) Barton-on-Humber: The Town Book of 1676 (Barton-on-Humber).
- Chapman et al 1975 H. Chapman et alia "Excavations at the Bishops Palace, Lincoln 1968-72": Occasional Papers in Lincolnshire History and Archaeology No.1.
- Charleston 1972 R.J. Charleston "The Vessel Glass from Rosedale and Hutton": in D.W. Crossley and F.A. Aberg "Sixteenth-Century Glass-Making in Yorkshire: Excavations at Furnaces at Hutton and Rosedal, North Riding, 1968-1971": Post-Medieval Archaeology, 6, 128-152.
- Chisholme 1979 M. Chisholme Rural Settlement and Land Use 3rd Edition (London).
- Clarke and Carter 1977 H. Clarke and A. Carter "Excavations in Kings Lynn, 1963-1970": Society for Medieval Archaeology Monograph Series No. 7.
- Clifton-Taylor 1972 A. Clifton-Taylor The Pattern of English Building (London).
- Colvin (ed.) 1963 H.M. Colvin (ed.) The History of the Kings Works (London. H.M.S.O.).
- Cook 1981 A.M. Cook "The Anglo-Saxon Cemetery at Fonaby, Lincolnshire": Occasional Papers in Lincolnshire History and Archaeology No.6.
- Coppack 1968 G. Coppack "A medieval well and associated pottery from Keighton, Nottinghamshire": Transactions of the Thoroton Society, 72, 51-58.
- Coppack 1970 G. Coppack "Two finds of Ispwich Ware from

- Lincolnshire": Lincolnshire History and Archaeology, 5, 16-17.
- Coppack 1971 G. Coppack "The deserted medieval village of Keighton": Transactions of the Thoroton Society; 75, 41-58.
- Coppack 1973 G. Coppack "The excavation of a Roman and Medieval site at Flaxengate, Lincoln": Lincolnshire History and Archaeology, 8, 73-114.
- Coppack 1975 G. Coppack "The Pottery" in H. Chapman et alia "Excavations at the Bishops Palace, Lincoln 1968-72": Occasional Papers in Lincolnshire History and Archaeology No.I, 15-29 & 44-55.
- Coppack 1976 G. Coppack "The Pottery" in P.L. Drewett et alia "The excavation of the Great Hall at Bolingbroke Castle, Lincolnshire, 1973": Post-Medieval Archaeology, 10, 6-24.
- Coppack 1978 G. Coppack "An excavation at Chapel Garth, Bolton, Fangfoss, Humberside": Yorkshire Archaeological Journal, 50, 93-150.
- Coppack 1978 G. Coppack "A thirteenth century pottery kiln in Nottingham": Transactions of the Thoroton Society, 82, 21-25.
- Coppack 1978 (b) G. Coppack "St. Lawrence Church, Burnham, Thornton Curtis": Lincolnshire History and Archaeology, 13, 81-82.
- Coppack 1980 G. Coppack The Medieval Pottery of Lincoln, Nottingham and Derby Unpublished PhD. thesis, University of Nottingham.

- Corder 1928 P. Corder "The Roman Pottery at Crambeck, Castle Howard": Roman Malton and District Reports No.1
- Corder 1930 P. Corder "The Roman Pottery at Throlam, Holme-on-Spalding Moor E. Yorkshire": Roman Malton and District Reports No.3.
- Corder and Kirk 1932 P. Corder and J.L. Kirk Appendix, "The Roman Pottery at Knapton" in "A Roman Villa at Langton, near Malton, E. Yorkshire" Roman Malton and District Reports No.4, 96-99.
- Corder 1937 P. Corder "A pair of fourth century Romano-British Pottery Kilns near Crambeck" Antiquaries Journal, 17, 393-413.
- Corder 1950 P. Corder A Romano-British Pottery Kiln on the Lincoln Racecourse (Nottingham).
- Craven 1972 M.T. Craven A New and Complete History of the Borough of Hedon (Driffield).
- Cregeen 1957 S.M. Cregeen "The Romano-British Excavations at Cantley Estate, Doncaster: The pottery from kilns 9-25": Yorkshire Archaeological Journal, 39, 364-388.
- Darby 1971 H.C. Darby The Domesday Geography of Eastern England 3rd Edition (Cambridge).
- Darling 1977 M.J. Darling "A Group of Late Roman Pottery from Lincoln": Lincoln Archaeological Trust Monograph Series, 16/1.
- Drescher 1968 H. Drescher "Mittelalterliche Dreibintöpfe aus Bronze": in J.G.N. Renaud (ed.) Rotterdam Papers (Rotterdam), 23-33.

