ASPECTS OF POTTERY ASSEMBLAGES OF THE LATE IRON AGE / FIRST CENTURY A. D. IN THE EAST AND NORTH - EAST OF ENGLAND.

(TWO VOLUMES)

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VOLUME I

A thesis submitted for the degree of Doctor of Philosophy at the University of Durham, in the Department of Archeology, 1993.

Declaration:

No part of this work has been submitted as part of a degree by myself at this or any other University.

ABSTRACT

ASPECTS OF POTTERY ASSEMBLAGES OF THE LATE IRON AGE / FIRST CENTURY A. D. IN THE EAST AND NORTH - EAST OF ENGLAND.

STEVEN HOUNSOME WILLIS.

This thesis examines the late pre-Roman Iron Age and early Roman period in the east and north-east of England from the perspective of the ceramic record. The evidence of pottery distributions and pottery assemblage composition (especially quantified data) has been employed to consider some fundamental questions concerning the nature of social and economic organization and cultural change during this period. The approach is comparative and synthesizing. Principal aims of the study have been to investigate the extent and degree of early Romanization in this relatively under-researched region, the character of pottery supply and variability between contemporary pottery groups from different locations.

The survey demonstrates how the distribution of pottery in the region during the period was structured. It shows that the composition of site pottery groups and assemblages appears to be significantly determined by site type, site status and site identity. The data also indicate a widespread and marked Romanization of pottery supply through the period, though this was not a sudden change. Regional variations, evident from the distributions of Iron Age pottery types, are to some degree also identifiable in the incidence of Roman types. Contrasts between pottery assemblages relating to the Roman military and those of native/civilian origin are revealed and discussed.

Patterns established for this region are considered against data from elsewhere in Britain and are contextualized.

" ... all these changes concern objects. At least, that is what I'd like to be sure about."

(Sartre 1974, 10).

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THE TEXT.

PREFACE.

This preface explains the site and Gazetteer coding system employed in this thesis and lists acknowledgements.

This thesis includes a Gazetteer of provenances and sites in the study area which are dated to the period under review. These have each been allocated a simple code and when either they or material from them is mentioned in the text, appendices, tables, etc. this code is usually cited, providing a reference to the Gazetteer, where further details and publication references may be found. The Gazetteer is arranged by administrative county, with sites within each county listed alphabetically and numbered consecutively. The site codes comprise the county and the number of that site within the county: hence "LEI 13". When a third, alphabetic, element occurs, this relates to the provenance of archaeological material from the site (eg. a specific excavation or collected material). To give an example, the excavations at Bath Lane, Leicester, in 1968, and material recovered from this work, are specified as LEI 13 (AW).

Note that for purposes of convenience that part of the county of Humberside to the north of the Humber is here termed North Humberside and that part to the south is referred to as South Humberside; both elements are treated in the Gazetteer (and in the site coding) as though they were separate counties.

Finally, the distribution maps which plot the incidence of particular pottery types include the site of Longthorpe (Cambridgeshire). This is the only site from outside the study area to regularly appear on these maps and this is so because of its frequent relevance to discussion. However, whilst the presence at Longthorpe of particular categories of pottery is recorded in the case of several types (in particular when this is mentioned in the text of the thesis) the presence or absence of types is not consistently recorded for this site.

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The text of this thesis was read in draft form by my supervisor who made useful suggestions and comments prior to the final editing. No other person has read or commented on the content or text of this thesis, with the exception of chapter 6 which was proof read by Sally Cottam. I am grateful to Sally for her assistance.

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(To those unmentioned, *"From way back"*, from 1987-93 and before I also say thank you).

Steven Willis
Sedgefield
18 July 1993

ABBREVIATIONS EMPLOYED.

ASM - The Ashmolean Museum.
BAG - Boston Archaeological Group.
BDAS - Boston and District Archaeological Society.
BM - The British Museum.
Coll. - Collection.
DCM - Doncaster Museum.
DOE - Department of the Environment.
DPM - Driffield Private Museum.
EH - English Heritage.
EMAB - East Midland Archaeological Bulletin.
ERAS - East Riding Archaeological Society.
ERASFSG - East Riding Archaeological Society Field Studies Group.
GRM - Grantham Museum.
HAC - Humberside Archaeological Committee.
HAU - Humberside County Council Archaeological Unit.
HBMC - The Historic Buildings and Monuments Commission.
HLM - Hull Museum.
HUCLHC - Hull University College Local History Committee.
IMM - Immingham Museum.
JRS - The Journal of Roman Studies.
LAT - Lincoln Archaeological Trust.
LAU - Leicestershire Archaeological Unit.
LCM - Lincoln Museum.
LPRIA - Late Pre-Roman Iron Age.
MOW - The Ministry of Works.
MPBW - The Ministry of Public Buildings and Works.
MSM - Mansfield Museum.
N/A - Not Applicable.
NCM - Nottingham Castle Museum.
NKM - Newark Museum.
PRIA - Pre-Roman Iron Age.
PTX - Finds currently with specialists for study.
RAHS - Retford Archaeological and Historical Society.
RCHM - The Royal Commission for Historic Monuments.
REC - Rudston Excavation Committee.
RFM - Bassetlaw Museum Retford.
SCM - Scunthorpe Museum.
SGSW - South Gaulish Samian Ware.
SLAU - South Lincolnshire Archaeological Unit.
SLHA - Society for Lincolnshire History and Archaeology.
TLA - The Trust for Lincolnshire Archaeology.
TPAT - Trent and Peak Archaeological Trust.
TTS - Transactions of the Thoroton Society of Nottinghamshire.
TVARC - Trent Valley Archaeological Research Committee.
UDM - University of Durham.
ULR - University of Leicester.
UNG - University of Nottingham.
USD - University of Sheffield.
WKM - Worksop Museum.
WVRC - The Welland Valley Research Committee.
YAJ - The Yorkshire Archaeological Journal.
YSM - The Yorkshire Museum.

CHAPTER ONE

THE DOMAIN OF RESEARCH.

1.1 INTRODUCTION.

This thesis is a study of the late pre-Roman Iron Age and early Roman period in north-east and eastern England. The study draws upon the evidence of quantified pottery assemblages in order to consider some fundamental questions concerning social and economic organization and change during this period. The evidence of the pottery, its character, distributions and assemblage constitution, are considered as an index of social practices and processes. Structural evidence, morphology and the wider regional and social context of the sites are also examined in the interpretation of the pottery and towards an understanding of the societies under study.

The relationship between past social activities and the pottery assemblages which confront the archaeologist in the present is not uncomplicated. Past social practice cannot be 'read-off'from the nature and composition of this material in a straight forward manner, just as it cannot be from any other type of archaeological evidence (eg. Hodder 1986). However, a number of studies, particularly of Roman material, have demonstrated the rich potential that pottery assemblages hold for elucidating past practices and processes.

This study has a number of aims. The 'agenda' of problems, questions, processes, and so forth, considered here has inevitably been framed by the intellectual milieu within which the study has been conceived, researched and written; as Clarke recognized: "each archaeology is of its time" (Clarke, D. L. 1973, 8; *cf.* Bintliff 1991c). The 'concerns' of the current study reflect those of recent and contemporary debate in the field as perceived, evaluated and prioritized by the author. The study seeks to identify processes and to present possible explanations for them by means of the study of the material culture evidence, within its context, specifically artefact distributions, type associations, range of types represented at a site, and the composition of assemblages. The purpose of this study is to ascertain and interpret patterning in distribution, similarity and variation within and between different sites, the social status of sites, relationships between sites and site 'identities'.

A principle aim is to examine cultural change in the region during this period. Romanization (*cf.* Millett 1990) is one dimension of this, and an investigation of the degree and extent of Romanization, as indicated by the pottery evidence, is a central concern of the study. A theoretical perspective upon this process is outlined under 1.4. Other dynamics likely to have engendered, and indeed reflect, social and cultural change (since such processes are reflexive) in the decades prior to the conquest and after have been identified by a number of writers. Some were apparently indigenous to late Iron Age societies such as the probably linked developments of population growth (Haselgrove 1989, 7-8; Woolf 1989), changes in the agricultural regime (Jones, M. K. 1981, 111-21, Fig.6.4; 1989; Van der Veen 1987; 1991), settlement nucleation (eg. May 1984) and political centralization (eg. Haselgrove 1987a). The origin of these developments lay within the middle Iron Age, if not earlier, though they became deeply manifest in Britain with the Roman period.

In the course of this chapter the time span and geography of the study are outlined (sections 1.2 & 1.3). Cultural change in the first century A.D. is then introduced (1.4) with aspects of theoretical modelling and interpretation considered. The role of pottery studies within the discipline of archaeology generally is reviewed (1.5). These two strands, of pottery study and social process are then brought together (in 1.6) as changes in pottery typology and manufacture and in the nature of assemblage composition through the study period are outlined at a general level. The potential of pottery studies to identify Romanization is briefly discussed in (1.7). This thesis is then located within the field of Iron Age and Roman studies in the region (in 1.8) and its scope *vis-à-vis* existing studies is defined. The chapter concludes with an outline of the contents of this thesis (1.9).

1.2 THE CHRONOLOGICAL RANGE OF THE STUDY.

The chronological range of the study approximates to the first century A.D. This period has been anticipated to be appropriate in order to examine aspects of processes such as those touched upon under 1.1. The time span covers the end of the LPRIA in this part of Britain, the Roman conquest of the south of Britain, including the southern half of the research area, during the Claudio-Neronian period, and the conquest of the north of England during the

Flavian period. This was a period of cultural re-orientation; if the objective is to examine Romanization it is in this period that its early expressions may be sought; (this timescale is, of course, of insufficient duration to encapsulate the dynamics of this process entirely).

The time period encompasses the final phase of stylistically late La Tène pottery, typologically similar to that from the Kentish cemeteries at Aylesford (Evans, A. J. 1890) and Swarling (Bushe-Fox 1925), in the southern half of the study area, and the first arrivals of Roman imports to the region. It is during this period that pottery production, particularly in the south of the region, altered with changes occurring in the technology of production, in the forms produced, and in the fabrics with which vessels were constituted; indigenous pottery production was 'Romanizing' (*cf.* Chapter 8).

The emphasis upon pottery analysis has been an important factor in framing the time span under study The focus has not been upon a conception of 'the first century A.D.' in terms of absolute dates but rather in terms of 'ceramic phases' (*cf.* Elsdon & May 1987, 6, 24-5 & Diagram 1; Going 1987, 106-17; Monaghan forthcoming). The termini of the time span considered are not sharply circumscribed, the nature of the material under review does not permit this. Instead, relative chronology based upon the changing character of the pottery groups and assemblages sets the margins for the study. Since a concern of the study is to examine cultural processes it is appropriate that the focus is upon the distribution of material culture, changes in pottery style and assemblage composition through time.

An approach focusing upon ceramic phases is beneficial in light of the typological variation of the pottery of the LPRIA across the region (*cf.* Chapter 4). It is a consequence of this variety that there is no universal ceramic expression which may be calibrated to the turn of the millennium and which might be employed to distinguish a starting point for the current study. The Iron Age in the study region is characterised by a range of different ceramic traditions. By the LPRIA types specific to particular 'sub-regions' vary considerably and hence for each sub-region the later Iron Age is identified by means of pottery types specific to that sub-region (*cf.* Chapters 4 & 8), supplemented by other indices of date. None of this LPRIA pottery is tightly datable hence the dating of LPRIA occupation is relatively imprecise and especially so north of the rivers Trent and Humber.

The terminus of the period under study is, by contrast, more readily defined both in terms of typology and date. The early years of the second century A.D. coincide with a new ceramic phase; this change marks the terminal point of this study. The change is an emphatic one, being apparent in form type changes, new sources of supply and the eclipse of previous supply centres. Gillam demonstrated that the advent of the reign of Hadrian coincides with a marked horizon in the typology of Roman pottery in Britain (1956, 65 & Figs I.1-2). As regards supply, Black Burnished Ware Type 1, for instance, began to appear in the north in considerable quantity for the first time during the early Hadrianic period (Williams 1977, esp. 199; see Note 1.1). In addition, at the turn of the century the supply of South Gaulish Samian ware (SGSW) to Britain ceases; subsequently imports from the Central Gaulish workshops appear in quantity (Oswald & Pryce 1920, 11-20; Dickinson *et al.* 1968, 146-7 & Fig.20; Millett 1980, 61; Marsh 1981; see Note 5.1).

Within the chronological range of the study many of the Roman, Gallo-Roman and 'Romanizing'/Transitional pottery types are distinctive. These have been comparatively well studied and their date-ranges are now established with reasonable confidence. This is certainly the case, for instance, with a number of the Roman fine wares. The 'type-life' of many of these early Roman fine wares, such as SGSW, Lyon Ware, Terra Nigra and Terra Rubra, did not extend beyond the period under study. The ability to date certain pottery types with some accuracy greatly facilitates analysis.

Detectable developments in pottery production, supply and consumption, evident from typological change, changes in sources of supply, changes in the appearance of the pottery, etc., which are here termed 'ceramic phases', constitute more than chronological indicators; they are likely to express social and economic trends.

1.3 THE GEOGRAPHY OF THE STUDY.

The research area is the eastern side of England from Leicestershire to the Tyne valley (Note 1.2). It covers nine counties and amounts to approximately twenty per cent of the land surface of England. The selection of this extensive sample area is advantageous for a number of reasons:

(i) The area comprises a distinct geographical region. The physical perimeters of this region are: the Peak District and the Pennine watershed to the west; the Tyne/South Tyne valley to the north; the North Sea to the east; and the Fens/River Welland to the south. To the south-west no marked physical features divide the Midlands consequently a non-physical division, which bisects these lowlands, has been taken, namely Watling St which constitutes the western boundary of Leicestershire. Taken as a whole this region is a discrete block of land approximately oblong in shape. For convenience the boundaries of the administrative counties contained within this geography are taken as the absolute perimeters of the study area (*cf.* Fig. 1.3).

(ii) The region includes extensive areas of both the 'Highland' and 'Lowland' zones as traditionally delineated (Fox, 1932; Evans *et al.* 1975). It has often been assumed that social and economic organization and cultural expressions differed in kind between these zones during both the Iron Age and the Roman period (eg. Fox 1932; Wheeler 1954, 27-30; Piggott 1958). However, this possibility should be approached as a matter for research rather than assumption (*cf.* Haselgrove 1989). Recent evidence shows such assumptions to be questionable and in need of review, not least because in actuality these 'zones' are themselves comprised of units of widely variable physical geography (eg. Haselgrove 1984b, 9). Collingwood had been aware of this diversity and stressed the natural fertility of many parts of the north of England and southern Scotland; he denied that geography (ie. terrain, soil, climate) exerted an over-determining effect upon culture (1932). Nevertheless he drew a sharp distinction between the south-east of England during the period in question here ("the civilized region") and: "the rest [who] might fairly be called barbarous", contending that this duality was manifest through the later Iron Age and Roman periods and that it arose from inherently differing social organization and relations, which were *not* a concomitant of geography (1932, 48-53). An important aspect of the research has been to consider spatial variability in the distribution of material culture specifically of pottery types.

(iii) The geography of the research region encompasses areas conventionally identified with a number of tribal groupings or *civitates*. For the Roman period the names and approximate locations of several *civitates*, are known; the sources being mainly literary and numismatic (Rivet & Smith 1979). It is generally accepted that the *civitas* structure of the Roman period was a near fossilization of tribal formations extant at the end of the LPRIA (Millett 1990, 65-9; Haselgrove 1989, 18, Note 181; *cf.* Frere 1967, 43-58, where this is clearly an implicit assumption). Such an arrangement would be entirely consistent with Roman policy, where-by tribal formations pre-dating the intervention of Rome were recognized and used by Rome as convenient units for administration within the imperial system (*cf.* Millett 1990; *cf.* Alarcão 1988, 15-34, for an apparently comparable example of this process from elsewhere in the western Empire). The precise relationship between the Roman administrative units and the preceding socio-political formations remains obscure (Haselgrove 1984a; 1987a, 52). From knowledge of the Roman *civitates* it is apparent that the region contains the territories, wholly or in part, of four tribal formations. These comprise: the territory of the Parisi; most, if not all, of the territory of the Corieltauvi; a major part of the territory of the Brigantes; and, (perhaps), part of the territory of the Catuvellauni. Although the precise boundaries of the individual *civitates* remains unknown their general location has been established with confidence. Whilst we might expect the boundaries between the Roman *civitates* to have been well defined and constant it may be that boundaries during the Iron Age were neither static or 'fixed' (*cf.* Branigan 1985, 27).

The territory of the Parisi is believed to equate to what is today North Humberside, together with the eastern margin of North Yorkshire (Stead 1965, 78-81; Ramm 1978, 13-25; Rivet & Smith 1979, 435-6). The territory associated with the Corieltauvi (Hassall & Tomlin 1983, 349-50; Tomlin 1983) is thought to approximate to the counties of Lincolnshire and Leicestershire, together with South Humberside and parts of Nottinghamshire (and possibly Warwickshire). Parts of South Yorkshire and north Northamptonshire may also have lain within the perimeters of this formation (Todd 1973a, 10-9; Rivet & Smith 1979, 324; Whitwell 1982, 52-60), (see Note 1.3). The research area also contains a major part of what is identified to be the territory of the Brigantes, since this included South Yorkshire, West Yorkshire, North Yorkshire, Cleveland and Co. Durham which are counties covered by the current study (Richmond 1954; Rivet & Smith 1979, 278-80; Hartley & Fitts 1988, 1-6). 'Brigantia' west of the Pennine watershed does not lie within the ambit of the study.

Variations in the experiences of these societies are of particular relevance. Prior to their absorption into the Empire these territories may have been articulated with the Roman world in different ways. They were brought into the Empire at different stages. They appear, on the evidence of Roman military deployment, to have undergone differing experiences of incorporation (*cf.* Millett 1990, 50-5). It has been posited that prior to A.D. 43 the Corieltauvi experienced the effect of the Roman world indirectly through: "contact at a remove", and through a 'predatory' southern neighbour, the Catuvellauni (Haselgrove 1984a). Before the Claudian invasion the Brigantes and the Parisi would have been geographically and possibly politically distant from Rome (though, within the Haselgrove (1984a) model, a part of the 'procurement zone'); by the mid 40s A.D., however, they were on the border of the Empire, a situation which was to endure for another thirty years. During this period both remained formally outside the Empire, though its proximity must have impinged upon social, political and economic relations. The Brigantes lay in an uneasy 'alliance' with Rome whilst the Parisi may also have been allied to Rome following the Claudian invasion (Millett 1990, 54). On the basis of such evidence as the location of known forts it may be extrapolated that these societies underwent differing experiences of conquest. The comparative lack of known forts within the areas associated with the Corieltauvi and Parisi suggests that they offered no military resistance to Rome. This was not so, apparently, in the case of the Brigantes who were incorporated by force (eg. Breeze & Dobson 1985, 2-3). The differing 'histories' of contact and incorporation into the Empire, which will have affected the status of these areas following absorption, together with the distinct Iron Age traditions of these societies comprise a broad context in regard of which patterns of evidence may be evaluated. The geographical scope of the study enables the impact of Rome upon several differentiated indigenous social structures to be monitored over a specific timescale encapsulating the whole period from 'contact at a remove' to direct control.

(iv) The research area encompasses evidence of varying contemporary ceramic distributions across discrete areas (eg. Chapter 4). The identification and interpretation of such phenomena occupies an important place in this thesis. Distributions might be taken as indices of a varied socio-political geography. However, whether such patterning can be interpreted as indicating cultural/political differences demands careful investigation rather than assumption. A key consideration in this connection is the status of artefacts as cultural markers. There are problems here in so far as the 'status' ascribed to a type by the archaeologist may not approximate to its actual status in antiquity. Moreover the meaning of items of material culture is never definitive, but is constantly open to re-definition and different definitions (eg. Haselgrove 1982a, 81). Notwithstanding these qualifications a number of studies suggest that cultural groupings can be identified with some degree of validity on the basis of archaeological pointers (eg. Sellwood 1984; Evans J. 1988a; May 1992). This thesis identifies a range of ceramic distributions which appear to relate to civitas and other cultural groupings.

An aim of the current study is to ascertain whether the geography of the major social formations as 'identified' by non-ceramic means, for instance, from coin distributions (eg. in the case of the Corieltauvi, (eg. Cunliffe 1978, Fig.6:8)), distinctive metalwork tradition (again the Corieltauvi, (eg. May 1976a, esp. 173)), burial rites (the Arras culture, perhaps to be identified with the Parisi (Stead 1979; 1989)) and so forth, correlates in any way with the character and composition of pottery assemblages (*cf.* Hodder 1977, 300). This possibility has been posited (eg. Sellwood 1984, 201-2; *cf.* Rivet 1968, 133; *cf.* Cunliffe 1978, eg. Fig.3:8) though rarely investigated. Evans, though, has identified the existence of a correlation in his study of the distribution of the products of the East Yorkshire pottery industries in the third century A.D. (Evans, J. 1988a; see also Lambrick 1984, 170-2).

1.4 THE SOCIAL BACKGROUND. CULTURAL CHANGES IN THE FIRST CENTURY A. D.

1.4.1 Introduction.

The evidence discussed in this thesis (esp. chapters 5-9) shows a widening incidence of Roman and Romanized pottery across the study area and a 'deepening' with time. This pattern is consonant with a range of other evidence which may be taken as indicating a process of cultural change which can, for convenience, be labelled Romanization (Note 1.4).

The recognition and interpretation of cultural change in past societies is a central concern in archaeology. Such processes are complex and multi-faceted and their analysis is rarely unproblematical. Cultural change in the form of acculturation may be identifiable when a pre-existing tradition with a particular material culture may be seen through the archaeological record to have acquired new or changed cultural expressions, perhaps in material items and their usage following a pattern derived from another (*cf.* Darvill 1987, 10; Reece 1990, 31). The actions and responses of particular groups or sections within the pre-existing culture (especially elites) could be crucial to this process since their behaviour may present an example to be imitated or deferred to by the rest (*cf.* Bartel 1980); elites may have possessed the ability to impose new definitions upon others. Something approximating to this may have occurred in Britain during the period under study.

1.4.2 Changes in Later Pre-Roman Iron Age Britain.

There are good archaeological reasons for believing that, in common with much of Britain, the area studied in this research was undergoing fairly rapid social, political and cultural changes during the LPRIA; many of these changes may have been essentially indigenous (*cf.* 1.1). These developments are apparent from the sequence of material culture and settlement evidence and represent a development of La Tène culture (eg. Cunliffe 1991; Champion 1976; May 1976a, 156-201). However, they were subsumed by a further and in some ways analogous process: Romanization (*cf.* Millett 1990) which was underway from the time of the conquest if not before (Haselgrove 1984a).

1.4.3 Romanization.

Traditional studies of Romanization generally relied heavily upon the historical literary sources. However, a tradition of the close detailing and interpretation of the material record has meant that accounts drawing upon the archaeological evidence have a long established pedigree (eg. Haverfield 1912; Collingwood 1932; Collingwood & Richmond 1969). Recent models have attempted to engage Romanization as a process and to locate native responses within the context of Roman policy and the structure of social organization and relations of indigenous societies (eg. Nash 1987; Haselgrove 1982a; 1987a; Millett 1990). Common to these models has been the implicit conclusion that the Romanization of 'every-day life' (eg.

ornament, building design, dress, burial rites, cooking practice) was not so much chosen piecemeal by native people of their own volition, nor imposed in some manner by Rome, but rather concomitant within the nature of the existing social relations. At one extreme, for instance, Bartel, drawing upon ethnographic examples, has presented a model of: "probable behavioural outcomes" (ie. cultural responses) in colonialist and imperialist: "situations of power domination" (1980, 16). He briefly applies this model to characterize imperial arrangements and cultural responses in the province of Upper Moesia during the Roman period. The reasoning owes much to Middle-Range Theory.

Okun's consideration of the area of the Upper Rhine in the early Roman period follows a similar vein. She presents a range of evidence demonstrating the Romanization of pottery assemblages in the region and this is seen by her as an index of a wider acculturation. Her explanation for this acculturation is firmly structuralist, that is to say the process is accounted for as a function of social structure. This is clear from her statement that: "conscious changes in ideology and social systems are not undertaken ... they occur through the adoption of new values and ways of acquiring wealth and power" (1989, 50). The basis of her interpretation is that occupation leads to interaction and this results in acculturation (for example: "any interaction ultimately results in acculturation" (1989, 50). What is underplayed in this explanation is the role of power relations and ideology *within* native society. It is probable that competition for power accelerated acculturation (see below, this section).

The recent studies of Romanization have stressed that social and political relations in the later Iron Age of north-west Europe are key to the understanding of the nature of the complex cultural changes referred to as Romanization (Millett 1990). What has been focused upon in particular have been: the dynamics of change within these societies; the importance of the proximity of an inherently expansive predatory empire (ie. Rome) to this process; the role of Roman material culture and ideology in these developments; and the receptiveness to Romanization apparent within these societies prior to their formal incorporation within the Empire. One of the key areas of consideration has been the extent to which the advent of Rome and Roman culture initiated, or catalysed, or accelerated, fundamental structural changes within indigenous societies, or whether it simply coincided with developments born of insular roots (*cf.* Haselgrove 1982a; 1989). The role of Roman material culture has been subject to particular scrutiny. During the past ten years or so various writers have followed broadly consistent lines of argument (Haselgrove 1982a; 1984a; 1987a; Reece 1988; Millett 1990; Trow 1990). This model is becoming current orthodoxy in explanations of early Romanization.

Haselgrove has interpreted the advent of Rome in Gaul as critical in transforming the political and social relations of LPRIA south-east Britain and "adjacent areas" (1989). His most recent synthetic statement (1989) constitutes a summary of what may be characterised as the dominant paradigm in the conceptualization of LPRIA society. It is an approach which has developed out of core-periphery explanation (eg. Haselgrove 1989, 17). Haselgrove contends that Roman diplomacy, trade ("however mediated") and the threat of invasion from 50 B.C. onwards engendered both greater political centralization and greater social stratification (1989, 16-7; see Note 1.5). Previous social and political relations in the British Iron Age at the macro level are seen as having been comparatively loose and pragmatic, with: "political authority transient" (1989, 16). From this perspective the management of the various demands of the Empire, and of the exotic (presumed) prestige items which arrived in Britain both necessitated and enabled competitive elites to extend their power. Enhanced power was essential if adequate control was to be exercised over the flow of goods and the *status quo* of the existing elite maintained. It was through the dispersal of the increasing imported items (amphorae, glass vessels, metalwork, fine pottery, etc.), that, it is argued, elites secured and expressed ties of allegiance, obligation and dependency; hence the model incorporates the creation, re-creation and negotiation of power relations. From the perspective of this model the management of diplomacy and exchange with the Roman world, as well as the prospect of Roman military aggression, brought into being a more precisely stratified elite whose authority was manifest in access to resources, social displays of status, such as acts of conspicuous consumption in life and death. Haselgrove has highlighted aspects of the material record which may be presented as consistent with this interpretation of 'steepening hierarchy': "the embellishment of the principal settlements" (eg. at Stanwick, NYK 23); an: "increased emphasis on forms of material culture by which individual rank could be further defined" (eg. the increased frequency of coining, brooch wearing and other personal adornment); "relatively restricted access to prestigious Continental imports" (the premier example being Cunobelin's Camulodunum, which appears to have been the major port of entry of the final decades of the LPRIA); and: "the adoption of a minority, Romanising burial rite" (Haselgrove 1989, 17). The adoption of a range of Roman dietary norms and wine consumption might be appended to this list.

In this model material culture is seen to play an important role in the structuring and management of social and political relations; this tallies with Shanks and Tilley's recognition that: "material culture is [always] actively involved in the social world" (1987b, 116-7). Early imported items from the Roman continent, which will have arrived as diplomatic goods, or through trade/exchange, or with immigrants, are interpreted as having been of particular significance. This material is relatively well studied; its patterned distribution has demanded that the possible meaning(s) of this material within pre-conquest social relations be considered (*cf.* Corder & Pryce 1938; Stead 1967; Peacock 1971; Sealey 1981; Haselgrove 1982a; 1984a; 1987a; Foster 1986; Fitzpatrick 1989a; 1989b). Following the tenets of the model outlined above, if the exchange of prestige items articulated and re-made ties of social obligation, to possess and display exotic and comparatively rare items from the Roman world will have been symbolic of power, whether this be the potential to give and to receive, access to the powerful, access to the sources of these items, representative of actual and fictional wealth and rank. From this understanding Roman imported items, such as wine and other amphorae, fine metalwork cups and other vessels (many of which seem appropriate for the consumption of wine), as well as the ceramic material documented below (1.6.2 (i) & elsewhere) would have been items of value and prestige.

This reasoning is consistent with an interpretation of material culture which is now commonplace in archaeological explanation. There is a wide tacit understanding that material items can have a significant 'active' role in the conduct of social relations. In particular items of material culture might constitute 'social credentials' defining and displaying status, identity, wealth, inclusion, exclusion, etc. (*cf.* Shanks & Tilley 1987a, 130-4).

Some observations which complement the model may be advanced here. The first concerns the use and meaning of the notion of 'symbolizing' and that items of material culture 'symbolized' status, etc. This is an awkward concept since within the sphere of 'day to day' relations it is unlikely that acts of exchange would have been conceived of as 'symbolic' of relations; what is more likely to have been at the fore-front is the context-situated understanding of relations. The American sociologists Thomas and Znaniecki observed many years ago that: "If actors define situations as real they are real in their consequences" (1958, Methodological Note); if, for example, Chieftain X was believed to be powerful, or the adoption of Romanized cultural practice was understood to mark particular status this would have been actually so since actors will have conducted themselves according to their perceptions and definitions. From this perspective there was no 'symbolic' only 'actual'.

A complementary avenue in approaching Romanization is to consider the significance of ideological factors. It is a general pattern that the ideas and culture of a paramount political force become hegemonic within the society over which this political power exists. Marx identified this phenomenon stating that: "the ruling ideas in every age are the ideas of the ruling class" (*cf.* Arthur C. J. (Ed) 1971). This is not to say that they are uncontested (there are always competing ideas), nor that the pattern is inevitable or universal. This point is presented here as a general observation, the validity of which is to be investigated in each instance. With regard to Britain in the first century A.D. it is likely that a case could be made for identifying the operation of this process as an important dynamic in the Romanization of Britain. It may be plausible to observe this postulated hegemony of the ideas, cultural practice and material culture of 'the paramount' as active at two successive levels: the adoption of a selection of Roman cultural norms by members of the native elites in the decades before the Claudian conquest and after, and, in turn, the dissemination of these norms from the native elites into native societies generally (Millett 1990). This social difference is of key importance. It is pertinent to record Okun's point that acculturation: "does not proceed simultaneously, and at the same rate for all levels and sub-groups of society, nor does it proceed at a constant rate" (1989, 52).

The internal consistency of the model, presented by Haselgrove and others, and its apparent 'verification' in aspects of the material record render it attractive. As an explanatory tool the model enjoys little competition at present. A range of recent comprehensive reviews effectively refine the model rather than contest it (Fitzpatrick 1989a; 1989b; Cunliffe 1988; 1991). Recent studies of Romanization, theoretical and area specific have been broadly consensual in their approach and conclusions; there has been surprisingly little contestation.

Identifiable exceptions to this general pattern are of interest though they are explained by reference to particular circumstances. The absence, for instance, of Dressel 1 species amphorae and other items of early Roman material culture from the area of the Benelux countries is interpreted by Fitzpatrick as archaeological verification of the Nervii's consistent rejection of Roman traders as documented by Caesar (Fitzpatrick 1985, 311-2; 1987, 90). The implicit conclusion in the case of the Nervii is that the absence (? rejection) of manifestations of Roman material culture arises from a distinctive social ideology and an acephalous social structure.

The present study is not the venue to discuss this literature in detail, though some observations may be stated. There is evidence to suggest that the pattern of response by the LPRIA societies of western Europe to the advent of Rome was not uniform (*cf.* Blagg & Millett 1990) . This is notable when one considers the potential range of responses available and the heterogeneous responses of other societies, in somewhat analogous situations, subject to imperialism, as documented in the volume edited by Burnham and Johnson (Birmingham 1979; Kirk 1979; Oliver 1979); though what is apparent from these papers is that the character of the imperialist intervention is fundamental in determining the nature of response. Deeper research will doubtless clarify regional variations and differing experiences.

In sum it is likely that power relations constituted a significant dynamic in this process of acculturation as interests strove to maintain or acquire power in new situations before, during and after the conquest. Millett has emphasized the significance of this arguing that early Romanization in Britain was facilitated by the co-operation of indigenous elites with Rome as the former sought to recast their authority within the new circumstances (1990, 66-9). From this perspective early Romanization in Britain was to a degree a means by which the extant status system largely re-expressed it itself (*cf.* Haselgrove 1982a), though it is not reducible to this. In a recent discussion Fulford (1992) has asked 'awkward questions' of this view; these will no doubt stimulate future debate.

1.5 THE CERAMIC BACKGROUND I. A BRIEF REVIEW OF POTTERY STUDIES IN ARCHAEOLOGY.

Conventionally pottery has been employed by the archaeologist as a means of identifying cultures and traditions (eg. Cunliffe 1991; Millett 1990, 12) and as a dating index (eg. Gillam 1956; Millett 1978; 1987a; Fulford & Huddleston 1991, 5-6). Much work remains to be done in the field of later prehistoric ceramics with regard to the investigation of dating (*cf.* Chapter 4) and in exploring the potential of this material for the identification and isolation of social or cultural groupings (*cf.* Lambrick 1984, 170-2). Roman pottery has, of course, a long history of study and traditionally this has been closely allied to its value as site dating evidence; more recently various studies have suggested the rich prospect of this material for constructing social inferences (eg. Evans, J. 1985; 1988a; 1988b; 1989).

The last twenty five years or so have witnessed a new thrust in pottery research with its developing contribution to understanding aspects of trade, exchange and patterned distribution (eg. Fulford 1977). The work of Peacock and others, as is well known, has been signal in exemplifying the dividends of applied fabric study (eg. Peacock 1968; 1969; Williams 1977) with particular advances being made in the study of Romano-British pottery (eg. Peacock 1977a; 1977b). Several of the major pottery industries of Roman Britain have been studied during this period, as too have many imported wares. Increasingly, quantification (in some form) has been undertaken for reporting the pottery from excavations (*cf.* Young 1980; Fulford & Huddleston 1991). The emergence of a more: "systematic approach to the classification and characterisation of fabrics combined with systematic methods of quantification" (Fulford & Huddleston 1991, 3) facilitated reliable distribution mapping whilst the development of interpretative models suggested how distributions might be evaluated and understood (eg. Hodder 1974a; 1974b; 1976; Hodder & Orton 1976). An important development has been the growing appreciation of the value of studying associated pottery, that is stratified groups and assemblages as integral units. This approach is of particular value for inter-site comparisons (eg. Orton 1982a, 161-2); as Peacock has observed the comparative profusion with which pottery finds occur: "provides a means of studying relationships between sites seldom rivalled by objects of metal, stone, bone [etc.]" (1977b, 21).

The focus of the current study is regional and comparative. Pottery was selected as the primary source of evidence for analysis since it comprises the one artefact type found on virtually all sites of the period, usually being present in some quantity. This has enabled quantitative work to be undertaken and from this inter-site comparisons are made. Synthetic, integrated regional studies based upon pottery research are comparatively rare though because of the nature of their contribution they remain highly desirable; this was a major theme of the recent English Heritage review (Fulford & Huddleston 1991).

1.6 THE CERAMIC BACKGROUND II. CHANGES IN POTTERY TYPOLOGY AND ASSEMBLAGE COMPOSITION IN THE FIRST CENTURY A. D.

During the period under review emphatic changes occurred in pottery typology and the composition of pottery assemblages through the study area. The evidence examined in this study demonstrates that these developments were not universal nor homogeneous. Some changes were clearly underway in some localities before their conquest. Other changes, such as the local production of flagons and beakers (*cf.* 1.6.1 (iv), probably followed the conquest rather than preceded it (*cf.* Rigby 1986, 232).

1.6.1 Changes in Pottery Typology and Manufacture.

Developments are evident at a number of levels with regard to the production of pottery within the region: the technology of manufacture changes (in the southern and eastern part of the region at least); fabric composition alters, principally with a change in preferred tempering constituents; changes occur in the location of production centres; and the production of new or altered forms, themselves possibly relating to different or altered methods of food preparation and consumption, is evident.

(i) Changes in the Technology of Pottery Manufacture.

The means by which pottery was produced were changing during the LPRIA in some parts of Britain including the southern half of the current study area. Changes included new practices in throwing and firing and, almost certainly too, the introduction of systematic clay preparation (*cf.* 1.6.1 (ii)).

The introduction and increased use of the potter's wheel (either a simple wheel or a foot-wheel (Harding 1974, 92)) was a development of significance since it permitted the manufacture of new and complicated forms, without ceramic parallel in Britain (*cf.* 1.6.1 (iv)). The arrival of the fast wheel was not, of course, a simultaneous phenomenon across the country. Its advent and usage varied regionally and sub-regionally in Britain, and between pottery types.

Elsdon has recently suggested a date of about 30 B.C. for the earliest wheel-made pots in some parts of southern England and, further north, in the South, Central and East Midlands, a date of around 10-1 B.C. (1989, 55). Wheel-made pottery first appears in quantity at Dragonby, SHU 1, for instance, in deposits dated to the early first century A.D. The very earliest examples occur at this site slightly earlier, in deposits dated to the end of the first century B.C. (Elsdon & May 1987, 11 & Diagram 2). However, from the evidence of native sites, north of the Humber and Trent the effective debut of wheel-made pottery comes much later.

On current evidence kiln technology appears to have arrived in Britain following the conquest. This mode of firing enabled pots to be heated with greater control and, possibly to a higher temperature, than was achievable within bonfires or pit clamps. It may be noted that ethnographic studies demonstrate that clamp or bonfire-firing can be executed with great skill and control, with high temperatures (eg. 900°) being accomplished (eg. Nicklin 1981)). Kiln technology also enabled pots to be produced in consistent and standardized colours which had not been previously possible (eg. orange, white and buff).

The earliest kilns identified in Britain are the La Tène III-derived kilns with simple up-draught structures. These types are known from mid-first century A.D. Britain (Woods 1974; Swan 1984, chapter 5). A very few e:.amples which are definitely of pre-conquest date (on the grounds of the typology of associated pottery) are listed by Swan (1984, 56). That the sample is small results in part from the ephemeral nature of these structures and problems in their recognition. Further, the inherently approximate nature of dating based upon pottery typology means that for a number of examples a pre or post conquest date cannot be confidently stated. What is certain, however, is that in Britain knowledge of the technology of kiln firing (albeit rudimentary) and the intention to employ it existed prior to the invasion. The archaeological evidence demonstrates that the immediate post A.D. 43 period witnessed a dramatic extension and development of the use of this technology (Swan 1984, chapter 6). The reasons for this marked change presumably include demand and the arrival of potters from the Continent immediately after A.D. 43. The latter appears to have been the case, for instance, at Rushden (Swan 1984, 57) and at Longthorpe (Wild 1975, 160); Darling (1977) discusses the evidence of Continental potters at early military sites in the west of Britain.

It is unlikely that these dimensions of change in the technology of pottery manufacture were independent developments; they seem to have been complementary elements of a whole. Pottery associated, for instance, with the earliest kilns is usually wheel-made, and only infrequently has it been found to have been handmade. Swan observes that: "The overall distribution of these early kilns, and of pre-fabricated furniture indicative of them, coincides very closely with the main concentrations of pre-conquest wheel-thrown La Tène III ('Belgic') pottery in Britain, that is around the Thames estuary and its hinterlands, the Upper Thames valley, and the valleys of the Trent and some of its tributaries, and of the rivers converging on the Wash" (1984, 56). It is reasonable to conclude that these changes were introduced from the Continent, where they were firmly established, and that they were associated.

Impressionistic evidence suggests that the LPRIA in the south and east of Britain witnessed a pronounced rise in the production of pottery (to the author's knowledge this question has, surprisingly, never been studied quantitatively). The coincidence of changes in the means by which pottery was produced with this perceived phenomenon is a matter of interest. It is likely that the relationship between these developments is more complicated than simply that the former permitted the latter. The evidence of these changes has been interpreted as indicating labour specialization in pottery manufacture (eg. Harding 1974, 91-5; Cunliffe 1978, 300).

(ii) Changes in Fabric Composition.

Pottery samples demonstrate that during the period under review the study area witnessed significant changes in the constitution of potting fabrics. In this context the changes seem likely to be connected with the shift from hand-modelling to wheel-based production and/or the new method of firing.

Hodges has contended that the introduction of the potter's wheel is likely to have led both to the cessation of tempering with coarse inclusions and stimulated the consistent levigation of clays (1974, 60-1). He points out that in wheel-based production coarse fragments are impracticable since they will have: "caught the potter's hands as the clay rotated" and gauged the walls of the vessel being formed. However, with coarse fragments excluded from the clay the latter needs to be uniform since large inclusions off-set the problems of an under-mixed clay matrix, namely the probability of excessive and uneven shrinkage as the pot dries, and they make the vessel more porous during firing. Levigation would therefore be practiced to achieve a well-mixed fine clay matrix (Hodges 1974, 61; Peacock 1982, 54). Moreover, a finer clay matrix is more easily manipulated on the wheel. A corollary is that finer clays more readily facilitate the production of thin-walled vessels such as beakers. The tendency for pastes to become finer has been broadly identifiable in the pottery assemblages under study here.

During the first century A.D. protracted but consistent trends are evident in the nature of fabric tempering within the research area. There occurred, for instance, a marked shift away from fossil shell/calcite grit and grog tempering to predominantly quartz grain ("sand") tempering (eg. as evident in the assemblages from 181-3 High St Lincoln, LIN 17 (O), (Darling 1988a), Holme Pierrepont, NOTT 20, and the Bath Lane and Blackfriars St sites, Leicester, LEI 13 (AW) & (BE) (Clamp 1985, 49)). This appears to have been a common development underway across much of southern and eastern Britain during the first century A.D.; in some areas it post-dated the Roman invasion (eg. the coarse wares of west Kent (Pollard 1988a, 64)). However, it should be recalled that there is in fact clear evidence that in some places in the south this specific shift in preferred temper preceded not only the Roman invasion, but also the advent of the fast wheel and kiln technology (eg. the Oxfordshire sites of Farmoor (Lambrick 1979, 35-46) and the Ashville Trading Estate, Abingdon, (DeRoche 1978), as well as elsewhere in the Upper Thames Valley, where it may date from the later middle Iron Age; the reason(s) for this shift, in this connection, remain obscure).

The change from shell/calcite grit is distinctly marked in the southern part of the current research area where quartz grain tempering became increasingly preferred through the course of the century. Some statistics, drawn from a variety of assemblages examined in the course of the research, which demonstrate this change are presented below (8.5). Generally, changes in fabric composition during this period do seem likely to be related to the other contemporaneous developments in pottery manufacture (*cf.* 1.6.1 (i)) as Hodges' observations and others would suggest.

In addition to (? or perhaps an alternative to) Hodges' argument it should be stressed that the increasing employment of kiln technology is also likely to have been of importance in this connection. Kiln technology enhanced the potter's ability to regulate firing temperature. This meant that the use of comparatively large inclusions, such as coarse fragments of fossil shell, flint, other crushed stone, etc. was no longer necessary; their purpose as mediators of thermal-shock had been superseded.

(iii) Changing Production Centres.

The possibility that the Iron Age witnessed greater specialization in pottery manufacture, at least in southern and eastern Britain, has already been suggested above (*cf.* 1.6.1 (i)). If this was indeed the case then a shift away from local production may have been likely, particularly in the case of fine wares, though perhaps not exclusively so, (but note there are assumptions here). Locating production sites in the Iron Age is, however, problematic (*cf.* 1.6.1 (i)). Few pottery production sites unequivocally of the LPRIA have been located with precision; the pre-kiln means of production, namely the pit clamp and bonfire are likely to leave only the most vestigial and fragile evidence.

A range of evidence, such as the apparently increasing standardization of potting, suggests the likelihood of developing foci of pottery production during the Iron Age. The isolation of six different groups of Glastonbury Ware by Peacock (1969), each with its own tightly circumscribed potential sources is consistent with this probability. Cunliffe has suggested that production may have had an increasingly commercial orientation (1978, 300).

(iv) The Production of New or Altered Forms.

The introduction of the wheel enabled potters to produce a new repertoire of forms (eg. dishes, plates and platters with foot-rings), to more readily reproduce complicated forms previously made by hand or in metal (eg. carinated and cordoned bowls) and to imitate the form of imports (eg. Gallo-Belgic beakers which were widely copied (*cf.* 8.6; see Note 1.6).

The advent of the fast wheel occurred at a time when the indigenous production of classes of vessels was developing anyway in terms of forms and stylistically. This is the case within the East Midlands as well as in the south-east of England. In the East Midlands certain forms, comprising essentially bowls and jars, which will have been hand-manufactured (perhaps being finished on a turning board) clearly display typological and stylistic development through the first century B.C. and into the early first century A.D. This is evident from the pottery sequences at Dragonby, SHU 1 (C), Tattershall Thorpe, LIN 34 (A) and (C)), Old Sleaford, LIN 26. It should be pointed out though that throughout the period under review associated and contemporary vessels display varying techniques of production. It is entirely likely that these differences relate to differing functions.

1.6.2 Changes in Pottery Assemblage Composition: An Introduction.

During the period under study the nature of assemblages also changed. In part differences follow from the developments outlined above (1.6.1). Pottery of the LPRIA tends to occur in a limited range of forms, mostly drinking vessels, bowls and jars. By the end of the period, however, the formal range and the sources of assemblages had dramatically changed (eg. Pollard 1988a). The general pattern is for assemblages over time to display increasing proportions of Roman pottery (as defined in Chapter 3), a greater variety of fabrics and forms and a greater standardization of forms. This pattern is confirmed by the evidence presented in Chapter 9.

(i) Roman Pottery in Pre-Conquest Britain. (See Note 1.7).

Imported pottery from the Roman world in LPRIA contexts in southern Britain is limited to a circumscribed and typologically specific range of vessel types. The earliest vessels arriving in any quantity were wine amphorae of Dressel 1 species. These Italian items make their appearance from around the beginning of the first century B.C.; their distribution, was not widespread (Cunliffe 1987, Fig.234; Fitzpatrick 1985; 1989a; *cf.* 1.4.3). It is not until the closing decades of the first century B.C. that other types appear. Amongst the initial arrivals of this 'new wave' were vessels with micaceous fabrics, Central Gaulish in origin. These included large flagons, known at Leicester, Dorton Buckinghamshire, Hertfordshire-Essex, and further south (Clamp 1985, Fig.32, No.35, Fig.33, Nos 80 & 90; Farley 1983; Rigby & Freestone 1983; 1986, esp. Fig.2), lid-seated jars of Cam. Form 262 (Tyers 1981; Rigby & Freestone 1986) perhaps arriving as containers, oxidized red-slipped platters of Cam. Form 1 (Rigby & Freestone 1986; Rigby 1986, 232-3), and, probably, unoxidized black-slipped bowls of Cam. 51 (research by the current author). The latter two types constitute the first ceramic items that can be identified as travelling to Britain not for their content but, presumably, for their perceived intrinsic value. On current evidence the quantity of these Central Gaulish items exported to Britain around the turn of the millennium seems modest. However, within the milieux of LPRIA Britain these vessels will have appeared truly exotic (*cf.* 1.4.3).

By the turn of the millennium a familiar range of platters, cups, bowls and beakers manufactured at a number of centres in north-east Gaul and commonly known as Gallo-Belgic wares were arriving (Hawkes & Hull 1947; Rigby 1973a; Timby 1982). Arretine ware (or more correctly, Italian Sigillata) and provincial Sigillata (*cf.* Kenrick 1978) also make their debuts in Britain at this time (Dannell 1979, 179). These fine table wares continued to be imported up to and, in the case of Samian ware of course, beyond the Claudian conquest.

Wine seems to have remained the most important amphorae borne commodity entering Britain during the LPRIA (*cf.* Sealey 1985). By c. A.D. 40 wine amphorae from a wide variety of sources were arriving (Sealey 1985; Williams 1986). Amphorae carrying products other than wine appear in Britain from around the turn of the millennium; these included the Dressel 20 containing olive oil, from Baetica (Sealey 1981, 63; 1985, 146-8; Peacock 1984, 40), the Haltern 70 type, which usually contained *defrutum* syrup (Sealey 1985, 149), and amphorae containing fish sauces (Sealey 1985, 77-85; Peacock 1974; Williams 1986; Fitzpatrick 1989a, 75).

Some aspects of the distribution of these items require brief comment here. The distribution of the arrivals from the Continent widens in the period preceding the conquest. Millett observes that the Central Gaulish, Gallo-Belgic and Sigillata wares display: "a wider distribution in the south-east than that achieved by the earlier Italian amphorae" (1990, 33; *cf.* Timby 1987a). In part this must have been a function of the absolute numbers of these types arriving in Britain. In actuality, though, the quantities of all pre-conquest types present in Britain are comparatively modest compared to what was circulating within the Empire contemporaneously, and what became available in Britain following the conquest (*cf.* Millett 1990, 30, for figures relating to Dressel 1A amphorae; Italian 'Arretine ware', so-called provincial Arretine and SGSW are (contra Dannell 1978, 226) all rare in LPRIA Britain both absolutely and relatively (Fitzpatrick 1989a; Millett 1980; Stead & Rigby 1989, 113; Trow 1990, 105-6); Rigby, on the basis of an analysis of stamps, has recently stressed that the aggregate of terra rubra and terra nigra vessels in Britain is small, especially so when the figures for Colchester are excluded (1990). The exception may be the Cam. 113 beaker which, to date, appears to be more common in Britain than at its place of origin (Rigby 1986, 232). It is of considerable interest that Gallo-Belgic vessels are generally much more common on pre-conquest sites in the south of England than are samian wares (*cf.* Stead & Rigby 1989, 113, where comparative figures are presented for the King Harry Lane (Verulamium) site and parallel drawn with the Skeleton Green, Hertfordshire, site). This pattern appears to hold within the current study area (*cf.* Chapter 5 for quantitative analysis). The incidence of this material in Britain, and often its context of deposition, as noted above, are structured. An interpretation of this patterning has been considered above, under 1.4.3.

One further pattern displayed by this pottery in LPRIA Britain is that the range of vessel types and forms which cross the Channel to Britain was highly circumscribed. The types present are a consistent and se'ect range of what was circulating in the north-west

Empire at the same time. The Gallo-Belgic fine wares are a firm illustration of this. The standardized types and forms reaching Britain appear to be a discrete sub-set of the actual output (see Note 1.8). Such a pattern is perhaps not surprising, especially if these vessels were socially 'required' in the consumption of certain foods or drink, (for instance flagons), or comprised 'services' of table wares (Loeschke 1909; Kam 1970; pers. comm. V. Rigby 29.3.88).

Pottery of course comprised only one of a number of classes of items of Roman material culture to arrive in pre-conquest Britain (Fitzpatrick 1989a). The archaeological evidence indicates that an increasing and diversifying contact developed between southern Britain and the Roman world in the century following Caesar's invasions. It is within this context that the ceramic evidence must be understood. Pottery constitutes a major part of the surviving evidence and it may be a valuable index in the identification of wider trends within later Iron Age society. However, important as these imports may have been it is vital that their incidence in LPRIA Britain be considered systematically and quantitatively so that their impact may be calibrated (*cf.* Trow 1990). This thesis attempts this for the region in question.

(ii) Roman Pottery in Post-Conquest Britain.

The Roman conquest stimulated a re-orientation in the nature of pottery production and supply; changes were both quantitative and qualitative. Following the invasion, the clear impression is that the supply of continently produced or inspired pottery began to increase, almost, it would seem, exponentially; for instance, in the case of samian Dannell notes that: "much larger quantities of samian [now] reached Britain, not only for use by the army, but for a burgeoning civilian trade" (1979, 181). The requirements of the Roman military for pottery are usually seen as central in this development (eg. Webster G. 1973; Darling 1977; Swan 1984, 83). The prolific quantities of pottery forthcoming from some fort and fortress sites of the conquest period (eg. Kingsholm (Hurst 1985) and Colchester (Symonds & Wade forthcoming) bear witness to the potential scale of military consumption. However, the *normal* scale of consumption has yet to be established.

The duality of changing supply and consumption (ie. military & civilian), however, as observed by Dannell (above) is of particular interest. That the Roman army was supplied with

Roman pottery (of whatever sort) is not surprising, though the composition of assemblages and the character of supply is, of course, of considerable archaeological interest (*cf.* Darling 1977; see Chapter 9) and it is one examined in the current thesis. The developing Romanization of assemblages on native sites which seems to occur in the decades following the conquest is more remarkable and equally is one that demands systematic study. This process followed pre-conquest antecedents, but the apparent early receptivity of some native populations to Roman or Romanizing pottery, and its wider and more intensive distribution, needs to be carefully studied and characterized. Swan states that the most indigenous potters changed their repertoires slowly but that some adjusted their production to cater for the requirements of the Roman army (1984, 83). (The question of the timescale of change is an important one and is addressed below (esp. Chapter 9)). However, there is a danger of circularity here; Swan, for instance, states: "Careful assessment of kiln groups with a reasonably high percentage of these forms [ie. forms customarily found on military sites] aids the identification of military-orientated workshops, even when forts which they supplied have not been located" (1984, 83). Detsicas reveals similar reasoning *apropos* the kiln of Claudio-Neronian date at Eccles, Kent, of which he states: "the forms of the vessels made and their fabric ... point to a probable army contract, if not direct military involvement in their manufacture" (1977, 29). Synthetic studies of the supply of pottery on non-Roman-military sites in the post-conquest first century are now of priority to test hypotheses and to redress the balance of research.

1.7 ROMAN POTTERY AND ROMANIZATION: A PROVISIONAL DISCUSSION.

One of the central priorities of this study is to characterize the composition of pottery assemblages and to account for their character. That the constitution of assemblages alters has been noted (1.6). Why these changes occurred is, of course, a matter of considerable interest. One way to approach this is to consider the purpose and role of the pottery within the social milieu. In order to do this it is necessary to consider the form and possible functions of the pottery types. This is important because, as Okun observes: "eating and cooking habits, which are culturally determined, are associated with various forms ... major changes in form should indicate changes in eating and drinking habits (1989, 47). That this is the case cannot be taken as given but it is a useful starting point.

When the customary function of particular forms or types can be established with reasonable certainty (see Note 1.9) this may be considered a valuable index of cultural change since the presence of types should indicate the presence of certain foods and drinks and/or perhaps the manner in which they were consumed; again though interpretations in this difficult area must proceed with caution. The pottery assemblages from sites occupied in the LPRIA and early Roman period, in southern Britain especially, suggest that some elements of some communities at least were receiving and consuming exotic imported foods (essentially from the Mediterranean) hitherto apparently unprecedented in Britain. The archaeological evidence allows the suggestion that, in the context of choice, a certain diet and perhaps a set of food consumption norms were being practiced. The widespread distribution of these Roman vessels in LPRIA and post-conquest Britain indicates that they are unlikely to be simply the discard of Roman or Romanized immigrants. Rather it could be suggested that they represent the adoption of Roman food practice by some of the native population. If one considers, for instance, mortaria and the Dressel 20 olive oil amphora, classes of vessel which, it might be posited, are quite likely to be closely associated with Romanized food norms, their distributions by the end of the first century A.D. are wide (*cf.* chapters 6 & 7). An implication of this evidence is that both food preparation and consumption were Romanizing. However, this cannot be readily assumed and it may be that it is unwise to follow Dannell's dictum that: "in both wine and food habits, Rome also conquered" (1979, 182).