- Drewett P.Drewett "The Excavation of the Great Hall at Bolinbroke Castle, Lincolnshire, 1973": Post-Medieval Archaeology, 10, 1-33.
- Dudley 1931 H. Dudley The History and Antiquities of Scunthorpe and Frodingham District (Scunthorpe).
- Dudley 1949 H. Dudley Early Days in North West Lincolnshire (A Regional Archaeology) (Scunthorpe).
- Dunning 1933 G.C. Dunning "Inventory of Medieval Polychrome ware found in England and Scotland": Archaeologia, 83,126-134.
- Dunning 1943 G.C. Dunning "The Pottery" in Sir Charles Peers and C.A. Ralegh Radford "The Saxon Monastery of Whitby": Archaeologia, 89,75-83.
- Dunning 1956 G. C. Dunning "Trade Relations between England and the Continent in the late Anglo-Saxon Period": in D.B. Harden (ed.) Dark Age Britain: Studies presented to E.T. Leeds (London), 218-33.
- Dunning 1959 G.C. Dunning "Pottery of the late Anglo-Saxon period in England": in G.C. Dunning et alia "Anglo-Saxon Pottery: A Symposium": Medieval Archaeology, 3, 31-58.
- Dunning 1968 G.C. Dunning "The Trade in Medieval Pottery Around the North Sea": in J.G.N. Renaud (ed.) Rotterdam Papers, 1, 35-58.
- Dunning 1969 G.C. Dunning "Medieval Church Cruets in Pottery": Medieval Archaeology, 13, 226-227
- Dunning 1971 G.C. Dunning A Medieval Jug Found in London, Decorated with Human and Animal Figures (Paris).

- Dunston 1909 G. Dunston The Rivers of Axholme (Hull).
- Dyer (forthcoming) C. Dyer "The Social and Economic Changes of the Later Middle Ages and the Pottery of the Period": Medieval Ceramics forthcoming.
- Eagles 1979 B.N. Eagles "The Anglo-Saxon Settlement of Humberside, Parts 1 and 2": British Archaeological Reports, British Series: No.68.
- Ellmers 1979 D. Ellmers "The Cog of Bremen and related boats": in S. McGrail (ed.). "The Archaeology of Medieval Ships and Harbours in Northern Europe": British Archaeological Reports: International Series: No 66, 1-16.
- Evan-Thomas 1932 O. Evan-Thomas Domestic Utensils of Wood (London).
- Evans 1969 G.E. Evans The Farm and Village (London).
- Evison 1974 V.I. Evison "The Asthall type of bottle" in V.I. Evison et alia (ed.) Medieval Pottery from Excavations: studies presented to Gerald Clough Dunning (London), 77-94.
- Evison 1979 V.I. Evison A Corpus of Wheel-Thrown Pottery in Anglo-Saxon Graves (Royal Archaeological Institute).
- Farmer 1979 P.G. Farmer An Introduction to Scarborough Ware and a Re-assessment of Knight Jugs (Private Publication, Sussex).
- Farrar 1973 R.A.H. Farrar "The Techniques and Sources of Romano-British black-burnished Ware" in A. Detsicas (ed.) "Current Research in Romano-British Coarse Pottery" C.B.A. Research Report No

- 10, 67-103.
- Farrell 1979 A.W. Farrell "The Use of Iconographic Material in Medieval Ship Archaeology" in S. McGrail (ed) "The Archaeology of Medieval Ships and Harbours in Northern Europe": British Archaeological Reports: International Series: No 66, 227-246.
- Farrer 1916 W. Farrer Early Yorkshire Charters Vol 3 (Edinburgh)
- Fennell 1974 K.R. Fennell "Pagan Saxon Lincolnshire": Archaeological Journal, 131, 283-293.
- Field 1981 F.N. Field "Cherry Willingham": Lincolnshire History and Archaeology, 16, 70.
- Fletcher 1858 T.C. Fletcher Read's History of the Isle of Axholme (Epworth).
- Foster 1914 C.W. Foster "Lincoln Wills, 1, AD 1271-1526": Publications of the Lincoln Record Society, 5.
- Foster and Longley(ed) 1924 C.W. Foster and T. Longley "The Lincolnshire Domesday and Lindsey Survey": Publications of the Lincoln Record Society, 19.
- Fox 1947 Sir Cyril Fox The Personality of Britain 4th Edition (Cardiff).
- Frost 1827 C. Frost Notices relative to the Early History of the Town and Port of Hull (London).
- Fulford 1977 M. Fulford "Pottery and Britain's Foreign Trade in the Later Roman Period" in D.P.S. Peacock (ed) Pottery and Early Commerce (London), 35-84.
- Fulford 1978 M. Fulford "The Interpretation of Britain's late