The major problem is that it is difficult to establish in cases of this type whether amphorae arrived at sites with their original contents intact and, indeed, quite how these may have been used (if at all) if they did arrive intact, and, similarly, whether vessels were actually employed by indigenous people in the customary Roman and intended manner. Considering mortaria, not only does their distribution widen through the Roman period but its frequency appears to intensify (*cf.* Booth 1991); mortaria seem to comprise increasing proportions of some site assemblages with time (eg. Millett 1989, 23; Swain 1987, 65; Evans, J. forthcoming B). That this represents a Romanization in food preparation cannot be assumed for as Evans has pointed out it may be that these vessels were actually being put to a traditional (ie. 'non-Roman') use that had previously been performed by other means (Evans, J. forthcoming B).

Having noted these qualifications some evidence can be identified which suggests that food norms were changing. First, Okun, in her study of the Upper Rhine in the early Roman period demonstrates that the size of vessels likely to have been used for drinking becomes smaller, and, at the same time, plates and small cups and bowls appear. She interprets this as probably indicating: "the transition from shared communal dishes to individual table settings", that is from a native and 'Celtic' pattern to a Roman one (1989, 51). Secondly, one of the conclusions of King's survey of animal bone assemblages from Roman Britain was that the use of sheep declines through the Roman period. This is consistent with the established Roman preference for pig and cattle (King 1978) and is just what would be predicted if diets generally were Romanizing (see Note 1.10). King's work is of particular relevance though since the evidence he presents qualifies and refines any model which suggests a unidimensional Romanizing of diet. Two points are illustrative: first, his data show that deposits from sites which on other evidence we would expect to be well Romanized (ie. villas, towns, roadside settlements, forts) have bone assemblages indicating less sheep consumption than "the native sites"; second, in juxtaposition to any assumed blanket pattern of Romanization of native diet the figures show that with regard to meat consumption: "the early military sites tend to fall into line with the native sites demonstrating their reliance on the available local food" (1978, 211). These points emphasize that the area of diet is a complex one.

It is clear that models and arguments concerning the Romanization of native dietary patterns need to proceed with care. An integrated and quantitative approach assessing the different types of evidence my be worthwhile. The ceramic remains may constitute a useful index of diet and the Romanization of diet but more evidence, and indeed qualitatively different evidence, than is currently available, is required to make statements with confidence. In this particular area it may be that our biggest difficulty lies not in the nature of the material record but rather with our assumptions concerning its meaning.

As a final comment it might be noted that if it was the case that elites, or aspirants to elite status, were the first to have access and inclination to a Roman diet (or at least their understanding of it) the material record demonstrates that (perhaps against their will) it did not remain their exclusive property over the long term.

1.8 THE SCOPE OF THE PRESENT STUDY AND ITS RELATIONSHIP TO EXISTING STUDIES.

The domain of research of this thesis is comparatively unstudied. General studies of the later Iron Age and of the early Roman period have devoted less attention to this area than to others (eg. Cunliffe 1991; Fitzpatrick 1989a; Sealey 1981; Trow 1990). This is doubtless in part a function of an historical imbalance of archaeological input. It seems that the region has remained less fashionable than, for instance, parts of the south-east of England. This lack of attention in the general surveys has in turn exacerbated the problem. A modest number of regional and 'sub-regional' studies do embrace the area or parts of it (eg. Haselgrove 1982b; 1984b; May 1976a; 1976b; 1984; O'Brien 1979a). Here again though some differential coverage is witnessed and, moreover, these works have not been focused upon the ceramic evidence.

The intention with the current study was for the coverage to be as comprehensive as feasible, hence the extensive Gazetteer listing sites known to have produced pottery and/or brooches and coins of the appropriate date. With regard to the examination and quantification of pottery assemblages the aim was to target sites which have yielded large amounts of typologically late Iron Age and early Roman pottery (*cf.* Chapter 2). A sample believed to be representative of assemblages from Roman military sites has been examined and quantified. Many smaller groups and/or groups unsuitable for quantification have also, however, been examined (eg. Frisby, LEI 8 (A), and Broxtowe, NOTT 6 (B), respectively).

The study is unique in terms of what has been examined and how. Challis and Harding (1975) and Plowright (1978) examined Iron Age tradition pottery in the north of Britain but with a focus upon typology and without quantification. Likewise Gillam's work (eg. 1968) was concerned with typology and chronology, beginning with Roman Flavian pottery and with a perspective which largely addressed military questions north of the Humber. Evan's important doctoral study of Roman pottery in the north of Britain (1985), including quantified analysis, examined the later Roman period. No synthetic study of the region for the period under examination here has been undertaken before.

The scope of the coverage suggests the possibility that patterning and variations in the distribution of material may be identified. The study presents the opportunity to evaluate established and less established views of the later Iron Age in the region and to compare the evidence for this region (and its interpretation) with the evidence from other regions. Salient priorities of the research are to consider the degree of receptiveness of the region to Romanization, to consider aspects of economy and society, as these are indicated through the incidence of pottery types, and to examine the character of groups and assemblages against their regional background. The methodology is quantitative and comparative. The evidence from different groups and sites is examined with the *working* hypothesis that the status and identity of a site *may* be reflected in the composition of its pottery.

1.9 THE STRUCTURE OF THE THESIS: AN OUTLINE.

The methodology adopted is outlined and discussed in Chapter 2. Chapter 3 is concerned with pottery typology, chronology and cultural association. Chapter 4 considers three regional pottery traditions of the late Iron Age. Chapters 5 to 7 examine the incidence of selected Roman pottery types, namely fine wares, amphorae and mortaria, in the region. Chapter 8 deals with aspects of the changing typology of indigenous pottery. Chapter 9 examines the dated groups to highlight trends in composition and to consider the constitution of groups within their contemporary and regional context.

CHAPTER TWO

METHODOLOGY.

" ... the model used to collect any archaeological information, or the model current when such information is gathered, will necessarily influence that gathering. Certain categories of information will be looked for because they are to be expected from the model; other information might not be seen or may be disregarded because, according to the model, it is not there." (Reece 1989, 234-5).

2.1 INTRODUCTION.

The focus of this thesis is the examination of pottery assemblages. Central to this investigation is the comparative study of assemblage composition and of pottery type distributions. The study draws upon quantitative data in order to isolate patterning and to identify variability between assemblages within the research area. The existence of 'normal patterns' and deviations - or indeed of an absence of discernible pattern - are discussed. A range of questions are considered through the analysis of the pottery data. In particular these questions address the process of Romanization, the social status of sites and the identity of sites.

The methodology of this thesis has been adopted on the premise that it will facilitate the study of these aspects of late Iron Age and early Romano-British society. The methodology is not new but rather applies approaches conceived of during the late 1970s and early 1980s and which are now seen as uncontroversial. Indeed, these methods are coming to be standard practice (though the results of this recent adoption have yet to be widely manifest and their implications understood). In consequence discussion of the methodology may be brief, though aspects are examined with reference to examples drawn from the current study.

Regrettably archaeologists have often been slow to recognize the degree to which the nature of the evidence has shaped their perceptions and moreover, that their theoretical frameworks have had a determining effect upon the means selected to study that evidence (*cf.* Hodder 1986, 16; Reece 1989, 234-5). It is acknowledged that the current study is 'of its time' (*cf.* Clarke, D.L. 1973) and that the pottery examined here may be considered in different ways.

2.2 THE POTTERY ASSEMBLAGE.

The fundamental frame of reference in this study is the pottery assemblage. The term assemblage is appropriate since the focus is upon the entire composition of groups (whether these be at a site, phase, or context level), and upon association. The approach to the material under study therefore aims to consider groups as whole entities, and when particular types or fabrics are the subject of study they are evaluated with reference to their pottery group context.

The theoretical principles of assemblage analysis as employed here follow the work of Millett (1980; 1983; 1987b), Jeremy Evans (1985) and Lambrick (1984). The model identifies and considers variables which may determine the composition of a pottery assemblage (*cf.* Millett 1987b, Fig.4). Put succinctly a range of factors will have contributed to (a), the formation and nature of a 'target pottery population', and (b), the composition of the excavated or otherwise recovered material, the so-called 'archaeological sample' (*cf.* Haselgrove 1985).

Millett outlined factors which demonstrably effect the composition of assemblages (1987b, 104-7). These factors are both chronological and synchronic and lie in relationship with each other. The chronological dimensions comprise: (a), "the primary time dimension", that is 'normal' chronological change, such as changes in fashion, means of production, etc., (this may simply be the aggregate effect of the chorological factors listed below (*cf.* Evans, J. 1985, Section 1)); (b), "the residual time dimension", that is diachronic influences affecting the composition of an assemblage, such as residuality (see 2.5.2 (iii)); and (c), "the imposed time dimension", which relates to variables arising from the subsequent history of the site, such as erosion or disturbance, the post-depositional deterioration of the pottery, and including recovery and the manner in which it is excavated. It would appear that (b) is in part a sub-set of (c). The fourth dimension Millett terms chorological (*cf.* Childe 1956), specifically: "factors which determine variation between groups in the same time zone" (1987b, 104) including variation in production and supply, social differences, functional variation, symbolic uses of pottery, and context of deposition. That the influence of these variables can, with some confidence, be identified between pottery assemblages and measured lies at the epistemological core of the current study. These variables can be briefly summarized (following Millett's order, 1987b, 106):

(A) Production and Supply (eg. Greene 1982; Marsh 1981). These are fundamental determinants of composition and are themselves dependent upon economics and technology, as well as social factors, spatial factors and exchange and distribution networks.

(B) Social Differentiation. Social status and 'identity' may be recognizable from the composition of pottery assemblages at both inter- and intra-site levels. Patterning may correlate with the incidence of other classes of material culture, as well as structural evidence. Social differences are likely to effect supply and influence rates of consumption. This important field of enquiry remains little researched, though there have been some notable contributions (eg. Lambrick 1984; Breeze 1977; Booth 1991).

(C) Functional Variation. It might be anticipated that sites performing differing functions, and differing functional areas within sites, will give rise to dissimilar pottery assemblages. Whilst this seems likely it too remain an area which has received scant attention.

(D) Distance. Numerous studies, particularly those of the Romano-British pottery industries have demonstrated that distance may normally be expected to be a determinant of distribution patterning and assemblage composition, though the 'distance decay function' may be distorted by other factors (*cf.* Orton 1982a, 120-4).

(E) Symbolic Uses of the Pottery. It is widely acknowledged that the form and decoration of artefacts might convey social meaning relating to group identifications and social inclusion/exclusion, etc. Hodder, for instance, has demonstrated how 'style' might affect the composition of cultural assemblages (Hodder 1982a). The pottery 'style-zones' of Iron Age Britain (*cf.* Cunliffe 1991, 60-93) may be open to an interpretation of this manner. Semiotics though continues to be a relatively un-explored field within archaeology; moreover, the current intellectual vogue to focus upon 'readings' rather than 'signs' renders this area of study distinctly unfashionable.

(F) Context of Deposition. This is another key variable determining pottery group constitution. For the assessment of a pottery group to be of full value it is necessary to establish from what type of context it comes. Site formation processes and the origin of deposits are highly varied. The cultural material which deposits come to contain is likely to bear a close relationship to the origin of the context. Hence it is important that archaeologists endeavour to comprehend deposit creation processes. At its most basic this will entail an evaluation as to whether the deposit comprises primary or secondary refuse, etc. (*cf.* Schiffer 1976, 30). The latter might be expected to be more representative than the former in so far as they (ie. secondary deposits) are more likely to comprise what Lambrick refers to as: "thoroughly mixed homogeneous refuse reflecting no particular activity" (1984, 168). In large proportion groups examined for this study appear to be of this type. (If all contemporary groups from a site comprise well mixed refuse this will negate the possibility of identifying different functional areas).

Extant pottery assemblages are the net sum of these variables as they have operated (and are operative) at any location in time and space. As Millett has observed the definition of these variables and the explanation of similarities and differences between assemblages is: "the proper subject for archaeological research" (1980, 57).

Importantly, apparent similarities in assemblage compositions may well result from different causes, or combinations of causes, which are inter-related. Further, there are no simple recognizable means for distinguishing between the various factors (outlined above) which result in the similarities in assemblage compositions (Millett 1980, 57; 1987b, 107). It is appropriate, therefore, that the operation (or possible operation) of these factors be considered separately.

The assemblage model identifies potential sources of variability in assemblage composition. It suggests what might be anticipated and monitored for. However, there are no concrete guides as to how particular sources of variability may be identified and measured. This may change as methodologies develop, though it cannot be assumed that the problem is solvable methodologically. Assemblages cannot be characterized, nor the operation of these factors quantified through the measurement of any one component element or attribute of the pottery alone. Rather different components may relate to a particular factor or factors. A further complication arises since pottery attributes (decoration, technology, fabric, surface finish, etc.) may not be entirely independent of each other.

Until recently the identification of factors causing variation between assemblages has proceeded in a somewhat *ad hoc* manner. During the late 1970s and the 1980s doctoral research by Evans (Evans, J. 1985), Millett (1983; 1987b, 107), Pollard (1982) and Tomber (1988) followed a systematic and relatively objective approach to the analysis of assemblage and group composition (*cf.* 2.5.4).

2.3 POTTERY QUANTIFICATION.

2.3.1 The Methods.

A principal objective of archaeology is to locate sites and assemblages within their contemporary social and economic contexts. One means of facilitating this is to establish the character or 'profile' of a pottery assemblage and to compare this with those for other sites. In order to make comparisons it is necessary to know the amounts of each type of pottery present; in short measures of quantities are required.

An apparently obvious way of establishing this might be simply by visual means, by estimating the minimum number of vessels present. With small groups and assemblages this may be accomplished quickly and seemingly unproblematically. However, the larger the quantity to be dealt with the less practical this approach becomes; (this is particularly so with Roman pottery which displays typological consistency). Large samples render this method unfeasible. Moreover, since the method is based upon subjective consideration it is prone to unreliability; it is doubtful whether the results of such processing would be replicated by the same observer on different occasions, or by different observers. Most damningly Orton (1982a, 162-4) has demonstrated that since vessel types normally break into different numbers of sherds, unless we have a complete sample from a fully excavated site any 'number of vessels represented' approach is likely to give rise to false impressions as to the relative frequency of types. This invalidates comparisons.

This study has consistently used three types of measure to quantify fabrics or types per group: sherd numbers, sherd weight, and rim percentages (RE). Quantification by sherd counting and by weighing is straight forward and easily accomplished. Millett (1979c) has shown that these measures generate internally consistent results. He has recommended the employment of both as 'accurate' in themselves, but also as complementary. A similar conclusion was reached by Evans in the course of his thesis study (Evans, J. 1985). One general advantage of employing these two methods is that average sherd weight figures (per fabric, per context, etc.) may be generated from them. This may be helpful, for instance, in identifying or assessing residuality in a group.

Both of these methods, however, carry potential biases. In the case of sherd counting the potential distortion lies in the fact that when large thick walled vessels, such as amphorae, mortaria and storage jars, are broken they normally give rise to large fragments. Conversely, thin walled vessels tend to produce more sherds per vessel than do thick ones. In the case of weight the bias is towards thick and bulky types of vessel. Hence measurement by sherd count or weight is unlikely to accurately measure the actual characteristics of a 'death assemblage' of pottery in terms of numbers of pots; rather, they are likely to give a distorted impression of the relative frequency of types. Awareness of these biases is important though their significance may not be such as to invalidate comparison when this is being made between sites since, for each type, one would anticipate biases of the same order to operate at all sites. It must be recognized, however, that when the incidence of pottery types is converted into percentages a 'bias' with regard to one type will effect the percentage value of all others within a group. Clearly this has important implications for comparative analysis.

The third method employed is that of 'vessel equivalents'. This method follows from the fact that each sherd is a fraction of the vessel from which it came. If sherds could be measured as fractions or as percentages of vessels and these figures totalled up this would, as Orton states, represent: "a number equivalent to the number of vessels that could be made up if all the sherds belonged to the same vessels" (1989, 94). Orton has shown that the 'vessel equivalents' approach remains a reliable index of the relative frequency of a type at a site independent of the proportion of the actual site assemblage the sample represents; neither does it allow certain types to register in a manner which over or under represents them (Orton 1982a, 165; 1989, Fig.1).

Practicalities render it necessary to employ a proxy for this equivalent and the measure advocated by Orton, namely to measure the percentage of the whole rim or base represented in a rim or base sherd using a radius chart (Orton 1982a, 165), is becoming an accepted method of quantification. When only rim sherds are measured this is referred to as 'Rim Equivalent' (RE); when rim sherds and base sherds are measured for a class the two figures are aggregated and then divided by 2 to establish the 'Estimated Vessel Equivalent' (EVE).

In the course of data collection for the current study both rim and base percentages were systematically recorded (separately) for all groups quantified. However, in the analysis it was decided to use only RE data rather than EVE. There are a number of justifications for this. RE generally has been preferred to EVE by those using this type of method. Rim estimates (RE), rather than EVE's, was preferred by Evans in his study (Evans, J. 1985) and indeed, the results of a survey of Roman pottery analysts in Britain conducted in 1987-8 revealed that: "Most specialists using vessel equivalents ... employ simple RE statistics" (Pollard 1990a, 76). It appears that often those using the method have actually employed RE whilst referring to the method as EVE (eg. Timby 1987b, 77). Hence the choice of RE in the current study facilitates comparison. Further justification for employing only RE derives from a bias inherent in base measurement, particularly when groups are relatively small, since the bases of most types tend to be robust and occur complete in deposits with greater frequency than do complete rims. Rim sherds therefore are likely to be more commonly encountered than are base sherds. When the latter do occur though they generate much larger EVE figures, and hence, to state matters simply, can give rise to irregular patterns. Additionally, when measuring the presence of types, rather than simply fabrics, RE is a more appropriate method since rim sherds are more subtle indicators of form than are bases. In measuring rim and base percentages separately the original intention was to monitor the consistency and degree of variation between estimates deriving from rims only (RE) and bases only (BE) as against EVE. The behaviour of these different measures is germane from a methodological perspective; in the light of space limitations detailed examination of this area is not, however, undertaken here. This aspect may be more appropriately discussed elsewhere.

Whilst the 'vessel equivalents' approach is desirable an inherent problem lies in the fact that it only measures the presence of rims and, perhaps, bases. When samples are small or if their constituents are highly varied, types which are represented by sherds which include no part of a rim or base do not register as present when this is the measure. An instance of this from the current study is the Feature 317 (penannular gully) group from Dragonby amongst which a comparatively wide range of Roman fabrics occur though being represented in each case by one or only a few sherds, with rim and base fragments highly infrequent (eg. of the 54 Roman sherds present only one includes a base fragment (*cf.* Table 9.1)). In cases in which a type is represented though not by a rim (or base) sherd it is not a satisfactory solution simply to record presence in some manner since this will simply create a binary analysis.

Additionally a potential bias exists in the instance of vessels with a small rim or base diameter since these are less likely to break into many pieces and when encountered are often complete. Rims from Roman flagons and amphorae are a case in point. An example of this phenomenon can be observed amongst a late first century pit group (context 108) from East Bight, Lincoln, 1980-1, LIN 17 (V), quantified by the current author. Amongst this group 51 sherds in buff/cream fabric(s), evidently from flagons or so called 'honey jar' or similar forms (that is vessels with narrow mouths and wide bases) amount to 1.4kg by weight. The RE figure is 1.17 but the base equivalent total is in excess of three times this figure. Hence despite a seemingly large sample size rims appear to be grossly under-represented. This disparity may be an accident of recovery (Clarke, D.V. 1979; Orton 1982a, 167) though it may in part be a function of the fact that since flagon necks and rims are less likely to break up their occurrence in deposits will, numerically, be less frequent.

Further potential for distortion when measuring by RE/EVE lies in the variation in the ratio of rim to body size. Amphorae, for instance, have a huge body in relation to rim diameter with the former likely to fragment into numerous sherds weighing 10s of kilograms. However, Drag. form 27 cups, for example, have a small body in relation to their rims.

None of the three means of measurement adopted for this study is without its problems. There is at present no one 'best' method. Significantly all three methods of quantification have been found to correlate well in practice (*cf.* Millett 1979c, 78; Evans, J. 1985, section 1) once certain quantity thresholds have been reached. How large groups need to be in order to produce reliable quantitative data is a question considered below (2.5.2 (ii)). Pollard has arrived at a similar conclusion in the case of Roman groups from Leicester, the only exception being when: "there is a high incidence of extremely robust (eg. amphorae) or delicate wares" (1990a, 77)). The observation of a correlation is important since it contradicts what might be anticipated intuitively: sherd count figures, for instance, will largely be a function of breakage rates which are likely to have been highly variable (and not simply a function of "robustness"); weight, however, will be constant.

The employment of different types of measure in this study allows for comparison between them and may operate as a balance. In certain cases one type of measure may be considered a more appropriate index of the relative proportions of types present for comparative purposes; in practice this is often weight (*cf.* Chapter 5). Count and weight are particularly suitable when dealing with small groups. As will become apparent the current study verifies Evans' conclusion that a range of methods is preferable (1985, Section 1). How the methods compare in detail, particularly in terms of the systematic differences they give rise to, is frequently explicit in the analysis here and this is alluded to in the discussion of the evidence. There is much scope for a thorough evaluation of these methods based on the data of this study. However, important as this is methodological questions are not the main emphasis of this thesis.

In the course of the current research quantitative data were collected at the level of the individual stratigraphic unit (the 'context'). However, for purposes of analysis figures for individual context groups are often amalgamated here under phase or feature group headings. (It is worth noting that this practice is not problematic when weight, count and RE are the measures of quantity, whereas it would be with a subjective assessment of vessel numbers). In addition to the quantification of context groups the total incidence of certain types and fabrics within an assemblage have been recorded for comparative purposes treating the assemblage as the unit (eg. for Terra Nigra, Terra Rubra, the Cam. 113).

2.3.2 The Purpose of Quantification.

The aim of pottery quantification is to secure reliable measured data for the total composition of an assemblage, or a sample of that assemblage. Quantified data for the presence of fabrics or types within a group or context will ideally, when converted into percentages, provide a calibrated basis for inter and intra-site comparison. Once the relative frequency of types has been established it becomes possible to compare these figures with that for the type(s) at other sites so that one might ascertain reliably that, for instance, there is: "relatively more X ware at site S than at site T" (*cf.* Orton 1978). The analytical utility of this data far exceeds that of straight forward presence/absence plotting and other qualitative methods.

2.4 SAMPLING AND REPRESENTATIVENESS.

A key consideration when examining pottery groups concerns their 'representativeness' as samples, that is whether the sample is a reliable indicator of the nature of the pottery at a site at a specific time. The representativeness of pottery samples is likely to be determined by a range of factors (*cf.* those discussed under 2.2). Not least the strategy and techniques of the excavator(s) will be significant, determining the area excavated; also influential will be the type of deposits encountered and excavated, the nature of the techniques of excavation and recovery, and so forth (*cf.* Lambrick 1984, 162-4). It is crucial to recognize that both the area of a site investigated and the cultural evidence forthcoming will materially frame the dating, characterization and interpretation of that site (the history of archaeological investigations at Verulamium illustrate this). An example from the current study is that of the two excavated pottery assemblages from closely adjacent areas at Old Sleaford, LIN 26 (B) and (C), which convey markedly different impressions of the 'history' and exchange connections of that site (*cf.* 9.2). Similarly May has suggested (pers. comm. November 1989) that the excavations conducted at Redcliff, NHU 17 (B), during the later 1980s may not be representative of the site as a whole since the finds recovered during this work suggest a somewhat later date for activity at the site than do the Corieltauvian coins previously attributed to the site (see 9.3 for discussion).

Studies have shown that particular activities conducted at sites are likely to have been spatially structured (*cf.* Hodder 1982a; 1982b; Parker-Pearson 1989). Sites will have had different functional and status areas at which pottery was consumed and discarded in different ways (eg. Breeze 1977; Millett 1979b; Bloemers & Dierendonck forthcoming); these areas may have changed through time. However, unless samples come from widespread excavation across a site and/or are truly 'area' investigations they may be markedly partial. Other variables are of course important such as the scale of the site and the structure of organization at the site being sampled. In some cases a sample from a small trench might accurately characterize a site, in others though large scale work may not.

Anomalies or oddities in the composition of samples which render them unrepresentative may be conspicuous and comprehensible. These may result from 'non-archaeological' processes, for example, differential recovery and retention of finds, (see 2.5.2 (v)). They may, however, arise from archaeological factors and directly relate to the nature and origin of the deposit. The existence of unrepresentative groups may not necessarily be immediately evident. For this reason (and others) it is important that the processes leading to the accumulation of deposits are systematically considered (*cf.* Millett 1987b, 101).

Attempts to distinguish whether contexts comprise *de facto* depositions (ie. those brought into being by accidental destruction), primary depositions (where material once in use remains *in situ*), or secondary depositions (ie. rubbish deposits) should be consistently made (*cf.* Schiffer 1976). Millett has demonstrated that *de facto* deposits, and thereby, by implication, primary deposits too, are likely to be abnormal in so far as they are likely to include: "material deposited 'prematurely' " the effect of which is: "to make the deposit appear much later than it is" (1987b, 101; *cf.* 1987a). For this reason rubbish/secondary deposits should preferentially be targeted for analysis.

The current research has been conducted in the light of an awareness of the problems of representativeness. An attitude of caution regarding the representativeness of samples may be advisable, but a failure to attempt interpretations because of apprehension over the representativeness of the evidence should be avoided. In cases where suspicion concerning the representativeness of a sample exists this might have to be off-set if the sample is the only one presently available from a particular site of a certain date. Future samples might well result in revision, but then this is to be anticipated of on-going enquiry.

2.5 OPERATIONALIZATION.

2.5.1 The Quantified Data I: Sources.

The quantified data employed in this research has in almost all cases been collected by the author. Principally, this arises from the fact that this information is not otherwise available. Many assemblages pertinent to this research have never been published; some, presumably, never will be, others remain 'forthcoming'. In the past, publications of excavations have customarily included merely a circumscribed selection of the pottery encountered. It is only comparatively recently that the potential value of quantified pottery data has been appreciated. Consequently very few reports of sites within the area of research publish a complete and quantified record of the pottery excavated. It has been necessary therefore to examine assemblages held by Museums, independent archaeologists, archaeological units or in private collections, across the research area and in the process quantify them. Whilst this exercise has proved time consuming, several positive points, in addition to simply generating the quantitative data, follow. Not least amongst these is the assurance that the categorizations and procedures employed are consistent. This clearly aids comparisons. In addition the examination and processing of the groups has resulted in an unusual degree of familiarity with a range of material which could never be accomplished from the study of the published reports alone. This has proved particularly useful with regard to awareness of fabric characteristics and distributions.

Material from a total of 20 pottery assemblages has been quantified by the author during the course of this study. This data is supplemented by quantitative information for assemblages from York and Leicester kindly made available in advance of publication by Monaghan and Pollard (see 9.1) as well as by Darling's reports upon Lincoln material (1984; 1988a). Not surprisingly numerous assemblages and groups examined were found to be unsuitable for quantification.

2.5.2 The Quantified Data II: The Criteria in the Selection of Assemblages and Groups for Quantitative Analysis.

The quantification of pottery groups is not appropriate in every instance. In particular it is inappropriate when groups are incomplete, contaminated or simply 'too small'. The results of any analysis based upon quantification in such circumstances will be misleading. When selecting groups for quantification it has been necessary to engage a range of considerations concerning the suitability, reliability and potential data quality of the material.

(i) Spatial and Chronological Parameters.

The spatial and chronological parameters to the material under study were set by the selected field of research (*cf.* 1.2 & 1.3). The assemblages and groups studied lie within these margins. Assessments of the date range of occupation at a site, and within this, of the date range of phases, context groups and individual contexts were a prerequisite. In many cases this information was available in the form of reports and interims (published and unpublished), matrices and archive plans and notes on sequences. These were considered for reliability. All groups comprising the quantified sample are of narrow date range.

(ii) Sample Size Parameters.

For quantification to result in a fairly accurate and reliable picture of the character of pottery present in a group or assemblage these units need to be of a certain size. Relatively large samples engender confidence in comparison and help to ensure that the product of such comparisons is reliable.

How large a group should be in order that the quantitative data be reliable is not yet firmly resolved. This is in spite of the fact that it has been a pertinent question for at least twenty years. In part this lack of resolution endures because the question has not been systematically addressed by research. Individual researchers have used differing minimum size thresholds on the grounds of their apparent 'reasonableness' though without rigo~~u~~rous testing. A further cause of this absence of resolution probably arises from the fact that the requisite size of a group may depend upon the nature of the archaeological question being addressed. A general trend can, however, be identified, namely the suggestion that a higher threshold (ie. larger group size) than previously advocated and employed is required.

Hodder's innovative work on the distribution patterns of Romano-British pottery, conducted during the early 1970s employed a quantitative approach. The nature of his research required an evaluation of the minimum size that a group might be and yet produce reliable data. He found that: "in practice ... samples of over 30 sherds resulted in fairly consistent spatial trends" (1976, 72; though this figure was arrived at within the context of other constraints). It should be recalled, however, that these distribution studies were not particularly sophisticated.

At the opposite extreme Pollard has suggested truly large figures in an attempt to ensure that samples are a representative index. He states: "Intuitively 15kg, or 1000 sherds or 25 vessel equivalents [RE's] should be sufficient" (Pollard forthcoming). However, in practice very few context groups comprise such large quantities and such figures will be rarely achieved even when context groups are amalgamated into phase groups at prolific Roman military and urban sites. Pollard has subsequently stated that he might now revise his suggested figures downward (pers. comm. June 1988)). It seems reasonable to assume there to be a close relationship between group size and reliability. Absolute figures in this connection are somewhat arbitrary and should be understood as a guide. A figure of 50 to 100 sherds is likely to be a much more satisfactory quantity.

In 1982 Orton (1982b) presented some preliminary results of work involving computer simulation modelling. This work engaged the problem of sample size with regard to the EVE method. He concluded that: "it appears that [the minimum] limit [per type] is about 1 eve; eg. if type A forms 10 per cent of our sample, we need an assemblage of 10 eves to estimate with reasonable precision, but if it is 25% we need only 4 eves (10% of 10 = 25% of 4 = 1 eve). This is likely to be a useful rule of thumb" (1982b, 18). However, an inherent difficulty again arises namely that unless one is dealing with large context groups (eg. from urban or kiln contexts) a summing of the rim fractions per type rarely results in a figure of 1 RE or greater.

To achieve such figures individual context groups might be grouped to, say, phase level. However, when this is done for the current study RE totals are generally modest, usually amounting to between 1.00 and 5.50, as Table 9.1 demonstrates.

In his doctoral research Evans addressed the specific question of how much pottery was required in order for the results of the different methods of quantification to closely correlate. He established the correlation coefficients of the quantification methods he employed for all of his quantified groups. It was apparent that all of the methods correlated fairly well; even small groups, in general: "Produced correlations which are comparable with other much larger groups" at the same sites (1985, Section 1.6). Importantly, he concluded that: "In a normal dispersed group sherd counts and weights are fairly reliable with 50 sherds and weights by around 0.75 Kg ... The minimum [RE] total needed would seem to be over 100 per cent" (1985, Section 1.6). Evans also found that once these levels have been reached the closeness of the correlations was not significantly improved with greater size. A similar impression has been gained from the current work, for instance, with regard to the Gallo-Belgic pottery. (Figure 2.1 presents a comparison of the results of the three means of quantification in the case of Gallo-Belgic pottery. The figure demonstrates the percentage of the Gallo-Belgic pottery formed by Terra Nigra, Terra Rubra and the Cam. 113 in the case of 6 groups. Whilst there are some consistent biases which arise from the typology of each of the categories (discussed under 5.3.6) it is clear that, this excepted, there is a considerable degree of correlation between the results of the measures).

These thresholds were borne in mind during the collection of data for the current study. Of the 81 groups forming the core quantitative sample (Table 9.1) only two groups have weight totals of less than 0.71kg, these being 697g and 577g, though the former group has count and RE totals of 130 and 1.39 respectively, whilst the latter has a count total of 61 (RE total: 0.43). Five groups have count totals under 50, but only two are under 30, these being 26 and 28, though the weight totals for these are 773g and 1040g. Eight RE totals are under 0.75. Some of these groups therefore lie close to the thresholds of acceptability. There is though an element of dilemma in this matter. Groups of large size are desirable, but if the groups one is interested in are of modest size the choice is either to exclude them (which might be potentially detrimental to analysis) or to include them, albeit with the proviso that they are of small size.

(iii) Residuality.

At most sites at which occupation is of some duration an amount of material which was originally contained within earlier deposits is likely to have been disturbed by subsequent activity leading to its deposition within a later group (*cf.* Millett 1987b, 104; Elsdon & May 1987, 5-6). Clearly this possibility is potentially of great significance since it may, if not fully recognized, confuse dating and obscure or distort the trends we are interested in. At Lincoln, LIN 17, for instance, pottery groups of middle and later Roman date often contain large amounts of pottery belonging to (ie. dating to) preceding phases (pers. comm. Maggi Darling, November 1988; *cf.* Darling 1984). In part this is a function of the nature of areas investigated, namely the defences (though the same phenomenon has been identified in groups from other areas such as LIN 17 (O) (Darling 1988a, 9)).

Identification of residuality, and indeed, assessment of the percentage of a group which residual sherds comprise (ie. its quantification) are dependent upon the degree to which the pottery can be distinguished chronologically. Types which are closely datable, such as the Drag. 29 samian bowl, will be better indices of residuality than less chronologically specific material, for instance, vessels of Iron Age tradition. There is though a further problem in so far as the definition of what constitutes residual material is not universally agreed. The likely curation of vessels, the probable existence of items of 'heirloom' status, as well as the question of what Reece refers to as 'terminally residual' pottery (Reece 1980, 81-3), complicate definitions and the allocation of the label 'residual'.

The problem of residuality is not a recent recognition, yet it remains a relatively un-researched phenomenon. In part this must arise from the fact that the presence of residual elements in a site group will depend upon a set of circumstances quite likely to be unique to that group, including the previous history of the site (*cf.* Lambrick 1984, 164-7). In a recent paper Evans and Millett (1992) examined residuality in a number of specific cases; they point to the level of pottery supply and context formation processes as key factors determining the extent of residuality.

Since one of the central concerns of this study is to examine the Romanization of assemblages residuality may be problematic. For instance, the probable presence of residual Iron Age tradition pottery in post-conquest groups on sites where occupation spans the conquest, as at Ancaster, LIN 1, would result in a misleading impression of how much Roman pottery was being consumed in terms of relative frequency. Similarly from the opposite perspective the question arises: is this Iron Age tradition pottery present in these groups largely residual material, or does it indicate that the currency of Iron Age tradition wares extended through the conquest period and beyond.

Regarding the current study it is likely that many of the groups quantified contain some residual element. However, the parameters of the study minimize this problem to some degree. Firstly, a number of the sites examined are apparently new foundations (eg. Redcliff, the fortress site at Lincoln, York, Binchester, Hayton). Secondly, both Transitional wares (*cf.* Chapter 8) and Roman pottery types of the first century are generally readily distinguished and relatively well dated, therefore assisting, for instance, the identification of earlier material in later first century groups.

(iv) The Quality of Recovery and Recovery Recording.

The pottery examined and quantified for this study derives from a large number of excavations. The character of these exercises and the quality of their records and procedures is understandably varied. When examining material it has been essential to monitor the circumstances and standard of recovery since this is likely to have been a determinant of the composition of the sample (*cf.* 2.2) as well as the quality of the site archive. Inconsistencies and problems concerning records and provenances were encountered from time to time during the data collection. When uncertainties were apparent contexts in doubt were not quantified.

Unfortunately the important assemblages from the Jewry Wall, Leicester, LEI 13 (AA), and the 1960-4 excavations at Old Sleaford, LIN 26 (B), could not be quantified by context since contextual information was scant and considered unreliable and because of the probability that the extant assemblages were the product of selective retention. In consequence in these two cases examination focused upon the collection of qualitative data (*cf.* 2.6).

(v) Contaminated and 'Selected' Pottery Groups.

Valid and reliable quantitative pottery information will only be forthcoming from complete and uncontaminated groups. Groups which have, or may have, been 'contaminated' with material from other contexts must be excluded. Similarly pottery must be monitored to ensure that it has not been subject to sorting (*cf.* Hodder 1974a, 340; 1974b, 92; 1976, 71-2). Groups from the 1930s excavations at Brough, NHU 3 (A), for instance, appear to be incomplete, the consequence of perhaps several selection exercises.

2.5.3 The Quantified Data III: Categorization.

During the data collection a hierarchical recording system was employed to process the pottery. Basic typological divisions were consistently employed and within these the material was recorded under a range of fabric, form and type classes. For much of the analysis here though these classes are amalgamated to construct figures for basic categories such as, oxidized quartzy coarse wares, mortaria, flagons, amphorae, Rusticated ware, samian, Gallo-Belgic wares, etc. This proved convenient. The ceramic evidence from the region during this period has not previously been examined in a synthetic manner and hence a primary concern has been to isolate general patterns through comparative analysis. Moreover, whilst being general these categories are discrete and well defined; they relate to functional classes and divide, to an extent, into imported/traded material and wares more likely to have been produced locally or regionally. It is now evident to the author that the material was recorded in much greater typological detail than finds expression in the body of this thesis.

2.5.4 The Quantified Data IV: Analytical Methods.

Quantitative statistics for assemblage composition are amenable to various analytical approaches; several have been adopted for this study. In particular percentage data is employed. The quantities of each pottery type present as ascertained by means of the different measures may be expressed as percentages of the total group composition. Once these statistics have been generated comparative analysis between groups within assemblages and between different assemblages becomes possible. General patterns may be made apparent by straight forward assessment of the degree of similarity between samples. In particular the percentage statistics can be used to established the average for all cases. Any deviations from the average can then be identified and explanations then considered.

Another tool is that of comparison in terms of ratios. These may be intra-assemblage (ie. between groups within an assemblage) or between assemblages. It may be instructive to establish the pattern of ratios between selected different types within samples, for instance, the ratio of: coarse to fine ware; Iron Age tradition types to Roman types; samian to Gallo-Belgic types; plain samian ware to decorated; and ratios between different functional types.

2.6 QUALITATIVE DATA.

2.6.1 Recording Presence and 'Absence'.

When a quantified approach is unfeasible important information may be garnered by noting the number and range of types represented in an assemblage or group as well as the presence or absence of types. This information is valuable but it is important to recognize its limitations.

The collection of presence/absence data is important for a number of reasons. Principally this data is essential for the purpose of recording the spatial distribution of a type (*cf.* Hopkins 1983, 86). Additionally, such data supplement information for all sites, including those for which there is quantified data; it may assist analysis concerning co-variation. In the course of this research the presence of certain pottery types of first century date has been systematically noted, for instance, when they were found to occur in groups which were not themselves being quantified (eg. when they occurred amongst small groups, surface collected material, or as residual material in later groups) and through literature search.

Unless published reports present a full record of all the pottery recovered from fieldwork they cannot be assumed to offer reliable guidance as to the presence or absence of a type. This is evident in the case of the report upon excavations at Old Winteringham, 1964-5, SHU 7 (A). The publication of this work (Stead 1976) included a report on the pottery which was not a full record of material recovered (its primary concerns being considerations of typology and chronology). Hence the presence, for example, of sherds of Lyon ware amongst this assemblage (pers. exam. August 1989) went unreported.

Obviously viewing entire site assemblages permits one to make authoritative statements regarding the presence/absence of types. However, in practice we can rarely say with certainty that a type is 'absent' from a site. Rather, when a type is said to be 'absent' this must be taken to mean that it is absent from the archaeological sample and will really only be registering the fact that the type has not yet been recorded from the site.

If a particular type is known to be absent from a large sample within which it might have reasonably been anticipated, this is likely to be of interest and should be recorded. (All of the available pottery from Brough, NHU 3, at Hull Museum, for instance, was examined so that an awareness of the presence and 'absence' of specific types was reliably established). Any decision to view the whole of a site pottery assemblage for the purpose of gathering presence/absence data should be made in the light of an appreciation of how large that assemblage is since it may prove to be a time consuming undertaking and in the case of some assemblages impractical.

When recording the presence of types in this manner it is potentially useful to record the quantity present since although such statistics cannot be employed in direct comparison with those from other sites (because one does not know the proportion of the assemblage these quantities comprise) they do at least provide some 'order of magnitude' measure which may hold some value.

2.7 DATA PRESENTATION: POINT DISTRIBUTION MAPS.

Presence/absence data permits the construction of point or find-spot distribution maps. This thesis presents a considerable number of such maps for different pottery types. Two key attributes of a point distribution map are that it presents the spatial spread of the artefact type together with the relative density of the distribution. With these maps though it is important to be aware of the sources from which the data derives since these may have a determining influence upon the pattern of distribution which is displayed. In the case of this research the distributions have been constructed from data derived by a number of familiar means such as: literature search (including the study of excavation reports, etc.); the examination of museum and private collections; and through the receipt of unpublished information from specialists.

When assessing a point distribution map it is necessary to consider the degree to which the plot reflects the distribution of archaeological research rather than constituting an index of the actual distribution (*cf.* Fitzpatrick 1985; 1987). In making this evaluation we need to gage whether concentrations, gaps and limits to distributions are real or if they arise from a differential intensity of research. This might not simply relate to the archaeological input of the author since mapping will also be a function of the work of the archaeological community and its research biases past and present. It will be dependent upon: the survival of evidence, the character of fieldwork, what finds have been recorded, what has been reported to or accessioned by museums and what has been published. For many sites the amount of archaeological material correctly identified and published constitutes only a fraction of the 'target population' (*cf.* Haselgrove 1985).

An emphatic illustration of this familiar phenomenon is, as Fitzpatrick (1985; 1987) has stressed, Galliou's work in mapping the distribution of Dressel 1 amphorae in north-west France (Galliou 1982). In his 1971 paper Peacock had published a map plotting the distribution of Dressel 1 amphorae in Britain and France (1971, Fig.36). Only three find-spots were then known to Peacock in the area of north-west France, amounting to only a few vessels. However, in 1982 Galliou was able to register 77 sites (over 273 such amphorae) from this same area (1982, Pl.xxiii), the outcome of sustained research.

The current research has resulted in the augmentation of the established distributions of a range of pottery fabrics and types. One case is illustrative. Greene's point distribution map for Lyon ware in Britain (Greene 1979, Fig.4, reproduced here as Fig. 5.61) shows a marked southern and eastern distribution. Of the distribution he states: "the coverage is as complete as possible and should not be altered by additional finds" (1979, 14). The 42 documented find-spots clearly relate to sites with a proven Roman connection occupied during the Claudio-Neronian period. Although Greene does not emphasize it his distribution appears to closely map the presence of the Roman army in Britain during the pre-Flavian period. The map appears to demonstrate a consistent pre-Flavian distribution with few find sites lying outside the realm of the Claudio-Neronian province. This pattern correlates well with the accepted dating of the ware. The few exceptions, such as Caerleon, Chester and York, may be accounted for in a customary manner: they could represent a few vessels which are still extant at the very beginning of the Flavian period. The pattern portrayed by Greene's map suggests that the density of find-spots decreases northwards and significantly, that the ware is essentially absent from the early (and later) Flavian forts in the north. Indeed he states that: "It is completely absent from Agricolan foundations in Northern England and Scotland" (1979, 17). This impression is spurious. Just as Galliou's study was able to dramatically augment Peacock's distribution, the current author's research has resulted in a significant extension to Greene's plot (*cf.* Figure 5.60; compare with Fig. 5.61). Interestingly the new find-spots further emphasize the apparent association of this ware with the Roman military (see 5.4 for detailed discussion).

The case of Lyon ware is a signal reminder that the interpretation of point distribution maps should proceed with caution and an attitude of 'source criticism' (*cf.* Barrett 1987) should be adopted as a matter of course. One needs to consider how the point distribution map has come into being and whether it is bias. In particular cases the pattern produced by plotting find-spots may need qualification. Within the region under study here some sites and areas have, for various reasons, received more attention in past and present research.

Recording the absence of a type on the point distribution map is potentially instructive (*cf.* Hodder 1976, 70-1); to do so increases the information available from which assessment may be made. This practice is under-taken in the current study as the distribution maps show. In those cases when the type under consideration is not represented a blank symbol is employed to denote this (*cf.* Hodder 1974a, Fig.1). For instance that there is to date no Lyon ware recorded amongst the large pottery samples from Redcliff, NHU 17, and Brough, NHU 3, is of significance and should be expressed.

In some instances artefact distribution maps should express quantities present, even if this is, of necessity, done in a crude manner. Orton has observed that: "this is particularly so for pottery, where a dot on a simple distribution map might stand for a single sherd or a hundred whole pots" (1982a, 114). In principle the more quantitative information presented the more likely it is that trends will be reliably identified (*cf.* Hodder 1974a, Fig.1). Hodder and Orton note that: "in a sense" any distribution map is: "an attempt at quantification" in so far as its purpose is to illustrate the frequency of finds within a given area (1976, 17).

Peacock's map of the distribution of 'Pompeian Red' ware fabrics at various sites in Britain (1977c, Fig.1) employs proportional circles to express quantities present (see Evans, J. 1989, Figs 33 & 35 for a recent example). The circles of Peacock's map are internally divided as pie-diagrams to express the relative proportions of specific fabric types present. The map appears to be a useful visual expression of tabulated data (Peacock 1977c, Table 1). However, the circles do not reflect the proportion of the site assemblage that the ware comprises and hence are of limited value. Further, not only may pie-diagrams be difficult to interpret, they are, as with all proportional circles, inherently misleading in terms of the visual effect which they present. For instance, if the diameter of the circle is doubled to express the fact that there are say twice as many finds of a type at 'B' than at 'A' the area of the circle is quadrupled.

Expressing quantities on distribution maps is clearly not straight forward. Histograms cannot readily be fitted onto maps (though individual histogram bars may be). Alternatively one could specify the quantity present by for instance enclosing the weight, the number, or the EVE measurement figures within a circle representing the find-spot. These may of course be either absolute figures or percentages. Hartley has published maps showing the recorded distribution of certain mortarium stamps in Britain which also present the absolute incidence figures (Hartley, K.F. 1973, Figs 1 & 7). Alternatively distribution maps might be combined with, or set alongside, trend surface analysis plots using the same data (eg. Timby 1987a, Figs 2-4).

The distribution map medium can be of great value. It can rapidly convey a range of basic information: where a class is and where it is not; it can suggest the perimeters of the distribution; and, within the distribution, should indicate trends, concentrations and potential anomalies. Apparent patterning may be instructive and will require interpretation. Moreover, the comparison of point distributions for different pottery types (and indeed different types of artefacts) may prove enlightening in respect of the degree of correlation.

Find-spot distribution plots have been widely utilized by archaeologists. They have been deployed as evidence in the identification of a diverse range of archaeological aspects. As regards Roman pottery they have been taken to suggest distribution routes (eg. Peacock 1978) and pottery marketing zones (eg. Evans, J. 1985; 1989). Such plots have also been taken to indicate the existence of cultural/political formations. This has been attempted in the case of Iron Age coinage in Britain (*cf.* Kimes *et al.* 1982) as well as with pottery (eg. Evans, J. 1988a).

2.8 A SUMMARY OF PROCEDURE.

Examination of particular pottery types (Chapters 5 to 8) generally proceeds by noting and discussing the incidence of the type. The incidence is usually plotted in a point distribution map. The quantitative evidence is then evoked, in particular that of the relative frequency percentages. Comparative analysis follows. Primarily this is between groups from within the research area; where appropriate figures are available for groups from outside the region these are, in turn, compared with the data for the study area. The quantitative data employed in the analysis is principally documented in table and histogram format.

CHAPTER THREE

ASPECTS OF POTTERY TYPOLOGY, CHRONOLOGY AND CULTURAL ASSOCIATION.

"The first need is for a few genuine sequences of common types ...

... this sequence might be of some help provided that too much is not expected from it." (Hodson 1964).

"Vessel and fabric categories are tools which are fashioned by us to enable our own interpretation of archaeological residues ... they are actively involved in maintaining particular lines of enquiry." (Barrett 1992, 336).

3.1 INTRODUCTION.

In this chapter the meaning and role of some concepts and terms which are central to the study of material culture and pottery research in particular, most notably typology and chronology, are briefly defined and examined. These concepts are of fundamental importance in the theoretical and methodological approach of the current study. In the sections which follow typology, pottery attributes and chronology are considered from a theoretical and practical perspective. Aspects of the character of both Iron Age tradition and Roman pottery are examined and contrasts are highlighted. Some suggestions as to what these differences may imply in terms of culture, society and economy are outlined. The petrology, typology and chronology of Iron Age pottery traditions within the study region are focused upon in Chapter 4, which is in respects a companion to the current one.

3.2 TYPOLOGY.

3.2.1 Typology in Archaeology.

Typology is the classification and ordering of artefacts into series or sequences on the basis of the observed presence or absence of certain attributes, such as form, composition, decoration, etc. At its simplest typology concerns evaluations of similarity and difference: artefacts are allocated to a group or type category when they are like other items in that group or category, and, to use Orton's phrase: "at the same time, unlike (or at least less like) objects in other [categories]" (1982a, 25). The construction of typologies was one of the key elements in the emergence of archaeology as a distinct discipline. Subsequently the concept of typology has been integral within the epistemology of archaeology, though it is a domain in which there is still debate (eg. Hodson 1980). The creation of typologies and typological ordering are not ends in themselves but rather tools for study and interpretation (*cf.* Barrett 1992).

The utility and validity of any typology will be dependent upon the appropriateness of the attributes selected in its composition to the archaeological question(s) addressed. That is to say, the attributes being considered have to be reasonable in terms of the objectives of the typology. Typologies may be synchronic or diachronic; typological sequences may relate to changes over time, hence typology may have a chronological dimension.

Typologies usually appear to be reasonable and meaningful constructs; they are seemingly sequential, based upon evaluations (and perhaps measurements) of the similarity/difference of attributes. Nevertheless typologies must be recognized as the creation (and re-creation) of the archaeologist; they are not static fixed entities. Any typology in theory and practice is a heuristic tool and as such should be employed or rejected dependent upon whether it is consonant with the ever emerging evidence of the past and the changing interpretations of it.

3.2.2 Typology and Pottery Study.

Traditionally typology has dominated the study of ancient pottery. The most common means of classifying pottery has been on the basis of 'form' (eg. Hawkes & Hull 1947; Oswald & Pryce 1920; Gillam 1968). In their report on the pottery from Camulodunum Hawkes and Hull (1947) describe fabrics but it is clear that in their approach consideration of fabric is secondary, for their typology is a form series. Whilst this is valid in so far as form may be an important index of function, date, and so forth, the continued strong emphasis upon form is historical. Increased awareness of the potential value of studying pottery fabric (and technology) means that it is now common practice to classify pottery into 'types', that is a synthesis of form and fabric. In reports on Iron Age and Roman pottery published in recent years fabric customarily takes precedence over form being the primary tier of classification, with forms comprising 'sub-sets' of fabric types. This change has been largely engendered by the recognition that fabric is an index of source provenance. This does not mean that form is now considered less instructive than previously; rather it demonstrates the belief that sourcing or 'common source grouping' is a fundamental requisite for study. Additionally it shows that the priorities of typology may alter.

In the study of pottery typology represents an imposed framework employed by the archaeologist at the levels of theory and practice in order to make sense of and interpret material. A typological approach is facilitated by the fact that there are often consistent similarities between pots and sherds. Attributes such as form, fabric, decoration, etc., may be shared by different vessels. Moreover, it is recognized that such similarities may arise from archaeologically interesting phenomena such as shared sources (eg. in the case of fabric parallels), contemporaneity (in the case of the replication of shape and formal elements), or a common cultural tradition (eg. in the case of similar finishing or decoration). That the reporting of pottery follows standard conventions and employs a common vocabulary greatly assists cohesion in research. These factors make inter-assemblage comparisons possible. As Orton states: "the breaking down of the material into types enables the archaeologist to make general statements which will be of use to other archaeologists" (1982a, 29).

When considerable heterogeneity exists in forms and/or fabrics a special response may be required, such as different criteria of classification or a concentration upon a specific attribute or attribute range. In their study of later prehistoric pottery from the north of England, for instance, Challis and Harding state that because there are: "often marked contrasts in the character of the ware [ie. fabrics] from sites relatively close in either time or space ... paramount attention is paid ... to the form of vessels, to their rims and profiles, in the belief that form is more likely to prove a useful chronological and cultural index" (1975, 12; *cf.* 4.4).

The principles of typology generally form part of the conceptual framework within which this thesis has been written. That typology is central to the chronological framework of the current study will be apparent. It is also the basis for the differentiation of the components of groups and assemblages. The relationship between typology and chronology is considered under 3.6.

3.3 FABRIC, PETROLOGY AND MANUFACTURE.

Peacock's work during the 1970s demonstrated the potential of the petrological analysis of fabric for establishing pottery groupings, sources and distributions (for methodology see, for instance, Peacock 1970; 1977a; 1977b). To discover whether pottery is local or foreign to a site it is necessary to identify the petrological constituents of the pot (ie. from a sample of its fabric) and then to compare this suite with what is available locally: if inclusions are exotic in terms of the local solid and surface geology the pottery (or rather clay source) must be from elsewhere. In isolating and characterizing fabrics and identifying their sources, Peacock, Williams and others have advanced the archaeological study of ceramics, particularly Roman material, profoundly (*cf.* Fulford & Huddleston 1991, 3).

The value of an attention to fabric is evident in much pottery work of the past two decades. The principles of fabric analysis and the division of assemblages by fabric, as a prerequisite to further work, are now central tenets in any pottery study. The main purpose of fabric examination today is the discrimination of sherds within groups so that they may be divided by and into fabric type. Ideally one would wish to know the source of these fabrics in order to establish the derivation of the pottery. In practice though this is often unascertainable. However, simply to separate an assemblage into fabric types holds considerable value independent of whether fabric source(s) are known. This division may be informative with regard to other areas of interest since, for instance, fabric may have a close relationship to function.

Recently a greater awareness of the limitations of a concentration upon fabric has emerged and, concomitantly, the potential of form and surface treatment to assist dating, provenancing and to inform about other fields is increasingly recognized (eg. Darling 1989; pers. comm. Dr Mark Gillings, February 1991). Rather than being simply a reaction against fabric analysis and a return to a focus concentrating upon traditionally studied attributes this should be understood as a reasoned stance. An awareness amongst researchers of the limitations of fabric characterisation is important if a potentially detrimental over-emphasis upon 'fabric' is to be avoided; fabric study is the *means* towards the objectives of pottery research. One highly significant limitation is that the clay sources of many fabrics are obscure and seem likely to remain so for the foreseeable future. Darling observes that: "unless there are distinctive inclusions, the identification of a source area (let alone kiln/s) on the basis of fabric alone is remote" (1989, 98). Form, decoration and surface finish may be important alternative guides to probable sources.