- Roman trade: the scope of medieval historical and archaeological analogy" in J. du Plat Taylor and H. Cleere "Roman shipping and trade: Britain and the Rhine provinces" C.B.A. Research Report No 24, 59-69.
- Gaunt 1975 G.D. Gaunt "The Artificial Nature of the River Don North of Thorne, Yorkshire": Yorkshire Archaeological Journal, 47, 15-21.
- Gillett 1970 E. Gillett A History of Grimsby (Oxford).
- Gillett and MacMahon 1980 E. Gillett and K.A. MacMahon A History of Hull (Oxford).
- Goulding 1891 R.W. Goulding Louth: Old Corporation Records (Louth).
- Gras 1918 N.S.B. Gras "The Early English Customs System" Harvard Economic Studies, 18 (Harvard and London).
- Hall and Coppack 1972 R. Hall and G. Coppack "Excavations at Full Street, Derby, 1972": Derbyshire Archaeological Journal, 92, 29-77.
- Harman and Samuels 1978 M. Harman and J. Samuels "Human Bones and Pottery from Grayingham": Lincolnshire History and Archaeology, 13, 77.
- Haslam 1978 J. Haslam Medieval Pottery (In Britain) (Shire Publications).
- Hayfield 1977 C. Hayfield "The Medieval Pottery" in J. Samuels "Cherry Lane, Barrow-upon-Humber, South Humberside": Lincolnshire History and Archaeology, 12, 30-40.

- Hayfield 1980 C. Hayfield "Techniques of Pottery Manufacture in East Yorkshire and North Lincolnshire: Medieval Ceramics, 4, 29-43.
- Hayfield 1980(a) C. Hayfield "The Pottery" in P. Mayes and C. Hayfield "A late medieval pottery kiln at Holme-upon-Spalding Moor, in North Humberside": East Riding Archaeologist, 6, Hull Old Town Report Series, 4, 103-111.
- Hayfield in prep(a) C. Hayfield "The Pottery" in J. Boden and J.B. Whitwell "St Chads, Barrow-upon-Humber": Lincolnshire History and Archaeology in prep.
- Hayfield in prep(b) C. Hayfield "The Pottery" in R.A.H. Williams "Excavation of a manor and chantry college at Epworth, South Humberside".
- Hayfield in prep(c) C. Hayfield "The Pottery" in R.A.H. Williams "Excavations at Hedon, a medieval planned town".
- Hayfield in prep(d) C. Hayfield "The medieval pottery" in G. Coppack "St Lawrence Church, Burnham, South Humberside: a non-parochial village church".
- Hayfield in prep(e) C. Hayfield "The Pottery" in G. Coppack et alia "Excavations at Thornholme Priory 1974-80, the Outer Court".
- Hayfield and Watkins in prep. C. Hayfield and G. Watkins "The Pottery" in R.H. Williams "Excavations at Beverley: Highgate" in preparation.
- Healey 1974 R.H. Healey "Pottery from Potter Hanworth": Lincolnshire History and Archaeology, 9, 30.
- Healey 1975 R.H. Healey Medieval and Sub-Medieval Pottery in Lincolnshire Unpublished M. Phil Thesis, Un-

- iversity of Nottingham.
- Healey 1976 R.H. Healey "A Glossary of Medieval Pottery Decoration": Car Dyke Research Group Publication No2.
- Hertig 1968 A.E. Hertig "The hansa town of Bergen and its commercial relations, seen in the light of excavations at Bryggen": in J.G.N. Renaud (ed) Rotterdam Papers (Rotterdam), 73-79.
- Hill 1948 Sir J.W.F. Hill Medieval Lincoln (Cambridge)
- Hinton 1977 D.A. Hinton "Rudely Made Earthen Vessels' of the Twelfth to Fifteenth Centuries AD" in D.P.S. Peacock (ed) Pottery and Early Commerce (London), 221-238.
- Hodder 1974 I. Hodder "Some Marketing Models for Romano-British Course Pottery": Britannia, 5, 340-359.
- Hodges 1964 H. Hodges Artifacts: An Introduction to Early Materials and Technology (London).
- Hodges 1974 H. Hodges "The medieval potter: artisan or artist?" in V.I. Evison et alia (ed) Medieval Pottery from Excavations: studies presented to Gerald Clough Dunning (London), 33-40.
- Hodges 1977 R. Hodges "Some Early Medieval French Wares in British Isles: An Archaeological Assessment of the Early French Wine Trade with Britain" in D.P.S. Peacock (ed) Pottery and Early Commerce (London), 239-255.
- Hodges 1981 R. Hodges "The Hamwih pottery, the local and imported wares from 30 years' excavations at Middle Saxon Southampton and their European