There are important contributions that fabric study can make in other areas of archaeological interest apart from sourcing and distribution study. Knowledge of fabric composition and the identification of inclusions can inform about aspects of technology and production, usage, and so forth. Swain's report on the pottery from Thorpe Thewles (Swain 1987), where almost all of the Iron Age tradition pottery is believed to be locally produced, offers an example of how the study of fabric and petrology may be helpful in these areas. The potential of such avenues of research is likely to be considerable and should be pursued.

The great contribution that petrological studies have made to our understanding of the production, exchange and distribution of Roman ceramics contrasts markedly with the limited progress made (to date) with Iron Age material. That there has been conspicuously little work of this kind reflects assumptions regarding the production and exchange of Iron Age tradition ceramics which may be unjustified. Challis and Harding state that it has been customarily assumed that hand-made Iron Age tradition pottery was locally manufactured and did not travel far (1975, 11; see 4.4 (iii)). Intuitively this seems a reasonable assumption on the grounds that the weight, size and fragility of vessels of this type, together with their probable frequent use (and turnover) would render transport over distance impracticable. Moreover these relatively unsophisticated non-specialist wares may have more easily been replaced by local manufacture. A small number of studies have verified the exploitation of local clay sources in the production of later prehistoric ceramics (eg. Brewster 1963, 58-9; *cf.* 4.4 (iii)). However, systematic investigation has been infrequent and insufficient studies have been conducted to suggest what was normal.

Peacock's study of Glastonbury ware (1969), as is widely known, demonstrated that some ceramics did travel during later prehistory. The case is often evoked in a cautionary manner to suggest that this possibility should be borne in mind when dealing with Iron Age ceramics, despite the assumption that localized production was the norm. It is pertinent that Glastonbury ware is highly distinctive fine decorated pottery (features which, no doubt, were contributary reasons why it came to be studied by Peacock) which might therefore have circulated in an unusual manner. These were vessels of marked quality (perhaps therefore having a particular meaning or function) whereas the vast majority of the Iron Age tradition pottery of the region under study here was neither of this quality or distinctiveness.

More studies (such as that of Topping (1986)) need to be conducted to establish the degree to which Glastonbury ware is exceptional and to investigate whether localized production was the norm. In the 25 years since Peacock conducted his study like research has been woefully rare (a conclusion implicit in Henderson's recent paper (1992)). The most fruitful product of new work in this field may be the identification of localized distributions and their characterization (*cf.* Morris 1992a). In particular we need to establish how local 'local distributions' were (*cf.* Morris 1992b). The isolation of such distributions may enhance our understanding of areal exchange systems, specialization in production, resource management, and so forth, which are aspects of Iron Age society about which comparatively little is known.

3.4 FORM.

In the study of pottery the categorization of vessel shape or form is an essential element. The characterization of forms is particularly important for interpretation and comparison. It is a necessary requirement that the nomenclature of form categorization is explicit and that identifications are consistent (eg. that there is a consensus as to what is meant by the use of a form name, for instance, by the term 'platter'). This is desirable since it is rarely possible to illustrate all diagnostic sherds. Fortunately, in the contemporary milieu terms used to describe pottery forms and formal elements (eg. profiles, rim forms and so forth) are widely shared and understood; standard conventional terms are nearly always employed so that the form of sherds and vessels can be conveyed in language. Large assemblages comprising an extensive range of form types with profile variants, rim variants, etc. are now dealt with using complex structured form typologies and with the employment of sophisticated 'understood' conventional terms (eg. Going 1987, 13-54; Cunliffe 1984, 231-2).

Form identifications have conventionally been made on an intuitive basis. However, unless some kind of measurement is employed, identifications may be subjective and unreliable (Orton 1982a, 33; Millett 1979b). Since many pottery forms, as traditionally perceived by archaeologists, such as platters, dishes, bowls and jars, relate to a ratio between vessel height and rim diameter, a simple template expressing these ratios and the 'frontiers' between form classes may be drawn up (*cf.* Orton 1982a, Fig. 2.8). The use of a template for the identification of forms aids consistency and reliability; this procedure has been employed during the course of the current study.

Such a procedure might be considered particularly appropriate when dealing with non-standardized pottery. In preparing the report on the pottery from Thorpe Thewles Swain utilized a key sheet in order to ensure that categorizations of body, rim and base forms were consistent (Swain 1987, 57; *cf.* 4.4 (iv)). Plowright employed a similar approach (1978, Table 5). It is likely to become standard practice for sherds diagnostic of vessel shape to be referred to key shape charts and coded for computer aided analysis.

3.5 CULTURAL ASSOCIATION.

Okun has stated that form is: "the most culturally laden" attribute of Iron Age and Roman pottery, particularly because of its relationship to function (1989, 47). This is to some extent contestable since fabric, method of manufacture, surface finishing and decoration are also 'culturally laden'. However, the recognition of the form-function-cultural association linkage is important. Form has a close relationship to function; both are cultural products.

Okun presents data which demonstrate form differences between Iron Age and Roman assemblages. La Tène assemblages examined had a higher proportion of tall forms than did sites of Roman date. There were also differences of type: "In La Tène assemblages most of the tall forms are either vases, neckless jars or ... shouldered or wide-mouthed pots ...

On Roman sites the most common type of tall vessel is the jug " (1989, 47). Conversely small bowls and cups were found to be more common at Roman sites. These contrasts are interpreted by Okun as arising from social phenomena.

The formal range of Roman pottery was much wider than what had hitherto existed in Iron Age Britain and forms were highly standardized. It seems likely that this reflected a discrete 'specific forms for specific functions' conceptualization and use of pottery, particularly since there appears to have been a colour-form correlation. This may be interpreted as suggesting that potting catered for specific purposes and that the practice of food preparation and consumption may have had associated (if not prescribed) normative procedures with certain functions being the specific purpose of particular forms. The extent to which this means that pottery in the Roman world was being put to a wider range of uses than in Iron Age societies is unclear. It may be that form/function relationships were less rigidly defined and practiced in the Iron Age. However, this remains a question for investigation. Even if this were the case generally it may well have been that some types within particular traditions had very precise and socially well defined functions. We need to know more about the uses pottery was customarily put to in late prehistory; this is a potentially rich avenue for study.

The pottery examined in the course of the current research has been divided by and discussed in terms of its cultural association, principally whether it is of Iron Age tradition or Roman. Discernment along these lines is not always straight forward (*cf.* Chapter 8). How these associations have been established, their meaning and implications are germane questions in a study like the present one. Such questions might be discussed at length. For brevity here it can be noted that most of the types examined have firm cultural associations as types; for example the classes examined in Chapters 5, 6 and 7 are well studied, familiar and are uncontroversially recognized as Roman/Gallo-Roman.

What is less certain though is how these items were used in the context of the study area. We may be able to infer an intended or likely function on the basis of the form of a vessel though in practice we cannot be confident that it was used in this manner. As noted above (*cf.* 1.7) whilst there are types which we commonly associate with Roman culture we cannot read off "Romanization" from their presence amongst groups from native sites in a straight forward manner.

3.6 CHRONOLOGY.

The dating of Roman pottery and pottery from 'Roman period' horizons has and can be established in qualitatively different ways from pottery of Iron Age tradition and pottery from Iron Age deposits. This is the result of a range of factors, both intrinsic and extrinsic to the pottery (see below). The consequence is that Roman pottery (and deposits of Roman date) can generally be more 'tightly' dated and dated more reliably than pottery of Iron Age tradition (and deposits of Iron Age date). The chronology of many Iron Age pottery traditions is far from established (eg. Haselgrove 1989, 2-3) and this is true in the case of the three traditions examined in Chapter 4. The implications of this are not restricted to dating alone, but impinge upon other areas (eg. our interpretation of chorological phenomena). The Later Prehistoric Ceramics Group allude to this problem in their recent policy statement: "the lack of tight chronological control severely restricts the refinement of almost all other archaeological endeavour for the period because of the reliance placed on pottery for the primary detailed phasing of most sites" (PCRG 1991, 4).

The factors which render the dating of Iron Age tradition pottery more approximate than Roman pottery are familiar. This being so they need perhaps be no more than listed. The reasons include: the fact that Roman pottery is comparatively well studied; deposits of Roman date and the pottery they contain are often datable through the presence of coins and other independent means of dating, and this is extremely rare with Iron Age deposits; dating Iron Age deposits and their pottery by the presence of associated imported metalwork, etc. is rarely possible because these items are uncommon and they too have a very imprecise chronology; Iron Age sites tend to have short stratigraphic sequences (shorter than at Roman sites); the dating of Roman pottery is facilitated by its standardization, moreover, the apparently localized manufacture of much pottery of Iron Age tradition with its diverse expressions complicates the identification of parallels; and, finally, the dating of Iron Age pottery by the use of scientific methods is hindered in the case of Carbon 14 determinations by their imprecision for the LPRIA (see also 3.2).

The often widespread distribution of Roman pottery fabrics and types, their standardized forms and decoration, plus the comparatively close dating of this material, and so forth, lie in contrast to the regionalized character and variability of pottery of Iron Age tradition (*cf.* Chapter 4). The regionality of Iron Age pottery has highly significant implications for establishing Iron Age chronology(s) since it frustrates integrated chronology (*cf.* Hodson 1964, 135). The consequences of this for Iron Age studies generally are truly deep.

In section 1.2 the chronological range of this study was defined with particular attention being paid to the termini. Within the period dating has not proved especially problematic. Close dating of later Iron Age tradition pottery and Transitional wares has often not been possible (*cf.* Chapter 8), however, this has not frustrated this research. The main focus has been upon the distribution of Roman types, the dating of which is generally relatively well established and largely uncontroversial. The established dating has been provisionally accepted here, though this has been monitored and is discussed (eg. as with the SGSW forms in 5.2.4) and where the contextual evidence from the region conflicts with 'conventional' dating this is highlighted, as with the distribution of Lyon ware (5.4.1 (ii)). The dating of the stratified groups (which are discussed as groups in Chapter 9) follows, as a working hypothesis, their dating as prescribed by their excavators (these 'dates' evidently deriving from an amalgam of the various ways in which the 'date' of groups is normally ascertained (*cf.* Orton 1982a, Chapter 3)). These dates have been assessed by the current author with reference to the finds content of each group and stratigraphy, and they appear reliable. Further, the quantitative analysis of the groups (*cf.* Chapter 9 and elsewhere) has not suggested the existence of anomalies arising from inaccurate dating. In addition the nature of the analysis here, being based upon ceramic phases and date ranges (eg. 'Claudian', 'Flavian'), minimizes the need for particularly close dating. In sum if the dating of any of the groups is inaccurate this is not apparent, nor, if this is so, should the dating be widely incorrect.

3.7 IRON AGE TRADITION POTTERY AND ROMAN POTTERY: SOME TYPOLOGICAL CONTRASTS.

A number of characteristics of Roman pottery distinguish it from Iron Age tradition material (*cf.* 1.6 & 1.7). Some of these contrasts are highlighted here. Contrasts result from differences in the way the pottery was produced, where it was produced, its 'intended' functions, the social perception and definition of the pottery, and so forth. These variables will have exerted an influence over the appearance of the pottery produced: in its fabric, form, colour, surface finish and decoration.

Although Roman (or Romanized) pottery is a very broad category it can generally be characterized by the possession of a range of shared and distinctive attributes which much pottery of Iron Age tradition lacks (Note 3.1). Relative to pottery of British Iron Age tradition the fabrics of Roman pottery were generally made from carefully prepared levigated clay and were often quartz grain tempered; unlike the pottery of some Iron Age traditions Roman pottery is: "often devoid of large inclusions" (Peacock 1982, 54). Roman fabrics usually display a consistent surface colour (being often, during the early period, oxidized). As noted above (1.6.1 (i) & (ii)) these factors are related to kiln firing. The high, controlled, temperature firings achieved by the use of kilns and the standardization of potting clays also produce a harder, amorphous fine fabric. In turn this effects the manner in which the pottery fractures; Iron Age tradition vessels were usually fired at relatively low temperatures rendering the pottery physically less durable than Roman pottery. Many of the forms in which Roman pottery occurs were novel to Britain (eg. platters, amphorae, flagons, mortaria) and formal details differ; fabric, form and decoration are highly standardized with vessel types being closely replicated in great number usually assisted by manufacture on the wheel. Many kilns and sources are known for Roman material, however, evidence of production sites, or firings, or kilns is extremely rare for Iron Age material (*cf.* 1.6.1. (i)).

Another area of marked differences is that of decoration. Decorative styles and depiction vary greatly both within and between Iron Age and Roman pottery traditions. The study of decoration is important for a number of reasons, not least because it must to some degree be an index of the manner in which both the decorated items and, indeed, the wider milieu were perceived. Aspects of decoration have been considered in specific studies (eg. Oswald & Pryce 1920; Elsdon 1975) one important conclusion being that styles and motifs on pottery are consistent with the decoration of metalwork and other forms of material culture, which suggests that they have a deep cultural basis. Decoration is a domain which requires new studies.

The standardized nature of much Roman pottery lies in juxtaposition to the variations both between and within the Iron Age pottery traditions. Pollard has stated that: "... the single most striking feature of Romano-British pottery is ... the overall similarity in the range of form and decoration over space and time, particularly with regard to coarse or 'kitchen' wares" (1988a, 1). This phenomenon is readily illustrated in the report on the pottery from the 1930s excavations at Camulodunum. In their introduction Hawkes and Hull state: "The site has in these excavations produced over 40 tons of unglazed pottery ... We have classified it throughout by form. The forms have been arranged under type-numbers, from 1 to 275 (it has been convenient to leave certain gaps which can accommodate later additions)" (1947, 202). What is remarkable is that this massive quantity of pottery, covering a wide functional spectrum, could be allocated to a form typology of such comparatively modest size. The manner in which Roman pottery was produced facilitated standardization (*cf.* Peacock 1982, 90); the intention of much production, evidently being exchange, presumably encouraged this outcome. However, the manner of production did not mean that standardization was inevitable; this must have been a social choice. Similarly the forms produced, the way in which firing was controlled to give a particular kind of finish (eg. colour) and, indeed, the employment of these technologies, were a product of the cultural milieux within which production took place.

The differences in character between much Iron Age tradition and Roman pottery mean that they cannot be approached in an entirely similar manner. The nature of pottery of Iron Age tradition (and its context of deposition) often imposes limitations upon its analysis. That sites of Iron Age date tend not to yield long, well stratified sequences hinders the construction of pottery chronologies. The existence of few independent dating methods further frustrates study.

The Romanization of pottery production in Britain during the early Roman period was remarkably pervasive. The means of production changed and so too did the forms produced. Many forms mirrored Roman or Gallo-Roman styles (*cf.* Chapter 8) or were hybrids of the indigenous and the Roman (*cf.* Woods 1974). The pottery industries which emerged during the early Roman period in Britain share many features in common. These expressions were not simply functions of the technology used, rather they apparently indicate deep change in how pottery was perceived and used by communities in Britain.

CHAPTER FOUR

POTTERY OF IRON AGE TRADITION:

AN EXAMINATION OF THREE REGIONAL TRADITIONS.

4.1 INTRODUCTION.

The ceramics of later prehistory have distinct regional identities: vessels with particular attributes have discernible spatial distributions (eg. Cunliffe 1991, 60-93; Millett 1990, 12-3, Fig.2). These expressions evidently endured through time. Some of these traditions passed through typological developments (eg. section 4.3); others were more conservative (eg. sections 4.2 and 4.4). This regional specificity means that Iron Age tradition pottery cannot be fitted into a national framework (*cf.* 3.6; PCRG 1991, 2). Across the east of England several traditions may be isolated. Traditions here, as elsewhere, have yet to be well defined typologically, spatially or temporally.

As stated above (under 1.2) the chronological framework of this study is predicated upon identifiable ceramic traditions and ceramic phases. In this chapter three Iron Age pottery traditions within the study area are examined. These comprise the so-called Ancaster-Breedon tradition (in 4.2), pottery of Dragonby-Sleaford type (4.3) and pottery from the Yorkshire, Cleveland and Co. Durham region (4.4). The latter is considered in greater detail since unlike the other traditions examined this one endured through the period under research and has, to date, received comparatively modest attention.

An examination and characterization of these traditions is important since they constitute the ceramic background within the study area upon which the developments of the first century A.D. were imposed. One of the features which is explicit from this study is the regionality of these traditions. Of necessity this survey concentrates upon typology, chronology and distribution (rather than inter-assemblage comparison which is central to subsequent chapters). This approach has been determined by the lack of previous synthetic work for none of the Iron Age pottery traditions lying within the study area have to date been comprehensively studied. Hence much of this chapter involves 'characterizing' rather than analysis. (Two future contributions in this field (Elsdon forthcoming B; Evans, J. forthcoming B) will be welcome).

There are considerable, indeed, often emphatic, variations between the regional traditions. The differences are not only ones of form, fabric, etc., but comprise: range of expression within a tradition, 'style', degree of typological development (or conservatism), longevity of the tradition, and so forth. Whether these distinctions relate in a neat manner to 'tribal', kin-related, or other social groupings is perhaps contestable, though they seem to be indices of cultural difference (*cf.* 1.3 (iii) & (iv); *cf.* Hodder 1982a). Regional and sub-regional variation in pottery distributions is a phenomenon apparent with other vessel types as the succeeding chapters demonstrate.

4.2 POTTERY OF ANCASTER-BREEDON TYPE ('East Midlands Scored Ware').

4.2.1 Introduction.

Pottery of this tradition first received attention through Kenyon's publication of material from Breedon Hill, Leicestershire, LEI 3, in which she appended a wider discussion of the regional 'parallels' of the pottery (Kenyon 1950). The other type site is that of Ancaster Quarry, Lincolnshire, LIN 2, from where pottery of this type, including scored items, was recovered in the 1960s. Pottery of this kind is common within the study area (Appendix 4.1; Figure 4.1).

Elsdon has stated that: "Scored-Ware is the typical regional pottery of the middle and later Iron Age in the Trent valley and south-eastern Midlands. It is also termed Ancaster-Breedon ware from the two main type sites" (1983, 23). Challis and Harding comment that scoring is the: "most outstanding characteristic" of this material (1975, 78). In fact this may be superficial. The most remarkable aspect of this pottery is its typological uniformity.

Pottery of this type has been characterised by Cunliffe as comprising: "weak-shouldered jars, frequently scored on the outside with irregularly arranged lines" (1978, 43). Pottery of this tradition is not simply distinguished by the nature of surface finishing (ie. scoring), which is simply one attribute, and, indeed, one which although common is not universal. Hence use of the label 'Sccred Ware' is misleading. Other shared characteristics, particularly of form, must define this pottery. There is a problem here though since it seems that traditionally the criteria followed in the recognition of this pottery has been the presence of scoring. Kenyon's paper (1950) was certainly influential in this respect particularly since she took scoring to be culturally and chronologically significant. As May points out: "it is uncertain how far the use of scoring, by itself, should be used to define a local cultural group" (1976a, 138) as Kenyon did. Moreover, as regards the pottery, not all Ancaster-Breedon pottery is scored and not all scored pottery is Ancaster-Breedon ware. (It will be interesting to note the definition Elsdon follows in her forthcoming survey paper since its provisional title is 'East Midlands Scored Ware' (Elsdon 1993; forthcoming B)).

4.2.2 Typology.

(i) Fabric.

The fabric(s) of Ancaster-Breedon vessels have not been systematically studied. The impression is that they vary between assemblages and to a lesser extent within assemblages; however, this requires investigation. As regards tempering inclusions there may be no over-riding pattern. The range of inclusion types represented points to the use of locally available rocks. Sherds from Loughborough, LEI 15, for instance, are said to contain: "stone grits" and "flint" (Kenyon 1950, 52) whereas "shell" tempering is evidently common at Werrington, north Cambridgeshire (Rollo 1988, 116).

Kenyon observed that the Breedon Hill material displayed a: "homogeneous" and: "fairly fine" paste (1950, 25); "shell" tempering is represented but it is said to comprise 1% of the total (1950, 25). Quartz grain tempering appears to be common. In reporting the pottery from his excavations of 1957 at Breedon Hill, LEI 3 (C), Wacher states that two different fabric types were represented and that these correlate with contrasting types of scoring. One fabric is said to be: "softer and less well fired, with a slightly leathery texture" (Wacher 1964, 130) and associated with it are shallow closely set furrows: "as though the surface had been lightly brushed with a bunch of twigs" (1964, 130). The other fabric is, apparently, harder, of "sandy" texture and more carefully finished, associated with this are deeper scoring marks: "made with a single-pointed and sharp tool" (1964, 130). The current author is unaware of other Ancaster-Breedon assemblages displaying this pattern.

(ii) Technology & Manufacture.

Sherds demonstrate that vessels of this tradition were invariably hand-made and fired in bonfires or clamps (*cf.* Kenyon 1950, 25). Exterior surfaces are either oxidized or variably oxidized whilst cores are generally unoxidized; sherds from Loughborough, LEI 15, demonstrate these features (Kenyon 1950, 52).

(iii) Form.

The formal range of this pottery is limited. The most characteristic forms are the so-called 'barrel' or 'situlate' jars and straight-sided, upright jars as, for instance, from Burrough Hill, LEI 4, (Challis & Harding 1975, Fig.11 Nos 3 & 4) . When present necks are short and are associated with slight rounded shoulders which occur high up on the vessel profile. These jars vary considerably in size with the smaller examples appearing somewhat globular. The rims of these jars are typically short, either flat-topped and upright, slightly incurved or slightly everted, as at Breedon Hill (Kenyon 1950, Fig.2), Loughborough (Kenyon 1950, Fig.14) and Whitwell, LEI 26 (Todd 1981b, 23). Bowls also occur, for instance, apparently at Breedon Hill (Kenyon 1950, 26; Wacher 1964, Fig.3 Nos 20 & 22) and at Whitwell (Todd 1981b, Fig.12 Nos 26 & 28). Bases are simple being flat and not infrequently splayed or "thickened outwards" (Kenyon 1950, 26). Published bases from Whitwell (Todd 1981b, Fig.12) illustrate these features (No.6 (splayed), Nos 5, 27 & 29 (thickened)). Some of the typological features of this pottery may have a chronological dimension; sufficient evidence is probably now available for a synthetic study to clarify this possibility.

(iv) Surface Treatment & Decoration.

Exterior scoring is a common feature appearing on both jars and bowls but evidently only a percentage of vessels were treated in this manner. Scoring most frequently occurs on vessel shoulders and girth though occasionally it may extend to the base or the neck. 25% of Kenyon's sample from Breedon Hill was scored (1950, 25). This figure is comparatively low when compared with percentages from elsewhere which might indicate a generally early date for the Breedon assemblage (*contra* Elsdon 1993). In phase 1 at Wakerley, Northamptonshire, which should date to the late middle Iron Age, 25% of the calcite tempered pottery was scored, while in phase 2, which is approximately late Iron Age, the figure is 45%

(Jackson & Ambrose 1978, 174-5). The latter figure is consistent with the evidence from Werrington where 44% of the late Iron Age calcite tempered pottery displays scoring (Rollo 1988, 116).

Kenyon stated that the scoring on vessels appeared to have been achieved by means of a narrow and slightly pointed tool. It is now generally accepted that the scoring was the result of brushing with a bunch of twigs (or similar), a single pointed instrument, or both, as with an example from Red Hill, Ratcliffe-on-Soar, NOTT 29, (Elsdon 1983, Fig.4 No.22). In his report on the pottery from Twywell, Northamptonshire, Harding characterized three 'styles' of scoring. Significantly these did not appear to be chronological and it is uncertain whether 'styles' of scoring are identifiable between assemblages (Harding 1975). Generally the effect is rarely a regular pattern, as with, for instance, late Iron Age 'combed' decoration, (eg. Kenyon 1948, Fig.34 No.13), but is often 'criss-crossed', as in the case of the large photographed sherd from Gamston, NOTT 16 (Knight 1991, 132).

Occasionally rims display finger-tip/nail decoration as with examples from Market Harborough, LEI 17, (Kenyon 1950, Fig.15 No.4), Whitwell (Todd 1981b, Fig.12 No.7), and two Northamptonshire sites, Irthlingborough (pers. comm. David Knight, November 1989) and Upton (Jackson *et al.* 1969, Fig.8 Nos 9 & 15). Generally this type of decoration is not associated with vessels believed to be of late Iron Age date.

4.2.3 Chronology.

The chronology of this tradition is not established with precision. The problem of its dating arises from factors which are typical in the dating of Iron Age tradition pottery (*cf.* 3.6). This is particularly true with regard to its beginning. Kenyon had believed it to be of later/late Iron Age date (1950, 67) though her excavations at Breedon, LEI 3 (B), had in fact produced no firm dating evidence. Subsequently, the dating of the tradition was by convention placed further back within the first millennium B.C.

Wacher's first excavations at Breedon, LEI 3 (C), could be interpreted as revealing a longer stratified sequence than did Kenyon's work. At Ancaster Quarry, LIN 2, an iron involuted brooch and a bronze wire fibula of La Tène genus were associated with the scored jars (see Gazetteer entry). Cunliffe has suggested a third or second century B.C. date for these metalwork items, whilst May has proposed a fourth to second century B.C. date for occupation at the site. The current view is that this pottery tradition was one of some longevity, spanning much of the Iron Age from the fourth century B.C. to perhaps the early first century A.D. (*cf.* Cunliffe 1978, 43; pers. comm. Sheila Elsdon, November 1989). This would be consistent with the evidence from Breedon Hill.

Radio-carbon determinations are of some assistance. Cunliffe notes that: "Twywell ... has produced a date of 280 $\pm$ 90 (347 BC) while Fengate ... was dated 350 $\pm$ 46 (419 BC)" (1978, 43). He observes that: "Both fall within the range anticipated on typological grounds" (1978, 43; *cf.* 1991, 599-607). Carbon 14 dates are also available for the site at Fisherwick, Staffordshire which marks the western parameter of the distribution on current evidence (Smith 1979, Figs 12 & 13). Four dates were obtained for the enclosure ditch at this site, from which also came sherds from Ancaster-Breedon type jars. The dates range from 410 - 10 B.C. to 10 B.C. - A.D. 130 when calibrated to the first standard deviation (1979, 89-92).

The demise of Ancaster-Breedon pottery generally appears to be relational with the advent of pottery of Dragonby-Sleaford/late La Tène affinity (see 4.3). This may mean that in the Trent valley district, at least, Ancaster-Breedon type pottery continued till the Roman conquest because here Dragonby-Sleaford/late La Tène pottery had not established itself by the time of the advent of Rome.

At a number of sites in the east and south-east Midlands contexts which are evidently of late Iron Age date have produced Ancaster-Breedon pottery in association with early wheel-made pottery. At the Trent valley site at Willington, Derbyshire, (Wheeler, H. 1980) a pedestal base from a wheel-made vessel was found in association with 'East Midlands Scored Ware' (Elsdon 1980, Fig.70). This also appears to be the case with regard to the Northamptonshire sites of Wakerley and Twywell, at Werrington and at the Fengate 'sub-site' of Cat's Water; at all four sites Ancaster-Breedon wares appear to have been in use until around the time of the introduction of wheel-turned pottery or indeed continued in use into this new ceramic phase (*cf.* Todd 1981b, 24; Jackson 1975 & pers. comm. S. Elsdon, November 1989; Rollo 1988, 116; Pryor 1984, 155, respectively). At Wakerley, phase 3, dated c. A.D. 30-55/60, yielded a considerable quantity of Ancaster-Breedon type shoulderless plain jars displaying either upright or incurving rims in association with wheel-produced forms of Aylesford-Swarling affinity (Jackson & Ambrose 1978, 175). At Werrington Rollo states that: "Scored wares appear to have been in use alongside vessels imitating 'Belgic' ceramic types" (1988, 116). A terminal date for Ancaster-Breedon pottery in the first century A.D. is also implied by the evidence from Gamston (Knight 1991) and Whitwell (Todd 1981b).