- Context" C.B.A. Research Report No 37.
- Holdsworth 1978 J. Holdsworth "Selected Pottery Groups AD 650 to 1780" Archaeology of York 16/7.
- Horrox 1978 R. Horrox The Changing plan of Hull 1290-1650 (Hull).
- Huber 1978 B. Huber "Dendrochronology": in J. Fletcher (ed) "Dendrochronology in Europe": British Archaeological Reports: International Series No 51, 15-26.
- Hurst 1956 J.G. Hurst "Saxo-Norman Pottery in East Anglia : Part 1": Proceedings of the Cambridge Antiquarian Society, 49, 43-70 .
- Hurst 1957 J.G. Hurst "Saxo-Norman Pottery in East Anglia Part 2": Proceedings of the Cambridge Antiquarian Society, 50, 31-60.
- Hurst 1958 J.G. Hurst "Saxo-Norman Pottery in East Anglia Part 3": Proceedings of the Cambridge Antiquarian Society, 51, 37-65.
- Hurst 1959 J.G. Hurst "Middle-Saxon Pottery" in G.C. Dunn-ing et alia "Anglo-Saxon Pottery: A Symposium": Medieval Archaeology, 3, 13-31.
- Hurst 1962-3 J.G. Hurst "White Castle and the Dating of Medieval Pottery": Medieval Archaeology, 6-7, 135-155.
- Hurst 1966 J.G. Hurst "Imported Flasks" in E.J.E. Pirie et alia "Kirkstall Abbey Excavations, 1960-1964": Publications of the Thoresby Society,

- 112, 54-59.
- Hurst 1971 J.G. Hurst "South Netherlands Majolica" in G. Beresford "The Old Manor, Askett": Records of Buckinghamshire, 18, 362-364.
- Hurst 1974 J.G. Hurst "Sixteenth-and seventeenth-century imported pottery from the Saintonge" in V.I. Evison et alia Medieval Pottery from Excavations: studies presented to Gerald Clough Dunning (London), 221-255.
- Hurst 1976 J.G. Hurst "The Pottery" in D.M. Wilson (ed) The Archaeology of Anglo-Saxon England (London) 283-348.
- Hurst 1977 J.G. Hurst "Langerwehe stoneware of the fourteenth and fifteenth centuries" in M.R. Apter, R. Gillyard-Beer and A.D. Saunders Ancient Monuments and their Interpretation: Studies presented to A.J.Taylor (London) 219-238.
- Hurst 1977 (a) J.G. Hurst "Spanish Pottery Imported into Medieval Britain" Medieval Archaeology, 21, 68-105.
- Hurst and Hodges 1977 J.G. Hurst and R.A. Hodges "A Tating-type ware sherd from Wharram Percy, North Yorkshire": Antiquaries Journal, 56, 249-250.
- Jenkins 1972 J.G. Jenkins The English Farm Waggon (London )
- Johnson 1980 S. Johnson "Excavations at Conisborough Castle 1973-1977": Yorkshire Archaeological, 52, 59-88.

- Joep 1952-3 E.M. Joep "Late Saxon Pits under Oxford  
Castle Mound: Excavations in 1952":  
Oxoniensia, 17/18, 77-111.
- Joep 1956 E.M. Joep "Saxon Oxford and its Region": in  
D.B. Harden (ed) Dark Age Britain: Studies  
presented to E.T. Leeds (London), 234-258.
- Joep 1956(a) E.M. Joep "The technique of pottery-making, as  
seen on the Carlisle pottery" in E.M. Joep  
and H.W.M. Hodges "The Medieval Pottery from  
Castle Street, Excavations in Carlisle 1953":  
Transactions of the Cumberland and Westmoreland  
Antiquarian and Archaeological Society, 55,  
102-105.
- Joep 1963 E.M. Joep "Regional Cultures of Medieval Britain":  
in I.L. Foster and L. Alcock (ed) Culture and  
Environment: Essays in honour of Sir Cyril  
Fox (London), 327-50.
- Kilmurry 1977(a) K.Kilmurry "The production of Red-Painted  
Pottery at Stamford, Lincs": Medieval Archaeology,  
21, 180-186.
- Kilmurry 1977 (b) K. Kilmurry "An Approach to Pottery Study: Stamford  
Ware": Medieval Ceramics, 1, 51-62.
- Kilmurry 1980 K. Kilmurry "The Pottery Industry of Stamford,  
Lincolnshire, cA.D. 850-1250": British Archaeologic-  
al Reports, British Series: No 84.
- Kirby and Tailby 1974 A.E. Kirkby and A.R. Tailby The Abbey of St Mary  
and St Peter, Humberston, Lincolnshire (Private

Publication - Waltham Toll Bar School).

Knowles and Hadcock 1953 D. Knowles and R.N. Hadcock Medieval Religious Houses in England and Wales (London).

Lamond 1890 E. Lamond (ed) Walter of Henley's Husbandry London.

Lewis 1978 J.M. Lewis Medieval Pottery and Metal-ware in Wales (Cardiff).

- Lincolnshire Archives Lincolnshire Archives Committee Archivists' Committee 1957/58 Report, 9, 31.

Loughlin 1977 N. Loughlin "Dales Ware: A Contribution to the Study of Roman Coarse Pottery": in D.P.S. Peacock (ed) Pottery and Early Commerce (London), 85-146.

Loughlin and Miller 1979 N. Loughlin and K.R. Miller A Survey of Archaeological Sites in Humberside (Hull).

McCutcheon 1939 K.L. McCutcheon "Yorkshire Fairs and Markets": Publications of the Thoresby Society, 39

McGrail (ed) 1979 S. McGrail (ed) "The Archaeology of Medieval Ships and Harbours in Northern Europe": British Archaeological Reports, International Series: No 66.

McGrail and Switsur 1979 S. McGrail and R. Switsur "Medieval Logboats of the River Mersey: A Classification Study" in S. McGrail (ed) "The Archaeology of Medieval Ships and Harbours in Northern Europe" British Archaeological Reports: International Series No 66, 93-115.

- Magilton 1977 J.R. Magilton "The Doncaster District: An Archaeological Survey "A Doncaster Museums and Arts Service Publication (Doncaster).
- Manby 1964 T.G. Manby "Medieval Pottery Kilns at Upper Heaton West Yorkshire": Archaeological Journal, 121, 70-110.
- Mate 1975 M. Mate "High Prices in Early 14th century England: Causes and Consequences" Economic History Review 2nd Series, 28, 1-16.
- May 1970 J. May "Dragonby: An Interim Report on Excavations on an Iron Age and Romano-British Site near Scunthorpe, Lincolnshire, 1964-9": Antiquaries Journal, 50, 222-245.
- Mayes and Hayfield 1980 P. Mayes and C. Hayfield "A Late Medieval Kiln at Holme-upon-Spalding Moor, North Humber-side": East Riding Archaeologist, 6 Hull Old Town Report Series, 4, 99-113.
- Mayes and Le Patourel 1964 P. Mayes and H.E.J. Le Patourel "Cowick": Medieval Archaeology, 8, 297.
- Mayes and Pirie 1966 P. Mayes and E.J.E. Pirie "A Cistercian ware kiln of the early sixteenth century at Potterton, Yorkshire": Antiquaries Journal, 46, 255-276.
- Mayes in prep. P. Mayes "A late-medieval pottery kiln at West Cowick, Yorkshire".
- Micklethwaite 1893 J.T. Micklethwaite "Some pottery and other antiquities found at Kirkstall and Fountains

- Abbey". Proceedings of the Society of Antiquaries 2nd Series, 15, 5-12.
- Moorhouse 1971 S. Moorhouse "The Pottery" in V. Russell and S. Moorhouse "Excavations near the Bishop's Palace at Nettleham, 1959": Lincolnshire History and Archaeology, 6, 22-26.
- Moorhouse 1971(a) S. Moorhouse "The Pottery" in C.F. Tebbutt et alia "Excavation of a Moated Site at Ellington, Huntingdonshire": Proceedings of the Cambridge Antiquarian Society, 63, 49-66.
- Moorhouse 1972 S. Moorhouse "Finds from Excavations in the Refectory at the Dominican Friary, Boston": Lincolnshire History and Archaeology, 7, 21-53.
- Moorhouse 1972(a) S. Moorhouse "Medieval Distilling Apparatus of Glass and Pottery": Medieval Archaeology, 16, 79-121.
- Moorhouse 1974 S. Moorhouse The Medieval Pottery from Sandal Castle, Yorkshire: A discussion of the methods used to present the material Unpublished Undergraduate Thesis, University College Cardiff.
- Moorhouse 1974(a) S. Moorhouse "A late Medieval domestic rubbish deposit from Broughton, Lincolnshire": Lincolnshire History and Archaeology, 9, 3-16.
- Moorhouse 1974(b) S. Moorhouse "The Pottery" in E. Russell et alia "Excavations on the site of the deserted medieval village of Kettleby Thorps, Lincoln-