It is possible that a more refined picture of the termination of this pottery is emergent. One possibility is that the tradition endured into and alongside the 'Belgic' phase (*cf.* Chapter 8) in the East Midlands though only around the fringes of its known incidence; elsewhere it disappeared sooner. If this were the case Jackson statement (1977, 32) that at the Northamptonshire sites of Aldwincle and Wakerley Ancaster-Breedon ware did not survive into the 'Belgic' ceramic phase might be reconciled with the evidence of an overlap cited above (*cf.* Jackson & Dix 1988, 73-9; Jackson & Ambrose 1978, 174-5). Certainly Gamston, Werrington, Willington and perhaps Whitwell lie on the northern and eastern margins of the recorded distribution (Figure 4.1). Rollo points to this possibility in discussing the: "co-existence of the two ceramic traditions" at Werrington (Rollo 1988, 116). If the terminal date of Ancaster-Breedon pottery was not universal across its recorded distribution cultural factors are likely to lie behind such variability.

4.2.4 Usage & Function.

The uses and functions of this pottery are under-researched. Quantitative information on such features as carbonized residues is desirable. The nature of the scoring implies it could have been functional, (eg. for ease of grip) and not necessarily solely for appearances. However, whether there was ever an original purpose to the scoring is a question the answer to which is likely to remain in the realm of speculation.

4.2.5 Incidence / Distribution.

Ancaster-Breedon type pottery has been recorded from 41 sites in the study region (Appendix 4.1). It had a wide distribution across the south and particularly the south-east Midlands (Figure 4.1). On current information its core distribution area comprises south Lincolnshire, Nottinghamshire and the Welland, Nene and Ouse basins.

Figure 4.1 shows a concentration of find-sites in the middle Trent valley. Here this pottery occurs in some quantity at perhaps every site with middle and/or middle to late Iron Age occupation. To date it is recorded from 11 sites and locations (see Appendix 4.1 & Figure 4.1) in this area. It is unclear whether this reflects an actual concentration of sites and examples of the ware, or if this pattern is a function of uneven archaeological research. Whilst it is evidently not entirely absent from Iron Age sites north of the Trent valley (*cf.* Appendix 4.1) it is, apparently, rare and this signifies the limits of its known distribution.

The distribution extends across southern Lincolnshire where Ancaster-Breedon ware is recorded from eight sites (Appendix 4.1) as well as from a number of locations in the vicinity of Helpringham Fen (see LIN 13). Pottery of this tradition is also recorded from 20 Leicestershire sites. The distribution demonstrates that this pottery has more commonly been found across the eastern side of Leicestershire, that is, east of the Soar.

Further south, into Northamptonshire, Ancaster-Breedon type pottery is seemingly common, particularly north and east of Northampton. Findspots to date concentrate along the Welland and Nene Valleys (Grimes 1951b, Fig.42; Jackson *et al.* 1969; Knight 1984, Map 51; pers. comm. D. Knight, November 1989; Pryor 1984, Figs 102-3). Again this pattern may well be a function of where archeological work, particularly rescue excavation, has been undertaken. The southern limit of the distribution approximates to the line of the Jurassic Limestone south of the Ouse with one or two outlying sites to the south-east (Grimes 1951b, Fig.43; pers. comm. S. Elsdon, November 1989).

On this current evidence the distribution of Ancaster-Breedon ware does not appear to be restricted by site size or status, though further work might refine this picture. The pottery occurs over a wide area, though the parameters have, apparently been broadly defined. A salient aspect of this incidence is that the distribution is seemingly not limited to a single tribal territory (as far as these can be discerned) since it traverses areas conventionally associated with the Corieltauvi, Catuvellauni and Iceni. Its apparent rarity in Lindsey, north Lincolnshire and South Humberside is notable since this hints at a sub-regional variation within the area identified with the Corieltauvi. Indeed this latter pattern correlates with other evidence (such as the distribution of Dragonby-Sleaford pottery which is evidently concentrated in North Lindsey and South Humberside) to suggest that there may be marked cultural differences between this sub-region and the rest of the East Midlands.

4.3 POTTERY OF DRAGONBY-SLEAFORD TYPE.

4.3.1 Introduction.

The typology and chronology of this pottery has been reviewed in detail by Elsdon and May in their report (1987) on the pottery from Dragonby. This site has produced the largest assemblage of this material to date (with the possible exception of the other type-site). Few other groups of this material have been published with which to contrast the Dragonby assemblage and hence in the circumstances it would be inappropriate to discuss this tradition at length here since this would be heavily reliant upon the findings of Elsdon and May. In consequence the current section is summary, briefly noting some aspects of the tradition of relevance to the present study.

4.3.2 Typology.

This group has been broadly defined by Cunliffe (1991, 89). It is most clearly distinguished in the stamped and rouletted wares (*cf.* Elsdon 1975) which, as Cunliffe observes: "lie at the beginning of a sequence which develops uninterruptedly into the first century A.D." (1991, 89). It must be stressed though that in the current author's experience the differentiation of Dragonby-Sleaford material from pottery of slightly later date, including wheel-produced forms, of Aylesford-Swarling affinity, is not unambiguously clear in every case. This situation arises from the fact that this class and the vessels of the latest Iron Age are typologically close.

More certainly, if groups of Dragonby-Sleaford pottery (*cf.* Elsdon & May 1987) are compared with material of Ancaster-Breedon tradition (*cf.* 4.2) or with Iron Age tradition vessels from north of the Humber (*cf.* 4.4), stark differences may be observed. Dragonby-Sleaford pottery generally displays finer fabrics and more elaborate, symmetrical and carefully finished forms; decoration is more frequent. This contrast is marked, despite the fact that the chronologies of these traditions overlap (*cf.* 4.2.3) and that their distributions are spatially close (*cf.* Figures 4.1 & 4.2 and 4.4.5,.

(i) Fabric.

Examination of sherds from a number of sites (eg. Dragonby, SHU, 1, Kirmington, SHU 5, Old Winteringham, SHU 7, Winterton, SHU 11, Ancaster, LIN 1, Ewerby, LIN 10, Old Sleaford, LIN 26) by the current author indicates that calcite was the principle (ie. most common) tempering agent employed in this pottery (*cf.* Middleton 1987; Elsdon & May 1987, 24-9). The use of calcite is not of itself remarkable for this mineral was being included in contemporary pottery in East Yorkshire and the Tees hinterland (eg. Evans forthcoming B; Swain 1987) and continued to be a common temper in the Roman period (*cf.* Chapter 8). What is notable though is the high degree of consistency in its use in tempering vessels of this category. It may be that this pattern arose from both practical and cultural phenomena.

(ii) Technology & Manufacture.

The typological differences of this pottery from that of the other two traditions considered in this chapter seem not to arise from the practice of different technologies. Some Dragonby-Sleaford vessels, especially the fine wares, were probably produced with the use of a turning-board, however, it appears that the means of production were in other respects similar. That vessels of the Dragonby-Sleaford tradition were manufactured to a comparatively high standard results principally from a demonstrably greater degree of care and control being exercised in production. Indeed, the quality of the products demonstrates a level of ceramic consciousness (amongst consumers and potters?) not parallelled in these two other traditions.

(iii) Form.

The formal range of the Dragonby-Sleaford tradition is considerably wider than that of the two other traditions examined in this chapter and includes a variety of jars, bowls, beakers and cups. Jars remain the dominant form, as is demonstrated in the assemblage from Dragonby (Elsdon & May 1987, 13-24). Jars, bowls and other forms frequently display everted and beaded rims, features that, as noted in this chapter, are comparatively rare in the other two traditions and which can be regarded as indices of date and cultural affinity. On the basis of its typology May sees this pottery as: "stimulated ... by contact with other regions, but essentially indigenous" (Elsdon & May 1987, 69).

(iv) Surface Treatment & Decoration.

Vessels are often burnished, some thoroughly so. A clear correlation between 'finer' fabric and thorough burnishing is detectable (pers. exam.). The so-called 'Stamped and Rouletted Ware', as characterized by Elsdon (1975) is really a sub-set of 4.3; this category simply defines a decorative style not a ware or independent tradition. The types decorated in this manner lie within the Dragonby-Sleaford tradition.

4.3.3 Chronology.

May's extensive consideration of the dating of this pottery does not draw firm conclusions as to its chronology largely because the dating of the early occupation at Dragonby is equivocal (Elsdon & May 1987, 67-75). In terms of relative chronology the Dragonby-Sleaford tradition has conventionally been understood to succeed (at least in Lincolnshire) the Ancaster-Breedon tradition (but note 4.3.5). Its evident affinity with the Aylesford and Swarling material indicates that its principal currency dates to the late Iron Age (c. La Tène III or D).

4.3.4 Usage & Function.

It was noted under 4.3.2 (iii) that the formal range of the tradition is comparatively wide. It might be inferred from this that changing requirements of pottery engendered new forms or that new types were being produced for specific (but traditional) purposes when previously a narrower range of forms had sufficed for such practices. This area will, however, remain one of speculation until systematic analysis of usage is undertaken.

4.3.5 Incidence / Distribution.

The distribution of this pottery is more certainly established. The incidence is largely restricted to the area lying between the river Welland and the Humber, that is essentially the area of the historic county of Lincolnshire (Appendix 4.2; Figure 4.2). Comparison of this distribution (Fig. 4.2) with that of Ancaster-Breedon pottery (Fig. 4.1) is particularly interesting. As discussed, Ancaster-Breedon pottery has conventionally been understood to predate and precede wheel-turned and/or typologically later La Tène pottery (*cf.* 4.2.3; May 1976a, 176) such as Dragonby-Sleaford types (*cf.* Cunliffe 1991, 89). However, Figures 4.1 and 4.2 display a curious lack of overlap. May has noted this phenomenon stating that: "these differences of distribution could be held to suggest spatial rather than temporal variation in culture" (Elsdon & May 1987, 68). It is worth noting in this connection that the area of incidence of Dragonby-Sleaford pottery is fairly well mirrored by the plotted distribution of scyphate gold coins (May 1992b, Fig. 1), though this parallel is not drawn by May. This is an area worthy of future enquiry.

Cunliffe has stated that the fine wares of the Dragonby-Sleaford range were probably produced for exchange (1978, 52; 1991, 89). This is possible but this is an area requiring much more research before statements may be made with confidence.

It is noteworthy that whilst the quality of metalwork within both the area of the incidence of Dragonby-Sleaford pottery and north and East Yorkshire is comparatively fine and sophisticated (May 1971; 1976a, 156-73; MacGregor 1962; 1976; Stead 1991) the standard of ceramic expression in the two areas is disparate. Apparently comparable metalwork apart these areas seem to define two separate cultural groups (*cf.* 1.3 (iii) & (iv)) and it may be concluded that the stark difference between the pottery types is the result of the rigid practice of cultural traditions.

4.4 IRON AGE TRADITION POTTERY NORTH OF THE HUMBER AND THE DON. (An Extended Review with particular emphasis upon the region of Cleveland and the Tees Lowlands).

"The few rim sherds are of a form familiar from Iron Age settlements in the area, both pre-Roman and Roman in date, and at the moment no hard and fast distinction can be made on this basis" (Jobey 1967, 67).

4.4.1 Introduction.

The Iron Age pottery of the north-east of England, that is the region delimited by the Humber and the Don, the Tyne and the South Tyne and the Pennines, may be regarded, on the basis of typology, as belonging to a common tradition, with material displaying similar characteristics across the region and through time. This is evident in the composition and tempering of fabrics, in the method(s) of manufacture, in the formal range and in firing. In fact this pottery is part of a wider genus since it demonstrably shares these characteristics with the Iron Age tradition pottery of Northumberland and southern Scotland (*cf.* Plowright 1978). Within the area considered here it is possible to isolate some spatial and chronological sub-divisions (*cf.* Challis & Harding 1975 (ii)). Often though differences are assemblage specific (eg. Challis & Harding 1975, 12) and constitute local variations within a wider continuity. Reasons for this consistency in the pottery are rarely considered. To suggest that this basic uniformity is the product of cultural phenomena begs further questions.

As with Ancaster-Breedon pottery the study of the Iron Age tradition pottery north of the Humber and Trent has been slow. There have been few attempts at synthesis. Exceptions are the unpublished research of Plowright (1978), commenced in the early 1970s, which catalogued Iron Age tradition pottery in the north of England and southern Scotland and the Challis and Harding volume (1975), which draws heavily upon the research of the former and also undertaken in the early 1970s. Both works follow a traditional approach focusing principally upon typology and chronology; they now seem dated yet no more recent regional survey exists in print. Swain's report on the pottery from Thorpe Thewles, CLV 4, (1987) and the petrological report on the pottery of Iron Age tradition from Dalton Parlours, WYK 1, (Buckland *et al.* 1990) are important recent contributions. Evans' new paper (Evans J. forthcoming B), whilst speculative, focuses upon potentially useful avenues for future work.

This lack of research may have been connected with ethnocentric aesthetic judgments of the pottery (eg. Wheeler 1954, 29 & 38) and a low estimation of its archaeological value. The nature of the material, specifically its variations of fabric and formal detail, as well as the rarity of decoration, have made it a somewhat difficult medium to study. Plowright states that: "It must be said ... that having attempted to describe native [sic] pottery ... that most of it is exceedingly difficult to describe" (1978, 5). In effect its variability constitutes a challenge to the tenets and conventions of typological classification in so far as it cannot easily be fitted into a 'types' schema. Swain found a conventional approach to material of this type to be : "largely unsuccessful" (1987, 57).

4.4.2 Typology.

(i) Fabric.

Only limited petrological work has been undertaken on Iron Age tradition fabrics in the region with little systematic research into clay sources and 'preferred' tempers. The work which has been done is largely of a qualitative nature. Notwithstanding this some apparent patterns regarding inclusions and tempering may provisonally be identified.

North of the Humber covers of glacial drift, re-worked glacial material and erratics are widespread. It appears that glacially derived clays were being used for potting during the Iron Age in the region (Heslop 1987, 120; Swain 1987, 63; Swain & Heslop 1984). In these circumstances the likelihood that petrological analysis of pottery in the form of, for instance, thin-section analysis, can be worthwhile has been doubted in principle (*cf.* Lambrick 1984, 162). Given the geological history of the region the possibility of provenancing the inclusion suite identified by thin section analyses (or other technique) to a discrete area may be considered improbable (Note 4.1).

Identification of coarse inclusion types within the pottery of Iron Age tradition from the region may be of value for a variety of reasons other than provenance study. This is particularly so when quantitative information is available since from this 'preferred' tempers should be apparent. However, to date no systematic work has been undertaken at an areal level to characterize the petrology of inclusion types within Iron Age tradition pottery from the region. Details of pottery temper have often not been reported upon. Knowledge of this domain is largely impressionistic particularly since anything approaching a general pattern (or patterns) with which to compare individual site assemblages has not been identified. (A limited programme of thin sectioning could assist in clarifying any general trends providing a picture of the range and frequency of inclusion types. From this it may be possible to begin to define any 'normal patterns').

In a very small scale exercise Harbord and Spratt (1972) undertook petrological examination of three sherds from three sites located on the northern fringe of the North York Moors. The sites were Great Ayton Moor, NYK 8, (Tinkler & Spratt 1978), Eston Nab (Vyner 1989a) and Percy Rigg, Kildale (Close 1972). One sherd per site was sampled, each said to be: "provided by the excavators [as a] typical fragment from each site" (Harbord & Spratt 1972, 174). It is implied in the report that the sherds sampled were believed to be: "typical of the later Iron Age undecorated Yorkshire ware" (1972, 174). On current evidence a more cautious dating of sherds from these sites would seem preferable. Sherds from these sites are likely to be from Iron Age tradition vessels, probably of Iron Age date, with the possible exception of the Eston Nab example which may be of an earlier date in the first millennium B.C. bearing in mind the new dating scheme advanced for the site (Vyner 1989a, 76-7), though the probability must be that it is Iron Age. All three sherds were found to contain igneous rock inclusions comprising both Cleveland Dyke and dolerite of probable Whin Sill origin. The Cleveland Dyke is exposed at a number of locations across western Cleveland whilst Whin Sill outcrops in north-west Durham and Northumberland. Only the sample from Percy Rigg contained an inclusion that was not one of these two rocks; however, this was a fragment of olivine-dolerite. Though a larger sample would have been desirable these results are now of considerable interest since they are consistent with other findings in pointing to the existence of a distinct pattern of tempering preference.

Vyner, in his report covering all of the extant pottery from Eston Nab, states that dolerite is the most frequent inclusion type, with quartz fragments being "occasional" (1989a, 77). The patterns demonstrated at other sites in North Yorkshire, Cleveland and Co. Durham present a broadly similar picture. Swain's analysis of the Thorpe Thewles pottery ascertained the predominant tempering inclusion in sherds of the diagnostic sample: 56.2% had dolerite as their predominant temper, in 29.8% this was quartz, 12.45% had dolerite and quartz and 1.42% were characterized by voids, presumably indicating the former presence of calcite (1987, 63). Dolerite and quartz are clearly the predominant inclusion types. Likewise amongst the 43 sherds of Iron Age tradition pottery from Ingleby Barwick, CLV 2, (apparently from a wide range of vessels) dolerite was the most common temper (pers. exam. March 1990; *cf.* Heslop 1984, 29)).

The petrology of the Iron Age tradition pottery from the 1980s excavations at Stanwick, NYK 23 (B), varies somewhat from the pattern displayed by the Thorpe Thewles assemblage. Dolerite, quartz and calcite are all present as tempering, but so too are limestone, sandstone and granite (Williams forthcoming) as well as organic tempering (pers. exam.). The presence of a wider range of tempers at Stanwick may be a function of a larger sample size and/or may reflect the differing statuses of these two sites with vessels at Stanwick being from a wider number of sources.

Work undertaken at Catcote, CLV 1 (A) and (B) in 1963-4 produced a sizable assemblage of Iron Age tradition pottery. However, no petrological work was undertaken for the report on this material (*cf.* Long 1988, 23) and regrettably the current author did not record the presence of inclusions in a quantitative manner when this material was viewed (pers. exam. February 1989; it was largely unstratified). This is unfortunate since such figures could be compared to those for Thorpe Thewles from which Catcote is only 10km distant.

Qualitative details of tempers present in this Catcote pottery were recorded by the present author. Dolerite (or similar igneous rock) was observed to be a common inclusion type as were opaque quartz fragments; Long records that quartz had: "often been used for the temper" (1988, 23)). Calcite tempered sherds from hand-made, typologically Iron Age vessels are also well represented, whilst sherds containing sandstone fragments were present, though infrequent.

A small assemblage of Iron Age tradition pottery was forthcoming from the 1987 excavations at Catcote, CLV 1 (C), (Vyner & Daniels 1989; Vyner 1989b). In his report on the pottery Vyner presents no quantitative figures upon the occurrence of temper inclusions but states that the incidence of inclusions in terms both of content and proportion is: "broadly comparable" with the pattern demonstrated at Thorpe Thewles (1989b, 21). Dolerite and quartz were the most frequent types represented, these being: "found individually as well as mixed" (1989b, 21). The quartz is said to range from 'sand grains' to fragments 4mm square. Two sherds are recorded as displaying voids, indicating the former presence of calcite (1989b, 21).

A small sample of sherds with igneous and sandstone inclusions was taken from the Catcote 1964 assemblage, CLV 1 (B), by the current author for purposes of specific identification (see Note 4.2). It was noted that the majority of the samples did not derive from rock sources *in situ* in the north-eas' of England, but were likely to be from further north (ie.

Scotland). In the circumstances it is probable that the rocks are represented in the glacial drift in the Hartlepool district and that this is the source used by local potters (see Note 4.3). Apparently none of the basalt-dolerite fragments were from the Cleveland Dyke and only one was perhaps from the Whin Sill. Few conclusions can be promoted with confidence on the basis of such a sample, however, the work again points to the intentional selection of dolerite (or similar igneous rocks) for tempering pottery. Again it seems likely that local boulder clays were the source of tempers.

Dolerite and basalt temper inclusions within hand-made Iron Age tradition pottery have also been recorded in a range of other assemblages from north of the Humber. These include two sites on the north bank of the Humber: Bursea House, NHU 4 (B), (pers. exam. April 1988) and Winestead, NHU 26 (A), (pers. exam. February 1988 and subsequently). Rigby has also recorded the presence of erratic tempering in a sherd believed to date to the first half of the first millennium B.C. recovered at the prehistoric boat find-site at North Ferriby (Rigby 1991a). The practice evidently extends into Northumberland since dolerite occurs in sherds from Thornborough Scar (pers. exam. May 1988; see Clack 1983 & 1984 for details of site). Inclusions of this type are also reported in a number of published site assemblages in addition to those specified above. These assemblages include three from Roxby, NYK 20, namely the enclosure (Inman *et al.* 1985, 187, Figs 4.6 & 4.8), "House 1" (Inman *et al.* 1985, 194) and "House 4" (Inman *et al.* 1985, 208), as well as those from West Heslerton, NYK 26, (Rigby 1987) and, apparently, Rudston, NHU 19, (Rigby 1987, 146). Dolerite and basalt tempering is also common amongst the pottery from the Iron Age cemeteries of East Yorkshire (Stead 1991; Rigby 1991b; Freestone & Middleton 1991).

The question that arises is why basalt/dolerite rocks appear so regularly as an added temper. These rocks, being of a shared igneous origin, have in common a similar appearance and a range of characteristic properties. They are hard and robust (*cf.* Taylor *et al.* 1971, 68), which, other things being equal, would result in their being disproportionately represented as an erratic in boulder clay and re-worked deposits. However, this alone is insufficient to explain the frequent occurrence of fragments of these rocks as tempering. It would appear that an active preference was exercised.

The Cleveland Dyke lies close to a number of sites at which it is represented as a pottery temper, it lies, for instance, only 5 miles to the south of Thorpe Thewles, and it outcrops at several places near Great Ayton and Kildale (where it has been systematically quarried). However, its exploitation and that of dolerite as an erratic seems highly probable. This would best explain its presence in pottery at Humberside sites, examples of these rocks having been identified amongst river shingle on the north shore of the Humber (research by the current author). Moreover, Harbord and Spratt believed that the fragments they identified had derived from their parent rocks not from 'chipping' but by means of: "a process such as abrasion" (1972, 174) (ie. glacial activity); the authors note that an erratic of Whin Sill was found at Great Ayton (1972, 175). In addition Swain states that both doleritic and quartz rocks are common in the boulder clay at Thorpe Thewles (1987, 63). In this connection it is relevant to note the thesis recently advanced by Briggs (1991) suggesting that the widespread distribution of Cumbrian stone axes may well relate not to 'trade' but the 'local' exploitation of erratics of this material within and outside the Lake District.

Swain also records that experimental work demonstrated that quartz and dolerite: "were the only two mineral types found on site which were suitable for crushing into pottery temper" (1987, 63). This suggests that the frequent incidence of dolerite and quartz as tempering has a practical explanation. However, the possibility that these particular rocks had a social and cultural significance as well should not be ignored (eg. *cf.* Baker 1988). The question as to why dolerite was so widely and intensively employed as a temper is discussed further below (*cf.* 4.4.2 (ii)).

Finally, it is relevant to note that grog-tempering is rare in the Iron Age tradition pottery from Yorkshire, Cleveland and Co. Durham. Grog is present in a sherd from Catcote (Plowright 1978, 18, 113 & Fig.8 No.13). It has also been observed in sherds from Rock Castle, NYK 7, (Willis forthcoming B) as well as in at least two fabrics associated with Iron Age tradition pottery from the excavations at Stanwick 1981-9, NYK 23 (B). However, generally it is infrequent. This pattern is an emphatic contrast to that evident in contemporary pottery from southern Britain (eg. Thompson 1982) and the East Midlands where grog tempering is common.

(ii) Technology & Manufacture.

The manner in which this pottery was produced evidently changed little through the Iron Age and indeed practices appear to have continued into the Roman period. Production was unsophisticated but competent. Pottery was customarily hand-formed and fired in clamps or bonfires. A lack of fine symmetry of form is a diagnostic feature of the nature of its manufacture, as is its irregular oxidization. A range of evidence indicates that production was probably localised and may largely have been practiced 'on-site'.

Sherds of this pottery commonly display unoxidized cores, variably oxidized surfaces and comparatively 'chunky' inclusions, both between assemblages and across the formal range (*cf.* Eastburn, Driffield Aerodrome, Site 2, NHU 7, (Philips 1960, 186; see annotation under Gazetteer entry); Ingleby Barwick, CLV 2, (Heslop 1984, 29 & 31; pers. exam. March 1990); Thorpe Thewles, CLV 4, (Swain 1987, 63; pers. exam. April 1990); Catcote, CLV 1, (Long 1988, 22-3; Vyner 1989b; pers. exam. June 1988 & February 1989); Eston Nab (Vyner 1989a, 77); Rock Castle, NYK 7, (pers. exam. November 1991). These characteristics indicate a common pattern of fabric preparation, manufacture and firing. Across the region and continuing through time a consistent technological practice was undertaken. This is at variance with what happened in other parts of the study area during this period: in part of the East Midlands at least pottery tradition alters profoundly (*cf.* 4.3). Awareness of this phenomenon is important for our understanding of culture and society; the apparent 'uniformity' and continuity in ceramic tradition correlates with other aspects of the material record which demonstrate that this region was slow to participate in the changes occurring elsewhere in Britain during the LPRIA (*cf.* Haselgrove 1989).

In the Tees Lowlands - south Durham district, for example, pottery manufactured during the middle and later Iron Age was probably produced by comparable technology to that employed in the Late Bronze Age and perhaps earlier (*cf.* Vyner 1989a, 76-7). Admittedly Iron Age tradition vessels generally possess a denser, harder, fabric than their Bronze Age precursors, suggesting that clays were more carefully prepared and pots more diligently fired, but these are differences of degree not kind. The clays and tempers employed appear to have remained the same (*cf.* Vyner 1989a, 77). The presence of dolerite tempering in a Food

Vessel Urn from the Bronze Age barrow at Hasting Hill, near Sunderland, is indicative of continuity (petrological identification Dr Tony Johnson; see Cowie 1978, 83-4 and Gibson 1978, 83 for details of context and pottery; see Note 4.4). Other vessels of Bronze Age date from Co. Durham and Cleveland are also known to be tempered with whinstone/dolerite (eg. Gidney 1984; Vyner 1988, 179-82).

The manner in which vessels of this tradition were constructed is often evidenced in the way they have fractured and come apart. Regular fractures, often at an acute angle to the surface of the sherd, are indicative of manufacture by means of overlapping coil or perhaps slab building. A clear example from the Thorpe Thewles assemblage has been published (Swain 1987, Fig.46 No.133). Slab or coil construction is apparent in sherds from other assemblages in the Tees Valley district, for example, Stanwick, NYK 23 (A) and (B) (pers. exam.), Rock Castle, NYK 7, (Willis forthcoming B) and Ingleby Barwick, CLV 2, (*cf.* Heslop 1984, 29 & 31); other examples are documented from the north-east such as at Tynemouth headland (Jobey 1967, 67) and Burradon (Jobey 1970, 72). This method of manufacture appears to have been common, if not indeed standard, practice.

Local or 'on-site' production has been claimed in a number of instances. Heslop and Swain suggested that the Thorpe Thewles pottery was produced 'on site' pointing to the local availability of the inclusion types, the limited range of fabrics, the diversity of formal detail (suggesting non-specialist production), as evidence, together with the presence of features interpreted as possible curing and clay extraction pits (*cf.* Heslop 1987; Swain 1987; Swain & Heslop 1984). Williams suggests that the variety of rock tempers present in the Stanwick sample, NYK 23 (B), derive from rocks likely to be present in the boulder clays in the vicinity of the site (Williams forthcoming). Additionally, in his report on the (early) Iron Age tradition pottery from Staple Howe Brewster identifies local Speeton clay as the source of the potting clay (1963, 58-9). Similarly Plowright (1978) concluded that manufacture was localized. Harbord and Spratt too believed that the pottery they examined (*cf.* 4.4.2 (ii)) was locally produced. If production was largely highly localized this might explain the variability of formal expression within the tradition (*cf.* 4.4.2 (iii)).