- shire": Journal of the Scunthorpe Museum Society Series 3 (Archaeology), 2, 15-30.
- Moorhouse 1978 S. Moorhouse "Documentary Evidence for the Uses of Medieval Pottery: An Interim Statement": Medieval Ceramics, 2, 3-21.
- Moorhouse 1979 S. Moorhouse "Tudor Green: Some Further Thoughts": Medieval Ceramics, 3, 53-61.
- Moorhouse in prep S. Moorhouse "The Pottery" in P. Mayes "Excavation at Sandal Castle, Wakefield".
- Mortimer 1905 J.R. Mortimer Forty Years' Researches in British and Saxon Burial Mounds of East Yorkshire (London).
- MPRG 1976 Medieval Pottery Research Group "Guidelines for the processing and publication of medieval pottery". Privately circulated.
- Musty et al 1969 J. Musty, D.J. Algar and P.F. Ewence "The Medieval Pottery Kilns at Laverstock, near Salisbury, Wiltshire": Archaeologia, 102, 83-150.
- Myres 1951 J.N.L. Myres "The Anglo-Saxon Pottery of Lincolnshire": Archaeological Journal, 108, 65-99.
- Myres and Southern 1973 J.N.L. Myres and W.H. Southern "The Anglo-Saxon Cremation Cemetery at Sancton, East Yorkshire": Hull Museum Publication, 218.
- Mynard 1969 D.C. Mynard "Excavations at Somerby, Lincs, 1957": Lincolnshire History and Archaeology, 4, 63-91.
- Orton 1975 C.R. Orton "Quantative pottery studies: Some progress, problems and prospects": Science and Archaeology, 16.

- Orton 1980 C. Orton Mathematics in Archaeology (London)
- Oswald 1937 A. Oswald The Roman Pottery Kilns at Little London, Torksey, Lincolnshire. (Private Publication - Nottingham).
- Owen 1770 W. Owen Book of Fairs 6th Edit. (London).
- Le Patourel 1965 H.E.J. Le Patourel Appendix B "The Pottery" :  
in C.V. Bellamy "Pontefract Priory Excavations 1957-1961": Publications of the Thoresby Society, 49, 106-122.
- Le Patourel 1966 H.E.J. Le Patourel "Hallgate, Doncaster, and the Incidence of Face-Jugs with Beards": Medieval Archaeology, 10, 160-164.
- Le Patourel 1966(a) H.E.J. Le Patourel "The Pottery" in E.J.E. Pirie et alia: Kirkstall Abbey Excavations, 1960-4": Publications of the Thoresby Society, 51, 36-50.
- Le Patourel 1968 H.E.J. Le Patourel "Documentary Evidence and the Medieval Pottery Industry": Medieval Archaeology, 12, 101-126.
- Le Patourel 1973 H.E.J. Le Patourel "The Moated Sites of Yorkshire": Society for Medieval Archaeology Monograph Series: No 5 (London).
- Le Patourel 1976 H.E.J. Le Patourel "Pottery as Evidence for Social and Economic Change": in P. Sawyer (ed) Medieval Settlement: Continuity and Change (London), 169-179.
- Le Patourel 1979 H.E.J. Le Patourel "Medieval Pottery" in J.G. Hurst (ed) "Wharram: A Study of Settlement on

- the Yorkshire Wolds": Society for Medieval Archaeology Monograph Series: No 8 (London),  
 Pelham 1936 R.A. Pelham "Medieval Foreign Trade: Eastern Ports" in H.C. Darby (ed) An Historical Geography of England before AD 1800 (Cambridge) 298-329.
- Phillips 1934 C.W. Phillips "The Present State of Archaeology in Lincolnshire Part II": Archaeological Journal, 91, 97-187.
- Pierpoint 1980 S. Pierpoint "Social Patterns in Yorkshire Prehistory 3500-750 BC": British Archaeological Reports, British Series: No 74.
- Pinto 1969 E.H. Pinto Treen and other Wooden Bygones (London).
- Platt and Coleman-Smith 1975 C. Platt and R. Coleman-Smith Excavations in medieval Southampton, 1953-1969 (Leicester).
- du Plat Taylor and Cleere (ed) 1978 J. du Plat Taylor and H. Cleere (ed) "Roman shipping and trade: Britain and the Rhine Provinces": C.B.A. Research Report No 24.
- Postan 1975 M.M. Postan The Medieval Economy and Society (London).
- Poulson 1840/1841 G. Poulson The History and Antiquities of the Seignior of Holderness Vol I (Hull) 1840  
 Vol II (Hull) 1841
- Power 1933 E.E. Power "The wool trade in the fifteenth century" in E. Power and M.M. Postan (ed)

- Studies in English Trade in the Fifteenth Century (London, 39-90.
- Rackham 1972 B. Rackham Medieval English Pottery 2nd Edit. revised J.G. Hurst (London).
- Radley 1971 J. Radley "Economic Aspects of Anglo-Danish York": Medieval Archaeology, 15, 37-57.
- Rahtz 1975 P. Rahtz "How likely is likely": Antiquity, 49, 59-61.
- Rieth 1979 E. Rieth "Pirogue Monoxyle et Port Fluvial de Port Berteau" in S. McGrail (ed) "The Archaeology of Medieval Ships and Harbours in Northern Europe" British Archaeological Reports: International Series: No 66, 117-144.
- Rigby 1980 V. Rigby "Coarse pottery" in I.M. Stead Rudston Roman Villa (Yorkshire Archaeological Society), 45-94.
- Rigby and Stead 1976 V. Rigby and I. Stead "Coarse Pottery" in I.M. Stead "Excavations at Winterton Roman Villa": Department of the Environment Archaeological Reports: No 9 (H.M.S.O.), 136-190.
- Rodwell 1979 K. and W. Rodwell "Barton-upon-Humber, St Peter's Church": Lincolnshire History and Archaeology, 14, 67-8.
- Rodwell 1980 K. and W. Rodwell "Barton-upon-Humber, St Peter's Church": Lincolnshire History and Archaeology, 15, 68-70.
- Rodwell 1981 K. and W. Rodwell "Barton-upon-Humber, St Peter's Church": Lincolnshire History and Archaeology, 16, 64-66.

- Russell and Moorhouse 1971 V. Russell and S. Moorhouse "Excavations near the Bishop's Palace at Nettleham, 1959": Lincolnshire History and Archaeology, 6, 19-27.
- Russell et al 1974 E. Russell et alia "Excavations on the site of the deserted medieval village of Kettleby Thorpe, Lincolnshire": Journal of Scunthorpe Meseum Society, Series 3 (Archaeology), No 2.
- Russell 1968 R. Russell The Enclosure of Barton-upon-Humber, 1793-96 (Barton Branch of the Workers' Educational Association).
- Rutter 1961 J.G. Rutter "Medieval Pottery in the Scarborough Museum; 13th and 14th Centuries": Scarborough and District Research Report: No 3.
- St John Hope 1887 W.H. St John Hope "On the English medieval drinking bowls called Mazers": Archaeologia, 50, 129-193.
- Salzman 1923 L.F. Salzman English Industries of the Middle Ages (Oxford).
- Salzman 1931 L.F. Salzman English Trade in the Middle Ages (Oxford).
- Samuels 1977 J. Samuels "Cherry Lane, Barrow-upon-Humber, South Humberside": Lincolnshire History and Archaeology, 12, 29-40.
- Samuels 1979 J. Samuels "The Excavation of Two Romano-British Pottery Kilns at Barnetby Top, South Humberside": Lincolnshire History and Archaeology, 14, 11-19.
- Saunders 1836 J. Saunders Jun. Lincolnshire in 1836 (Lincoln).
- Scammell 1961 G.V.Scammell "English Merchant Shipping at the

- End of the Middle Ages: Some East Coast Evidence": Economic History Review, 2nd Series, 13, 327-341.
- Shaw 1897 Rev. G. Shaw Old Grimsby (Grimsby).
- Sheppard 1912 T. Sheppard The Lost Towns of the Yorkshire Coast (Hull).
- Smith 1958 J.T. Smith "Medieval Roofs: A Classification": Archaeological Journal, 115, 111-149.
- Smith 1965 J.T. Smith "Timber-Framed Building in England: its development and regional differences": Archaeological Journal, 122, 133-158.
- Smith 1964 L.T. Smith (ed) The Itinerary of John Leyland 1535-1543 (London).
- Stark 1843 A. Stark The History and Antiquities of Gainsburgh 2nd Edit. (Gainsborough).
- Stenton 1922 F.M. Stenton "Transcripts of Charters Relating to Gilbertine Houses": Publications of the Lincoln Record Society, 18.
- Stenton 1936 F.M. Stenton "The Road System of Medieval England": Economic History Review 1st Series, 7, 1-21.
- Swinerton and Kent 1976 H.H. Swinerton and P.E. Kent "The Geology of Lincolnshire": Lincolnshire Naturalists Union: Natural History Brochure: No 7, 2nd Edition, (Lincoln).
- <sup>h</sup>  
Tompson 1956 F.H. Thompson "Anglo-Saxon Sites in Lincolnshire: Unpublished Material and Recent Discoveries": Antiquaries Journal, 36, 181-199.