Although the vessels of this tradition are unelaborate and were manufactured by simple technology there are no grounds for assuming that this pottery was other than adequate for its intended functions (contra Wheeler 1954, 29). What was produced was presumably what was required; the conservatism of the tradition implies that the character of this pottery was considered satisfactory.

Occasionally vessels display comparatively well-finished and regular rim profiles indicating that they may have been finished on a turning board. Stratigraphic and other evidence is lacking but this presumably is a late introduction. Long has suggested that certain vessels from Catcote were finished in this manner (1988, 22). The group from South Cave, NHU 20, believed to be late Iron Age, includes a number of well executed vessels the quality of which suggests that they may have been finished on a turning board (*cf.* Challis & Harding 1975 (ii) 19, Figs 35-6). Wheel-made Iron Age tradition pottery within the region is evidently restricted to North Humberside where it is rare and comprises of vessels which are probably imported (*cf.* 8.4.1 (iii)); such items are unlikely to be earlier than first century A.D. in date. The vessel from Garton Slack referred to by Challis and Harding (1975 (i) 13, Fig.34 No.4) seems very likely to be a import.

Finally, it is as a curious piece of social history that Wheeler's assumptions regarding the production and usage of this pottery may be recalled. In his discussion of the cultural significance of the pottery from Stanwick he claims that: "The Brigantian woman cooked, and herself made such elementary pots as she needed for her menial task ... her cooking was of the simplest sort, and her pottery matched her cooking" (1954, 30). Whilst it is likely that social and power relations, and construction of 'identities', within Iron Age societies had a gender dimension there is no archaeological evidence for Wheeler's assertions (which are presented in his text as if they were axiomatic). Today we may perhaps regard this portrayal as revealing more about Wheeler's own perspective and that of his cultural milieu than about the production and consumption of pottery in the late Iron Age.

(iii) Form.

A particular difficulty with this type of pottery is the comparatively small proportion of sherds which are diagnostic of form that survive. At Thorpe Thewles, for instance, only 19%

of sherds were considered by Swain to be diagnostic, and only 12% could be understood to be from a specific profile or general profile range (1987). The proportion of diagnostic sherds in an assemblage will of course be effected by the robustness of fabrics and breakage rates. Pottery of this tradition was fired at comparatively low temperatures and this has probably contributed to its fragmentation and denudation (*cf.* Swain 1988). In the case of the small assemblage from Rock Castle, NYK 7, less than 5% of the 319 sherds and fragments of Iron Age tradition pottery were diagnostic of form (Willis forthcoming B).

The formal range of this pottery is limited. Forms were not tightly standardized, however, on the whole the seemingly infinite variety of detail, angle, size, and so forth, comprise variations within a limited range of basic form classes. These classes are widely represented.

Swain's work on the Thorpe Thewles assemblage employed a 'key sheet' of rim, body and base types in order to catalogue and categorize the pottery. He established that nineteen distinct rim types, ten body types and five types of bases were represented (1987, Fig. 80 on fiche). However, when these were 'joined' and simplified they distiled to seven general profile types. Four main body profiles were present comprising bowls or cauldron-shaped vessels (which were rare), bucket-shaped pots, barrel-shaped vessels and vessels with an S-shaped profile (1987, 57). The nineteen rim types could be amalgamated into three general groups: "in which some functional differentiation might be inherent, namely simple, everted and lid-seated rims" (1987, 57). The four basic form classes at Thorpe Thewles each display various rim types (1987, 62) which might be related to function. The five catalogued base types were typical of this tradition being simple and unelaborated with variations of presence/absence of a foot and angle and size of foot.

The formal range at Thorpe Thewles is parallelled elsewhere in the North-East. The published pottery from the Eastburn, Driffield Aerodrome, Site 2, NHU 7, for instance, which should be later Iron Age (or early Roman), is consistent with this pattern (Philips 1960, Figs 3-7). The illustrated rims from Ingleby Barwick, CLV 2, (Heslop 1984, Fig.7 Nos 2-4) and Eston Nab (Vyner 1989a, Fig.11) are consonant with the Thorpe Thewles group. The published pottery from Catcote, CLV 1 (A), (B) and (D), similarly, is, broadly comparable, the rim types represented are predominantly inturned (as with the items from Eston Nab), everted, plain upright, and flattened/lid seated (Long 1988, Fig.3). Bead rims are represented but are comparatively rare amongst the 1963 and 1964 assemblages (eg. Fig.3 Nos 23 & 29). The 1987 assemblage from Catcote comprises simply of jars (Vyner 1989b, 21). The rim types illustrated (1989b, Fig.12) are entirely consistent with those published by Long.

The pottery from Stanwick published by Wheeler is likewise broadly consistent with the Thorpe Thewles pattern. The majority of vessels represented are, or appear to be, large or small jars with simple everted rims (Wheeler 1954, Fig.12). Bowls are present (eg. Fig.12, Nos 28 & 31) but are comparatively rare. Bead rims are uncommon, whilst some rims may be interpreted as 'lid-seated' (eg. Fig.12 Nos 8 & 9).

The adoption of a simple 'key sheet' method in a synthetic review of the pottery from this region now seems highly desirable. It could establish in a systematic and objective manner the formal range of the pottery in the region and provide a quantified guide to the frequency of different form types. In this way the existence of any 'normal' pattern(s) or trends for the region may be isolated. Two qualifications might be sounded: such a project may be hindered by the small size of many assemblages in the region and whilst such work would characterize forms, in this particular context form may bear only a loose relationship to usage (*cf.* Swain 1987, 64).

(iv) Surface Treatment & Decoration.

It is uncommon for vessels of this tradition to display surface elaboration. This contrasts with the preponderance of decorative motifs characteristic of the contemporary pottery traditions from further south in Britain (*cf.* Cunliffe 1991; Elsdon 1975; Jackson & Dix 1988, Figs 32-6). Amongst the comparatively large assemblage from Thorpe Thewles, for instance, decorated vessels were rare. Only fifteen decorated vessels were represented; the nature of decoration was heterogeneous and unelaborate (Swain 1987, 62). Swain concluded that no satisfactory social or cultural inferences could be drawn from: "such a small and disparate group" (1987, 62). Further, amongst the pottery from the Tees valley district even simple treatments such as burnishing, polishing or wiping are rarely witnessed. Such finishing does occur, as at Ingleby Barwick (Heslop 1984, 29) and Catcote (Vyner 1989b, Fig.12 No.7) but cases are infrequent.

4.4.3 Chronology.

The Iron Age tradition pottery of the region north of the Humber may be distinguished from earlier 1st millennium B.C. pottery on the basis of typology. Swain (1987), for instance, points out that the difference between the assemblages from the two earlier 1st millennium sites in Cleveland of Heathery Burn and Eston Nab and that from Thorpe Thewles. Both of the earlier assemblages contain so-called "slack profiled" simple rimmed vessels and situlate forms. These forms are absent from the adjacent later Iron Age and Roman sites of Catcote, Ingleby Barwick and Thorpe Thewles. Everted or beaded rims and somewhat finer fabrics (as, for instance, at Ingleby Barwick, CLV 2, (Heslop 1984, "Native Fabric II" 29-31, Fig.7 Nos 2, 3 & 4) and Percy Rigg, North Yorkshire (Close 1972, 28 & Fig.7) appear, to a limited extent, to be an index of date. However, generally, typological variations in the region were not marked. Both the technology of production and typology remained conservative and it is not yet possible to distinguish chronological units within this wide pottery tradition.

A major contribution to our understanding of the chronology of this pottery is the thermoluminescence (TL) dating project being conducted by Bailiff at the University of Durham. The results for one assemblage are currently available, namely Thorpe Thewles (Bailiff 1987). In the case of this site sherds from stratified contexts believed on typological grounds to be Iron Age/Iron Age tradition were dated by the method to the Iron Age (Bailiff 1987, 72). The TL dates proved consistent with the site phasing. Sherds from phase II produced a mean date of 485 B.C., those from phase III a mean date of 135 B.C., whilst a sample of Black Burnished Ware from the site produced a date of A.D. 110. None of the coarser fabrics sampled were of late date and this supports the observation (*cf.* above) that the 'fineness' of a fabric is, in this context, of some guidance in indicating its relative date. The value of this technique lies in the fact that it introduces an objective control into a methodology which is inherently subjective and dependent upon association and relative sequence. The advantage of the technique in relation to C14 lies in the fact that it is effectively the sherds themselves which are dated.

A terminal date for this pottery tradition cannot be forwarded with confidence. This is so, for instance, in the case of the Tees/Cleveland district where, as Vyner notes, a number of assemblages demonstrate that: "pre-Roman styles of ceramics continued in use, and probably in manufacture, well into, if not through, the Roman period" (1989a, 76). Indeed Swain noted continuity amongst the Thorpe Thewles assemblage (1987, 62). Clearly this hinders the dating of assemblages and sites and in turn has important wider implications for our understanding of the period (*cf.* 3.6).

4.4.4 Usage & Function.

The presence of carbonized residues on the surfaces of sherds is a common feature of pottery of this tradition (*cf.* Jobey 1967, 67; 1970, 75 & 77; Wheeler 1954, 38). Swain's analysis of the Thorpe Thewles pottery demonstrates a clear correlation between external carbonized residues and sherds with dolerite temper inclusions (1987, 64 & Fig.82). This finding is consistent with the evidence of Rye's study which concluded that quartz and similar inclusions are an unsuitable temper for cooking pots since they have a poor thermal absorption capacity (Rye 1976). It is to be hoped that Swain's finding will encourage future researchers to monitor the incidence of concretions and residues *vis-à-vis* other variables. However, Swain recognizes a possible alternative explanation for the correlation: inclusions of dolerite tend to be larger than quartz fragments (which may arise from the greater resistance of dolerite to crushing) with the larger inclusions being used for larger vessels (ie. dolerite in cooking pots) and the smaller inclusions for relatively small vessels (ie. quartz in drinking and storage vessels).

There is some evidence that sherds tempered with dolerite are on average physically more robust. The average sherd weight of the Ingleby Barwick sample, for instance, is 15.8g but the average weight of the sherds tempered exclusively with dolerite is 24g which is the highest average for the sample by more than 7g. However, this may be a function of vessel/sherd thickness, if indeed dolerite was commonly used for large vessels. Clearly more work needs to be done in this area.

Swain demonstrated that finer fabrics were more frequently used for smaller vessels and that items in finer fabrics were more likely to occur in an oxidized fabric and less likely to have exterior residues (1987, 64 & Figs 81 & 83). Similarly, amongst the pottery from Eston Nab there is a tendency for smaller vessels to appear in a comparatively finer fabric (Vyner 1989a, 77). It is important that future work upon assemblages of this type of pottery monitor the material at these basic but significant levels. Quantitative information on these sorts of correlations is necessary if reliable patterns perhaps relating to common usage are to be identified.

4.4.5 Incidence / Distribution.

There is no firm indication that any pottery of this tradition was produced for exchange or was traded. Definitive statements cannot be made regarding this matter at this stage in research (particularly due to the problems of sourcing (*cf.* 4.4.2) and we must be w~~e~~ary of assumptions. However it seems unlikely that much of this pottery was traded.

Worthy of comment is the fact that in two instances characteristically identical fabric types have been recorded at three sites in the Tees hinterland, namely Stanwick, NYK 23, Rock Castle, NYK 7 and Catcote, CLV 1. One of these is a distinctive fabric which displays abundant grains of clear quartz. This fabric is present at Catcote (pers. exam. February 1989) and is closely parallelled amongst the Stanwick material (Willis 1991, fabric 109). A sherd of similar fabric occurs at Rock Castle (Willis forthcoming B, fabric E), in this case though grog pellets are also present though these are occasional and mirror the host fabric. In the second case five unpublished sherds recovered in 1964 from ditch 12 at Catcote (Long 1988, for details of this context; pers. exam. February 1989) which are seemingly from the same vessel, occur in a distinctive organic tempered fabric which is in every quality identical to fabric No.100 at Stanwick (Willis forthcoming A). Again this fabric type is also represented amongst the assemblage from Rock Castle (Willis forthcoming B, fabric D). The possibility that these two fabrics have common sources is attractive and not improbable. However, it is possible that the parallel qualities in respect of both fabric types arise not from shared origins of manufacture but rather a common method of manufacture.

Swain has suggested that sites north of Thorpe Thewles, in Co. Durham and Northumberland are, in the later Iron Age at least, aceramic. He cites Coxhoe, DUR 4, (Haselgrove & Allon 1982), Strawberry Hill (Haselgrove 1980) and Thornborough Scar (Clack

1983; 1984). However, this generalization is not entirely accurate. No pottery of Iron Age tradition was recovered during the 1979-80 work at Coxhoe (Haselgrove & Allon 1982, 38-9), but, it is emphasized in the report that this: "absence may be apparent rather than real, a function of the severity of the ploughing, the limited volume of excavated contexts, or the areas of the site explored" (1982, 46). Similarly Haselgrove's excavations at Strawberry Hill comprised trial trenching on a modest scale; only one trench sampled the core area of settlement as indicated by aerial photography; (also since there are no dated finds from the site the site is actually undated). Iron Age tradition pottery was in fact recovered during Clack's excavations at Thornborough Scar, sherds being present in contexts of the earliest phase (Clack 1983; 1984; pers. exam. May 1988). Pottery of Iron Age tradition has also been recovered, albeit in modest quantity, at a number of sites in the counties of Durham, Tyne and Wear and Northumberland, for instance, West Brandon (Jobey 1962, 25), from occupation underlying the Roman fort at South Shields (pers. comm. Paul Bidwell, March 1993), Tynemouth headland (Jobey 1967, 67-8, Fig.7 Nos 1-3), Burradon (Jobey 1970, 72-8, Figs 8-10) and further north, as at Milfield basin (pers. exam. December 1992). Whilst it must be acknowledged that this pottery is not a common find (*cf.* Haselgrove *et al.* 1988, 40) it may be suggested with some confidence that its apparent absence is in part a function of a lack of both fieldwork and particularly open area excavations.

Considerable typological variations exist across the region (*cf.* 4.4.1). Swain has pointed to differences between the (later) Iron Age pottery from the Tees hinterland and that from the Vale of Pickering and eastern Yorkshire (1987, 65). He cites the pottery from Rillington (Turnbull 1983) and Levisham Moor (Hayes 1983, 32). However, as its excavator observes the assemblage from Rillington is somewhat anomalous (Turnbull 1983, 5). Whilst variations exist these nonetheless may legitimately be seen to lie within the same general tradition. It is relevant to note that during the Iron Age there is an apparent absence of imported pottery from outside the region, a phenomenon which endures well into the first century A.D.

4.5 CONCLUDING COMMENT.

The preceding sections have demonstrated the regional variations in the Iron Age tradition pottery of the study area. The traditions are spatially discrete and the Humber and the Don mark a distinct and enduring boundary between traditions. North of these rivers a distinct conservative tradition spanned the Iron Age. To the south, in the East Midlands, a changing ceramic pattern characterized the later Iron Age. Here expression in terms of forms, decoration and the manner of production, was changing, culminating in middle and north Lincolnshire in the comparatively sophisticated Dragonby-Sleaford style. The distributions of these traditions correlate with other distribution evidence outlined in the chapters which follow.

Finally it is important to recall that the questions which can and have been asked of Iron Age pottery have, to date, been much more circumscribed than is the case with Roman pottery. Whilst this results in part from the nature of the material it is also true that study of this evidence has suffered until recently from unsophisticated reporting and an absence of a shared systematic methodology. In this respect some parallel can be drawn with the state of Roman pottery studies c. 20 years ago. This situation looks to be altering with new perceptions, methods and targeted research. This is especially important bearing in mind that this material is the main artefact type available for the period. With regard to the prospects of the study of Iron Age tradition pottery the least productive approach is an unimaginative one.

CHAPTER FIVE

THE DISTRIBUTION OF THE IMPORTED ROMAN FINE WARES.

5.1 INTRODUCTION.

In this chapter the distributions of three classes of Roman fine wares are examined in detail. These wares comprise South Gaulish Samian ware (hereafter SGSW), Gallo-Belgic and related pottery and Lyon ware. The emphasis of this chapter is not upon the incidence of these types as dating evidence (though this is considered) rather the main focus is one of comparative analysis between sites.

5.2 THE DISTRIBUTION OF SOUTH GAULISH SAMIAN WARE (SGSW).

5.2.1 Introduction.

Samian has been the most thoroughly researched of all Roman pottery types of the north-west provinces. A number of characteristics of this pottery, such as its distinctive appearance, standardization, developing forms, decoration and stamping have facilitated its detailed study, one consequence of which is the comparatively close dating that is possible with sherds of this class (*cf.* Oswald & Pryce 1920; Hartley, B. R. 1969a; Webster, P. V. 1987). The quality of this pottery, together with the fact that it was evidently intended to be seen and used in social contexts, has led archaeologists to assume that it will have been particularly valued in antiquity (eg. Wild, F. 1985, 123). Evans has recently published empirical evidence that supports this interpretation (Evans, J. 1988b, esp. 202). From this premise it follows that its occurrence (especially in decorated form) may be regarded as an index of site status (*cf.* Millett 1980; Evans, J. forthcoming B). This belief must not, of course, be taken as given in all instances but should remain a matter for investigation in each case (*cf.* Haselgrove 1982a, 81).

In the current study the incidence of SGSW is focused upon since its production and importing period lie within the time-span under review (see Note 5.1). The latest SGSW in Britain is Trajanic (*cf.* Marsh 1981, 184) and therefore the occurrence of SGSW can be regarded as indicative of occupation or activity of first century A.D. (or early second century) date (*cf.* 1.2). Further, this pottery can be dated to relatively short time spans on the basis of diagnostic attributes. It is now standard practice for reports to include suggested datings for published samian ware (whether this be of a specific chronological date range such as: "c. A.D. 60-80" or is related to the imperial reigns (see Note 5.2)). The evidence of dated samian has been employed in the following analysis.

5.2.2 The Archaeological Use of Samian Ware.

Samian pottery has traditionally been employed as a primary means for dating sites, phases and deposits (eg. Oswald & Pryce 1920, 39-46; Hartley, B. R. 1969a, 235-6; 1972b; Hartley, B. R. & Dickinson 1990). In instances when this pottery has been employed in an analytical manner this has principally been to do with questions of site dating, especially fort foundations and military deployment (eg. Hartley, B. R. 1971; 1972b; 1981; Simpson 1973). This use of the material is undoubtedly of fundamental importance for site reporting and will remain so (*cf.* Fulford & Huddleston 1991, 38 & 48-9). However, the material has rarely been approached in the manner advocated by Millett (1980) nor used to engage chorological questions (*cf.* 2.2; Millett 1987b). The virtual absence of synthetic analyses undertaken using this rich and potentially highly informative data base is surprising, though it is in large part a consequence of the conventional separation and specialization of samian study. Paradoxically the pottery about which we know most has been subject to only limited synthetic study.

It is intended here to examine the evidence of the SGSW within the study area from both chronological and chorological perspectives. A series of distribution maps, Figures 5.2 to 5.21, plot the incidence of SGSW within the research area (Figure 5.2), the incidence of specific forms (Figures 5.3 to 5.11) and the incidence of dated items (Figures 5.12 to 5.21). (Full listings of documented SGSW present at sites within the study area are recorded by site within the gazetteers). Presentation of this type of information on a regional basis is rare and has never previously been undertaken for the region under consideration.

5.2.3 The Nature of the Evidence.

(i) Research Input and Samples.

It is important to recognize that the nature of the archaeological input has had a key role in determining the samples available for study. Historically within the study area disproportionate attention has been paid to Roman military sites, due to such reasons as site visibility and research interest (eg. the excavation campaigns conducted on Roman forts in Yorkshire in the early twentieth century initiated by the Roman Antiquities Committee of the Yorkshire Archaeological Society), and to large centres, often because they underlie modern urban settlement or because they too are more visible (for instance, in terms of stray and surface finds); both have attracted sustained research and large scale recovery. This means that there is a greater chance that excavation(s) has been undertaken and that archaeological samples are larger. Hence not only is the presence of SGSW likely to be better characterized at such sites but, moreover, the samples being larger, there is more chance of the less common samian forms being represented. This situation may distort our perception of the evidence. (This situation is of course one to be borne in mind when considering the incidence of other types not just SGSW).

It may be observed that the area of Lincolnshire is comparatively under-represented in many of the distributions examined in this chapter. This is probably not an accurate reflection of the actual character of the archaeological record but rather seems likely to be a function of a lack of excavation in the area, as well as a lack of publication in the case of many of the excavated assemblages (eg. those from Old Sleaford, LIN 26, Ancaster, LIN 1 and Saltersford, LIN 29) and collected assemblages (eg. those from Ulceby Cross, LIN 35, Owmby, LIN 27, Ludford, LIN 21, and Navenby, LIN 23).

(ii) Data Sources.

The samian data collated here has been gathered from a range of sources, including published and forthcoming reports, from information communicated to the author and from the author's own examinations of material. Inevitably this means that there are variations in the extent and nature of information per assemblage. Many reports, including recent ones, do not include full inventories of the samian recovered; traditionally there has been a concentration in reports upon decorated ware and stamped items; often the specific fabric type is not stated. There may be doubt regarding some of the datings given in the reports of the early part of this century, though, presumably, if there is error this will be of marginal bearing in mind the nature of the material and the date range categories employed in the current analysis. Form identifications in all cases are likely to be highly reliable. It may be noted though that there is a bias in the current work as where reports simply list form identifications but no Gaulish source only those forms produced solely in South Gaulish potteries could be used; those forms which were manufactured at both the South and Central Gaulish potteries, such as the Drag. forms 27 and 33 have, in these instances, been excluded).

Regrettably only a very few reports upon samian ware pottery include quantified data ('estimated number of vessels present' data has often been included in samian reports in the past, but, as outlined above (*cf.* 2.3.1) this method does not permit reliable comparative analysis). This means that the quantified analysis presented here (*cf.* 5.2.8) is necessarily largely limited to data gathered by the author.

(iii) Duration of Occupation.

Another significant variable is the length of time during which a site is occupied, since this is likely to have effected the number of SGSW forms potentially represented at that site. For instance, one reason why so many SGSW types are recorded from Leicester, LEI 13, is presumably because it was occupied throughout the importing period for this ware. On the other hand occupation at Redcliff, NHU 17, had ceased by c. A.D. 70 and hence types customarily found in post A.D. 70 deposits, such as the Drag. forms 35, 36 and 37 are unlikely to be represented there. In other words Figure 5.1, which charts the number of SGSW forms recorded per site within the study area, does not simply record site status and level of Romanization but is a function of the range of factors outlined above (*cf.* 2.2; *cf.* Millett 1987b, Fig. 4).

(iv) Curation and Pottery Life-span.

As with all archaeological finds it is important to recall that the dating of items of samian does not necessarily give an accurate date for site occupation or for the arrival of the item at a site (*cf.* Orton 1982a, 100-5; *cf.* Millett 1987b, 99-101). The occasional presence of pottery types normally deemed to be of a date earlier than the start date of the site at which they occur is to be expected. This is particularly so with fine ware pottery which is likely to have been of above normal value and/or difficult to replace, as seems to be the case with samian (as indicated by the relatively high incidence of repair). The careful curation of such pottery may be anticipated. Hence it is likely that some SGSW vessels will have been in circulation and use well into the first half of the second century. This may have been so in the case of some of the decorated vessels (of Drag. form 37) dated as late Flavian or Flavian-Trajanic from North Humberside. The phenomenon may also explain the presence of a Drag. 29 bowl dated as Claudio-Neronian, from Elslack, NYK 6, (if this dating is reliable) and the sherds of SGSW from Binchester, DUR 1, dated as pre-Flavian (Wild, F. forthcoming), though the start date for the occupation is conventionally believed to be c. A.D. 80, (eg. Jones, R.F.J. 1991, 93). As a general rule the larger the pottery sample the more likely it is that such conspicuous items will be present.

5.2.4 The Distribution by Form.

(i) Introduction.

Data on the form types of SGSW present in each assemblage has been gathered in the course of the current research (see Gazetteer). This information, which is summarized in Appendix 5, has been employed to produce Figures 5.1 and 5.2 and Appendix 5.1 plotting and listing the overall distribution. The broad trends are perhaps what may have been predicted from a knowledge of distributions from elsewhere in early Roman Britain. The centres at which the most SGSW forms have been documented (*cf.* Figure 5.1) are those identified with large scale Roman military and/or regional civil and administrative roles and which have produced comparatively rich, highly Romanized, finds assemblages and extensive first century structural evidence. They are also the centres which have been the subject of the most work and publication.

The distributions of a number of SGSW form types have been plotted in Figures 5.3 to 5.11. These forms have been chosen because they are diagnostic of date and/or possibly site status (limitations of space preclude an examination of the distribution of all forms). To begin with the incidence of the rare and early (ie. essentially pre-Flavian) form types will be examined before turning to the more common SGSW forms.

(ii) The Distribution of Dragendorff Form 24/25 (Figure 5.5).

This form is a hemispherical cup with an external cordon and a zone of rouletting between the cordon and the rim (Oswald & Pryce 1920, 171-2). This form is essentially pre-Flavian (Webster, P. V. 1987, 19). The form has been recorded at six sites in the study area (Appendix 5.4). Four of these sites, namely Leicester, Lincoln, East Bridgford and Old Winteringham, lie south of the Humber-Trent and are known to have been occupied in the Claudio-Neronian period. These four sites are in fact the four sites from which the widest range of SGSW forms are known. The other two find-sites are both in North Yorkshire, Stanwick, NYK 23, and Aldborough, NYK 1. The presence of Drag. 24/25 amongst the pottery from Stanwick is not surprising given the Claudio-Neronian date of most of the samian from that site. (See Note 5.3).

(iii) The Distribution of Ritterling Form 8 (Figure 5.9).

This form is also a hemispherical cup (Oswald & Pryce 1920, 184-5) and it too is essentially pre-Flavian (eg. Webster, P. V. 1987, 25). The form is recorded at five sites in the study area, these being Great Casterton, Leicester, East Bridgford, Redcliff and Stanwick (Appendix 5.8), all of which are known to be centres of pre-Flavian, indeed Claudian, occupation. The two sites north of the Humber-Trent at which it is present are Redcliff, NHU 17 and Stanwick, NYK 23, both of which have produced pre-Flavian samian in quantity. The current author has encountered no references to Ritt. 8 from Lincoln, LIN 17. As the SGSW sample from this site is so large this is somewhat surprising, even though the main *floruit* of occupation there dates from no earlier than c. A.D. 60 (see Gazetteer entry).

(iv) The Distribution of Ritterling Form 9 (Figure 5.10).

This form is a carinated cup (Oswald & Pryce 1920, 170-1). The Ritt. 9 is a pre-Flavian form which is rare after c. A.D. 60 (eg. Webster, P. V. 1987, 25). Within the study area the form is documented at eight sites (listed in Appendix 5.9) with a wide geographical spread. Of these sites only Binchester, DUR 1, and York, NYK 28, do not have attested pre-Flavian occupation. The only example from York known to the current author comes, somewhat surprisingly, from the Rougier St site (S), that is, from the area of the later *colonia*. Binchester has produced only one sherd of Ritt. 9; considering the conventional date of its foundation, which is c. A.D. 80 (*cf.* 5.2.3 (iv) & Gazetteer entry) this item would be from a vessel which was approaching 'heirloom' status by the time it arrived at the site. (See Note 5.3).

(v) The Distribution of Ritterling Form 12 (Figure 5.11).