- Tompson 1960 F.H. Thompson "The Deserted Medieval Village of Riseholme, near Lincoln": Medieval Archaeology, 4, 95-108.
- Thorn 1975 J.C. Thorn "Medieval Pottery" in T. Tatton-Brown "Excavations at the Custom House Site, City of London Part 2, 1973": Transactions of the London and Middlesex Archaeological Society, 26, 118-151.
- V.C.H. 1906 Victoria County History Lincolnshire Vol 2 (London).
- Villain-Gandossi 1979 C. Villain-Gandossi "Le Navire Medieval. A Travers Les Miniatures Des Manuscrits Francais": in S. McGrail (ed) "The Archaeology of Medieval Ships and Harbours in Northern Europe": British Archaeological Reports International Series: No 66, 195-226.
- Vince 1977 A. Vince "The Medieval and Post Medieval Ceramic Industry of the Malvern Region: The Study of a Ware and its Distribution": in D.P.S. Peacock (ed) Pottery and Early Commerce (London), 257-305.
- Wacher 1969 J.S. Wacher Excavations at Brough-on-Humber 1958-1961 (Leeds).
- Walker 1976 J. Walker "Anglo-Saxon Traded Pottery: Analysis of sherds from Orton Hall Farm, Peterborough, and other sites" (Privately circulated Research Note from University of Southampton).

- Watkin 1980 J.R. Watkin "A Frankish bronze bowl from Barton-on-Humber": Lincolnshire History and Archaeology, 15, 88-89.
- Watkins 1978 J.G. Watkins "Pottery from Excavations in Hull": Medieval Ceramics, 2, 43-50.
- Watkins 1979 J.G. Watkins "The Pottery" in B. Ayers "Excavation at Chapel Lane Staith 1978": East Riding Archaeologist: Vol 5, Hull Old Town Report Series No 3, 42-46.
- Watkins (forthcoming) J.G. Watkins "Medieval Imported Pottery in Hull": in P. Davey and R. Hodges (ed) Ceramics and Trade at press.
- Webster 1947 G. Webster "A Romano-British Pottery Kiln at Swanpool, near Lincoln" Antiquaries Journal, 27, 61-79
- Webster 1960 G. Webster "A Romano-British Pottery Kiln at Rookery Lane, Lincoln ": Antiquaries Journal, 40, 214-220.
- West 1960 S. West "The Deserted Medieval Village of Snarford, Lincs": Lincolnshire History and Archaeology, 4, 93-97.
- West 1979 S.E. West "Pagan Saxon pottery from West Stow, Suffolk ": Berichten van de Rijkdienst voor het Oudheidkundig Bodemonderzoek, 19, 175-181.
- White 1826 W. White The History and Directory of the Towns and Principal Villages in the County of Lincoln (Leeds).
- White 1856 W. White The History and Directory of the Towns

- and Principal Villages in the County of  
Lincoln (Leeds).
- Whitwell 1969 J.B. Whitwell "Excavations on the site of a  
moated medieval manor-house in the parish of  
Saxilby, Lincolnshire": Journal of the  
British Archaeological Association 3rd series,  
32, 128-143.
- Whitwell 1970 J.B. Whitwell Roman Lincolnshire (Lincoln).
- Whitwell 1978 J.B. Whitwell "St Chad's Barrow-on-Humber":  
Lincolnshire History and Archaeology, 13, 76.
- Williams 1977 D.F. Williams "The Romano-British black-burnished  
industry: An essay on characterisation by  
heavy mineral analysis": in D.P.S. Peacock  
(ed) Pottery and Early Commerce (London),  
163-220.
- Williams 1976 R. Williams "Epworth": Lincolnshire History and  
Archaeology, II, 57.
- York 1978 R.N. York "The Weight of the Evidence": York  
Archaeological Trust Interim Vol 5, No3,  
45-50.
- Ziegler 1969 P. Ziegler The Black Death (London).