This form is a hemispherical bowl with a horizontal flange below the rim (Oswald & Pryce 1920, 210-1). (It can be difficult to distinguish sherds of this form from the Flavian form Curle 11; all examples listed here are, however, diagnostic). The form of the Ritt. 12 resembles that of mortaria, though whether these vessels were actually employed for this type of use is unclear. Webster records that its incidence is: "predominantly pre-Flavian, although there are some early Flavian examples" (1987, 21). Ritt. 12 is recorded from 9 sites within the study area (listed in Appendix 5.10); at none would it appear to be common. The sites are geographically widespread and all are sites at which Roman military occupation is confirmed from structural evidence, with the exceptions of Leicester, LEI 13, and Old Winteringham, SHU 7, two sites at which this is highly probable but not yet proven. This pattern is curious and may indicate that a clearly defined use (perhaps particularly 'Romanized' or specifically military) was associated with this form. In this connection it is noteworthy that no examples of Ritt. 12 are recorded in Robertson's lists of Roman finds from native sites in Scotland despite the fact that a range of other SGSW is documented (Robertson 1970).

The presence of this form at Templebrough, SYK 5, Brough, NHU 3, and, particularly, Slack, WYK 5, Binchester, DUR 1, and Ebchester, DUR 6, point to its duration into the Flavian period in Britain. This is further attested by the presence of Ritt. 12 at two other Flavian foundations in the north of Britain outside the present study area: Ribchester and Melandra (Wild, F. forthcoming); both of these sites are, of course, Roman military sites. (Oswald & Pryce document the presence of Ritt. 12 in early Flavian deposits at Hofheim (1920, 211).

(vi) Some Aspects of the Distribution of the Early and Uncommon SGSW Forms.

The general pattern of these four distributions accords well with what might be expected on the basis of the established dating of the forms. All four forms are comparatively rare finds within the study area. This can be gauged by noting that whilst the total number of sites within the study area which have produced identified and documented SGSW forms is 62 (though note that this includes a number of Flavian military foundations) at only 6 sites is Drag. 24/25 recorded, at only 5 is Ritt. 8 recorded, at only 8 is Ritt. 9 known, whilst Ritt. 12 is documented from 9 sites. By contrast Drag. 18 and Drag. 37 have both been identified at 39 sites, and Drag. 29 at 43 sites. Moreover the six sites at which Drag. 24/25 occurs all have 8 or more other SGSW forms documented; with Ritt. 8 each of the five sites at which it occurs have no less than 7 other forms present; in the case of Ritt. 9, the eight sites at which it occurs again have 8 or more other forms documented; finally, with Ritt. 12, all of the 9 sites at which it is recorded have a minimum of 6 or more other forms present. This implies that samples have to reach a certain threshold before one can realistically anticipate the presence of these uncommon forms.

The distributions of the more common forms differ in a number of ways from those of the four forms considered above. In the following section the distributions of the Drag. forms 15/17, 18, 27, 29, and 37 are examined. Forms 15/17, 18 and 29 are wholly first century and of South Gaulish manufacture (with the exception of the comparatively rare first century Central Gaulish products (see Note 5.1)). Forms 27 and 37 were, of course, produced in Central Gaul in the second century, but only SGSW examples are documented in the current analysis.

(vii) The Distribution of Dragendorff Form 15/17 (Figure 5.3).

This form is a platter with an internal quarter-round moulding at the junction of the floor and wall (Oswald & Pryce 1920, 173-80). This form was current until the end of the first century A.D., though it was less common in the Flavian period (*cf.* Webster, P. V. 1987, 17). (Note that in the listing and analysis presented here in Appendix 5.2, 15/17 and the rouletted version of the form, 15/17R, have been grouped together as the same form (*cf.* Hartley, B. R.

1969a, 243); in the Gazetteers the presence of 15/17R is usually specified separately. The same practice has been followed with the Drag. form 18 and the 18R).

Of the 62 sites in the study area at which SGSW forms have been documented form 15/17 is represented at 25 (Appendix 5.2), which is approx. 40% of sites. Eighteen of these sites are ones at which Roman military occupation is attested or highly probable. Five sites are native/civil and these range from the nucleated centres of Dragonby, SHU 1, and Stanwick, NYK 23, to the farmstead-enclosure site at Thorpe Thewles, CLV 4. The remaining sites, not allocated to either group, are Goldhill, NOTT 17, and Aldborough, NYK 1, at which early Roman military occupation is suspected but uncertain (*cf.* Breeze & Dobson 1985; Myres *et al.* 1959, 8-9).

The geographical spread seems fairly even and probably reflects the fact that though the form is less common during the Flavian period it is not rare. It is, for instance, well represented at the later Flavian sites of Newstead I (Oswald & Pryce 1920, 176-80) and Inchtuthill (Hartley, B. R. 1985). Finally, it may be noted that south of the Trent-Humber form 15/17 is documented at only one unequivocally native/civil site, namely Dragonby, SHU 1 (Appendix 5.2). The distribution of this form is further discussed below (5.2.6).

(viii) The Distribution of Dragendorff Form 18 (Figure 5.4).

This form is a platter with a slightly curved wall (Oswald & Pryce 1920, 181-3) and it was current until the end of the first century A.D. (Webster, P. V. 1987, 19); through the Flavian period this form became far more common than the 15/17. Geographically the incidence of form 18 is widespread across the research area. It is reported at all types of site. Of the 62 sites in the study area at which SGSW forms have been identified form 18 is represented at 40, that is 64.5% (Appendix 5.3). The contrast of this figure with that for 15/17 is of interest. It is not clear whether this difference is entirely a function of the declining ratio of 15/17 *vis-à-vis* form 18 during the later part of the first century. Of these 40 sites (again excluding Aldborough and Goldhill) 22 have Roman military associations whilst 16 are native/civil sites. These figures produce a ratio of 11:8 (22:16) for form 18 compared to approximately 7:2 (18:5) in the case of 15/17. This differential is of some interest, particularly bearing in mind that the two forms could be employed for like purposes. It is also demonstrated at the farmstead complex at Maxey (Pryor *et al.* 1985), on the southern margin of the study area, where parts of 9 vessels of form 18 were recovered but no examples of the 15/17 (Wild, F. 1985, 123). The pattern may indicate that the supply of samian or access to samian was more restricted in the pre-Flavian period than in the Flavian years (ie. restricted to the military and a few large nucleated centres) and/or it may point to a growing Romanization in the native population a generation after A.D. 43. In fact there is some support for this interpretation when the date of these documented items is considered (Appendix 5.3). Unfortunately many of the items are undated, however, it does seem to be the case that at the smaller native/civil sites the Drag. 18s present are of Neronian-early Flavian or Flavian date (eg. Melton Mowbray, Scalford Brook, LEI 19; Skeffington; Whitwell, LEI 26; Norton Disney, LIN 25; Sapperton, LIN 30; Staxton, NYK 24; and Thorpe Thewles, CLV 4). In this connection, however, it is important to recognize what was happening *vis-à-vis* the general pattern of supply to Britain. The evidence assembled by Marsh (1981) shows a dramatic peak in SGSW supply occurring in the first half of the Flavian period. It may be that the pattern evidenced by the incidence of these platter forms in the study area relates to the changing volume of supply to the new province.

(ix) The Distribution of Dragendorff Form 29 (Figure 5.7).

This form is the familiar mould-decorated carinated bowl (Oswald & Pryce 1920, 66-86) current through the middle decades of the first century A.D. until about A.D. 85 (eg. Webster, P. V. 1987, 31); the form is therefore a sensitive dating index. Form 29 is documented at 43 (69%) of the 62 sites in the study area at which SGSW forms have been positively identified (Appendix 5.6). This figure is higher than for the 'common' plain forms examined here, including Drag. 18. This high figure must be assisted by the erstwhile tendency for the reporting of decorated samian to be more common and detailed than for plain forms. Even so by this measure it cannot be said to be scarce. As with Drag. 18 the incidence of form 29 is widespread across the study area being present at all types of site (though absolute quantities vary considerably). Form 29 is present at every site associated with the Roman military in the area, at which significant excavation work has been undertaken.

It is curious that the form is present at 5 native/civil sites in North Humberside which seems high when compared with the figures for the other counties to the south which were incorporated into the Empire at least 25 years earlier: in Leicestershire Drag. 29 is documented at only 2 civil/native sites; in Lincolnshire at 4 civil/native sites; Nottinghamshire, 1; and South Humberside, 3. These North Humberside vessels are modest in number though: Redcliff, NHU 17, has yielded sherds of Tiberio-Claudian vessels and a sherd from a vessel dated as Claudio-Neronian; at Rudston, NHU 19, several Drag. 29s have been forthcoming and these are dated as early Flavian and Flavian; Faxfleet 'B', NHU 10, has produced one Drag. 29 which is dated as Neronian-early Flavian; Park Grange Farm, Woodmansey, NHU 28, has also produced only one vessel, this item dated as early Flavian; and, finally, the one vessel represented at Brantingham, NHU 2, is undated. Clearly these North Humberside vessels are, with the exception of the short lived site at Redcliff, not early arrivals but are of a date which coincides with the advent of the Roman army in East Yorkshire.

(x) The Distribution of Dragendorff Form 37 (Figure 5.8).

This form is the familiar mould-decorated hemispherical bowl (Oswald & Pryce 1920, 95-125) that dates from c. A.D. 70 and which by the early 80s had become more common than the Drag. 29 (Webster, P. V. 1987, 32-3). The form continued to be produced through the second century A.D. and into the third at locations in central and eastern Gaul; only SGSW items are considered here. As with the Drag. 29 this form is far from being rare within the study area. Like the Drag. 29 it too is well represented at Roman military sites in Yorkshire and Co. Durham, though it is also present at native/civilian and Roman military sites in the East Midlands. Drag. 37 is documented at 39 sites (Appendix 5.7) which compares with 43 sites in the case of the form 29. A total of 39 find-sites is a high figure especially given that the form made its debut c. A.D. 70. That these two decorated bowl forms have been documented from a comparable number of find-sites is interesting since both were in circulation in the region for c. 40 years: Drag. 29 was in circulation in the study area from around the time of the conquest in A.D. 43 to c. A.D. 85 and Drag. 37 (South Gaulish) was current between c. A.D.. 70 to c. A.D. 110.

5.2.5 Decorated South Gaulish Samian Ware in East Yorkshire (North Humberside).

As with form 29, South Gaulish form 37s appear to occur in East Yorkshire (North Humberside) at a relatively high number of native/civil sites. In fact they are present at six (though being represented by only 1 or 2 vessels in every case excepting that of Rudston, NHU 19). By comparison Drag. 37 is known from only 2 sites in Leicestershire which are not associated with the Roman military, whilst the totals for Lincolnshire, Nottinghamshire and South Humberside are 2, 0, and 2, respectively. As with the distribution of form Drag. 29 this pattern is not the result of differential research input on the part of the current author.

The phenomenon is further emphasized by the fact that it is apparently limited to decorated ware. This is clear from the fact that whilst all of the nine non-Roman military sites in North Humberside from which documented SGSW forms are known have produced sherds of decorated ware (Drag. 29 and/or 37) only two of these nine also have plain ware recorded; in other words seven sites have produced only decorated ware (albeit in modest quantity). The pattern appears to be supported by the evidence of the composition of the SGSW assemblage from Rudston, NHU 19. In his report Pengelly states that 13 decorated SGSW vessels are represented and that these out number plain SGSW vessels by more than 2 to 1 (1980, 37). This figure is surprising since the normal pattern might be expected to be a ratio of 3:1 or 4:1 in favour of plain ware (eg. the ratio for Hayton, NHU 14 (A), a site in the same area, is 3:1 in favour of plain SGSW).

The evidence to date from native/civil sites in East Yorkshire clearly suggests that there was a bias in exchange favouring decorated SGSW. This East Yorkshire pattern appears likely to be due to the nature of demand since the composition of samian assemblages from the military site at Hayton and sites in South Humberside and elsewhere indicate that it is unlikely to be a function of supply.

5.2.6 Some Comparative Analysis of the Form Distributions.

Some of the trends highlighted above (5.2.4 & 5.2.5) may be considered further.

(i) Plain Ware and Decorated Ware.

Appendices 5.2, 5.3 and 5.5 show that the three most common plain SGSW forms, namely Drag. 15/17, 18 and 27 occur at 24, 39 and 30 sites within the research area respectively. Whilst SGSW is recorded from 82 sites and find-spots in this area forms are documented from only 62 localities. Taking this latter figure it can be established that Drag. 15/17 is documented from 40% of the sites with known forms, Drag. 18 from 64.5% and Drag. 27 from 48% of these sites. Turning to the decorated forms Drag. 29 and Drag. 37, the former is present at 43 sites which is 69% and the latter at 39, 63%. As noted above the greater tendency for decorated ware to be reported may be of some significance in this connection but if so its influence will have been marginal not determining. The figures indicate that access to decorated ware was no more restricted than access to plain ware (indeed if anything they imply that decorated ware circulated more widely than did plain ware forms). This is significant in so far as it might be posited that decorated vessels were of greater prestige than plain ones (*cf.* Wild, F. 1985, 123). Comparative data from elsewhere in Britain would be of value in this connection, as indeed, would a collation of supply data in order to establish the scale of the supply of different forms. The latter could be employed to calibrate the significance of site finds.

(ii) Incidence by Form in the East Midlands.

The incidence of particular forms on sites associated with military occupation and at non-military sites in the southern half of the region, comprising the counties of Leicestershire, Lincolnshire and Nottinghamshire together with South Humberside is worthy of consideration. Drag. 29 is documented on ten sites with a military association and ten native/civil sites (ratio 1:1); Drag. 37 at 10 military, 6 non-military (5:3); Drag. 18 at 9 military, 11 non-military (ratio approx. 1:1); Drag. 27 at 8 military, 6 non-military (ratio 4:3) (see Note 5.4). These ratios form a consistent group, however, that for 15/17 appears anomalous since it is documented at 8 military sites, but only one non-military site (Dragonby, SHU 1). This absence of form 15/17 from non-military sites in the south is rather off-set by its presence north of the Humber at Redcliff, NHU 17, Rudston, NHU 19, Stanwick, NYK 23, and Thorpe Thewles, CLV 4, and this might be thought to negate any explanation for this pattern in terms of it being a form having a predominantly Roman military circulation. Bearing in mind that the 15/17 became progressively less common through the second half of the first century its conspicuous absence from non-military sites in the East Midlands might be explained by the possibility that samian was less desired and/or was less accessible to these sites in the Claudio-Neronian period but became more available later (5.2.4 (viii); Figures 5.12 - 5.21 appear to indicate likewise). An interesting alternative reading of the evidence is that it suggests that prior to c. A.D. 70 the ware may have been largely restricted to military circulation within the conquered area (ie. the East Midlands) but outside, in the native sphere, it was exchanged more freely.

(iii) Incidence by Form in the North of the Study Area.

The figures for the samian forms at military and native/civil sites in the study area north of the Humber-Trent correlate well as a group and contrast with the pattern of the East Midlands: Drag. 15/17 is documented at 10 military sites and 4 non-military (ratio 5:2); Drag. 18 is documented at 13 military and 5 non-military (ratio 5:2); Drag. 27, 9 and 3 (ratio 3:1). This is further evidence that the Roman military sites in the north-east were well supplied with SGSW, with it being present at only a small number of native sites. The configuration of the evidence with regard to native sites in this block north of the Humber and Trent hints that, with the exception of a small number of 'magnet' centres (Stanwick, Redcliff and Rudston) the indigenous exchange network was not articulated with the networks through which samian was distributed until a generation or more after incorporation into the Empire. As noted above (section (ii)), there are indications of a parallel (but chronologically earlier) scenario in the area south of the Humber-Trent.

(iv) Number of Forms Per Site.

Finally, considering the number of forms recorded per site (Figure 5.1) some overall patterns are evident. Ideally it would be of considerable interest to establish the mean number of forms present per period at each type of site: fortress, auxiliary fort, LPRIA centre, farmstead, etc. However, the data is not readily amenable to this purpose for a number of reasons, including the fact that the samples arise from differential input and reporting. What can be said is that large Romanized centres and fort sites, subject to extensive investigation, have yielded the widest ranges of SGSW forms. In addition all forts subjected to excavation (small scale trenching apart) have produced ranges of forms customarily in the order of 6 or more; these sites predominate in the bottom half of Figure 5.1. With only three exceptions the native/civil sites, without military connections, have six or less forms documented, and these sites dominant the upper half of Figure 5.1. The exceptions are the oppidum site at Stanwick (12 forms), Redcliff (8 forms) and Dragonby, the LPRIA complex which became a minor Roman settlement (11 forms) where a large area was excavated. It is of note that Thorpe Thewles, Catcote, Rudston, Norton Disney and Whitwell, sites which are, in terms of the character of their Iron Age-early Roman occupation broadly similar, each have 4 or 5 forms represented. What accounts for this pattern is a matter of considerable interest, for instance, whether it is a function of sample size, reflects status and/or a limited capacity to accrue samian.

For a considerable number of sites only 1, 2 or 3 forms are documented. Whether this is a "real" pattern is unclear since consideration shows that in the large majority of cases these low numbers may be the result of small scale archaeological input, selective or limited reporting and site chronology. The exception may be the North Humberside sites that have been subject to comparatively large scale investigation.

(v) Summary.

The following trends can be tentatively suggested from the above analysis:

A). Within the study area SGSW occurs principally at sites evidently associated with the Roman military as well as at other sites demonstrating a comparatively wide range of Roman material culture and a relatively high level of Romanization.

B). At sites which appear to be minor settlements and farmsteads SGSW is generally absent (eg. Hasholme Hall, NHU 13) or present in very small quantity (eg. Dalton Parlours, WYK 2).

C). Decorated samian ware, whether the earlier Drag. 29 or the later Drag. 37, does not appear to have been scarce within the study area in terms of the number of sites at which it occurs, nor, indeed, relative to plain ware.

D). Decorated ware is customarily found on Roman fort sites or sites associated with the military. In the case of the native/civil sites decorated ware is represented at all types of site including nucleated centres of Iron Age origin (eg. Ludford, LIN 21 and Stanwick), sites which became small towns (eg. Goadby Marwood, LEI 9), roadside settlements (eg. Sapperton, LIN 30), enclosure sites which became villas (eg. Mansfield Woodhouse, NOTT 23 and Winterton, SHU 11) and ((B) notwithstanding) minor nucleated sites and farmsteads (eg. North Cave, NHU 15 and Staxton, NYK 24). This is consistent with Millett's findings in the case of west and central Sussex (1980).

E). The evidence suggests that there might be sub-regional variations in the distribution of form types which are not entirely explained by the chronology of the Roman occupation; these may reflect differential access and/or the exercise of preference (*cf.* 5.2.6 (ii)).

F). The pattern of the distribution of samian forms can be interpreted as indicating a time-lag between conquest and the advent of samian on a range of native sites. (Millett's study of SGSW in west and central Sussex may have identified an analogous sequence since it demonstrated that whilst most sites at which SGSW was present had: "ample supplies" at only three were there: "more than two pre-Flavian types [ie. forms] represented" (1980, 62, Fig. 23b)).

G). Forts and sites associated with the Roman military invariably display a greater formal range than do native/civil sites (*cf.* Millett 1980, 65). This might well indicate that they were the principal 'entry point' of (Roman) material into the native/civilian system(s), though this should not be assumed.

(H). The general pattern of the type of site at which SGSW occurs in some range mirrors the impression of the distribution in the south-east of England (*cf.* Pollard 1988a, 36-7; Millett 1980).

5.2.7 The Distribution by Date.

The evidence of dated SGSW is presented in Appendices 5.11 to 5.20 and Figures 5.12 to 5.21. This information has been collected by the author largely from published or forthcoming specialist reports where dating is given (full listings per site are presented in the Gazetteers). As with the form evidence some qualifications may be stated: the information is qualitative not quantitative; it is derived from the work of a number of specialists and therefore datings and the use of chronological brackets may differ; the evidence has been extracted from piecemeal site specific reporting. Nevertheless, as with the evidence of the distribution of forms the sample is large enough to promote confidence in the patterns which it suggests.

The earliest SGSW in the study area is dated as Tiberian or Tiberio-Claudian and is plotted on Figure 5.12 (Appendix 5.11). Only four sites feature: Leicester, LEI 13, Stanwick, NYK 23, Old Winteringham, SHU 7, and Redcliff, NHU 17. None of these are surprises given the nature of their archaeology and known finds. Leicester appears to have been an important centre of the LPRIA and was clearly in receipt of Roman imports in the pre-conquest period (*cf.* Clay & Mellor 1985). At Old Winteringham pre-Roman activity may well have preceded the conquest period horizon there, but even if it did not, the occupation of Claudio-Neronian date (military or otherwise) is early enough to explain the presence of SGSW of this date. The native centre at Redcliff was certainly in receipt of quantities of Roman imports during the Claudian period, whilst Stanwick was also a recipient at this time or slightly later. (It might be expected that Dragonby, SHU 1, would have yielded early SGSW, however, only a limited amount of information regarding the date of the samian is available for this site).

The figures showing the incidence of SGSW dated as Claudian and Claudio-Neronian (Appendices 5.12 and 5.13, Figures 5.13 and 5.14) give a similar picture to the earlier distribution, but with the list supplemented by fort sites of the early conquest period, namely Great Casterton, LEI 10, Broxtowe, NOTT 6, East Bridgford, NOTT 10, and Osmanthorpe, NOTT 26. Dragonby appears as having Claudio-Neronian material, whilst Elslack, NYK 6, also has an item of similar date (*cf.* 5.2.3 (v) above).

More forts appear on the listing of SGSW dated as Neronian (Appendix 5.14, Figure 5.15) and hence of a total of 20 sites at which pre-Flavian material is documented 14 are sites with a Roman military connection, the remaining 6 being native/civil. However, that the list includes Binchester, DUR 1, which is conventionally ascribed a mid-Flavian foundation date, is a reminder that the dating of pottery types relates to the mean date of deposition for examples of the type based upon many examples; the few pre-Flavian sherds from Binchester are presumably from vessels which survived longer than normal. An alternative view though is that the site needs redating, that is dating earlier by 5 to 10 years. Quantified data for dated material might give a more accurate impression.

The incidence of SGSW dated as Neronian-early Flavian, early Flavian and Flavian is presented in Figures 5.17 to 5.19 (Appendices 5.16 to 18). When compared to the distributions of the earlier material these show both the movement of the Roman army into the north during the Flavian period (a geographically wider distribution) and the increased incidence of samian at native/civil sites, especially in the south of the study area, in the Flavian period, indicating a socially wider distribution *(cf.* 5.2.5). This latter pattern tallies with the evidence from south of the study area; the SGSW from excavations in the Milton Keynes area, for instance, is reported to be a: "basically Flavian collection" (Pengelly 1989, 147), whilst the Sussex evidence displays a similar widening in SGSW distribution in the Flavian period (Millett 1980).

Finally the incidence of late Flavian SGSW in the study area and of Flavian-Trajanic SGSW in the north of this area is presented in Figures 5.20 and 5.21 (Appendices 5.19 and 5.20) respectively.

5.2.8 The Evidence of the Quantified Assemblages.

(i) Introduction.

In the course of this research a number of stratified assemblages of the first century A.D. from within the study area have been quantified; many contained some SGSW. The quantified figures for fourteen assemblages are presented in Tables 5.1 to 5.3. All of the phases and groups itemized in these tables bar one are dated to the first century A.D. and could have received SGSW. Eleven assemblages had SGSW present in one or more of their phases or groups; three, however, contained no SGSW. Groups from Binchester 1975-80, DUR 1 (C), which were quantified, are not included in this list because the samian had evidently been separated from the rest of the pottery and it was not possible to examine and quantify this element. Assemblages found to contain no SGSW are discussed prior to examining assemblages amongst which it is present.

(ii) The Absence of SGSW from Three Quantified Assemblages.

The three samples with no SGSW were from: Ancaster, the site of the LPRIA occupation and conquest period fort, LIN 1 (D); Old Sleaford, the Old Place 1984-5, LIN 26 (C), and Thorpe 1963, NOTT 32 (F). Pottery from a considerable number of early contexts at

Ancaster was quantified (total amount quantified: 11.2kg, 1072 sherds, 3.82 RE; *cf.* Table 9.1). The groups covered a lengthy sequence of activity including the earliest (ie. late Iron Age) features which were cut by the ditches of the conquest period fort (*cf.* 9.2). No SGSW was present and groups were found to comprise largely of Iron Age tradition pottery (*cf.* Chapter 9). Given the overall unromanized nature of the groups the absence of SGSW is not entirely surprising (see Note 5.5).

A similar situation exists in the case of the assemblage from trenches cut in the vicinity of Old Place, Old Sleaford in 1984-5. Here four sequences of deposits dating from the late Iron Age through the Roman period had been excavated (Simmons forthcoming, B). An extensive number of groups of approximately first century A.D. date were examined and quantified by the author but no SGSW was present (amount quantified, excluding Unit 9: 45.8kg, 2354 sherds, 22.61 RE; *cf.* Table 9.1). As with the Ancaster assemblage a few sherds of samian were noticed to be present in bags relating to contexts later in the sequence, so it had evidently not been removed.

In the case of the Ancaster sample a general absence of Roman imported wares is evident (*cf.* sections 9.2 -9.5). The contention that Ancaster was a major centre in the late Iron Age (*cf.* May 1984) is not yet proven (the most important excavations at the site in this connection have remained unpublished), and hence it may well be that, in actuality, the site did not have much of a 'pull' within the exchange system.

At Old Sleaford, LIN 26 (C), the general absence of Roman imported wares may well be due to an 'accident' of trench location, for though features and deposits of the later Iron Age were encountered curiously little stratigraphy specifically datable to the middle and later first century was encountered. In contrast to the material arising from Margaret Jones' work at locations close by, LIN 26 (B), the context of which was largely unrecorded, very little Gallo-Belgic or early Roman pottery was present amongst the 1984-5 assemblage. Whether this virtual absence of SGSW from the 1984-5 assemblage is a reliable pointer for the site as a whole is, however, unclear since the assemblage from the 1960-4 work, LIN 26 (B), is unpublished, and whilst the current author has seen much of it knowledge of any samian recovered remains obscure.

Finally the absence of SGSW from the quantified group from a sleeper beam trench at Thorpe, NOTT 32 (F), context 55, may be considered (quantified totals: 3.3kg, 81 sherds, 6.18 RE; *cf.* Table 9.1). This absence may not be unrelated to the unusual composition of this group which mostly comprises of sherds from a small number of vessels which do not appear to be normal rubbish.

The apparent absence of SGSW from these samples has to be evaluated in terms of the general pattern of the incidence of samian ware in the region during this period. The quantitative evidence presented below (*cf.* Table 5.1) shows that even when SGSW is present in groups it forms only a very small proportion of the group. Indeed the quantities present are 'marginal': it would only need a few sherds to be absent for the whole fabric to appear absent. However, this having been recognized it is the case that most of the groups in the quantified sample contain SGSW, albeit in tiny quantity. This being so its absence from the large samples from Ancaster and Old Sleaford is noteworthy (for further discussion see Chapter 9).

(iii) Assemblages with SGSW: The Quantitative Evidence.

The eleven remaining quantified assemblages containing SGSW derive from seven sites; these are specified in Table 5.1 where the data are presented. The pottery comprising these assemblages was quantified by the author mainly at the level of individual contexts and this data has been combined to give figures for site phases and feature/deposit groups. Table 5.1 presents the percentage of each phase or group which SGSW comprises on the basis of weight, count and RE. Priority attention should be paid to the figures for weight, since count, whilst being a useful index can be effected by a number of secondary variables, such as breakage rates, etc.; similarly the value of the information conveyed by the RE figures is, in this instance, doubtful since the sample sizes are small (eg. the presence of one rim sherd or a small number of rims could skew the figures). Nonetheless, it can be observed that there is a fair degree of correlation between the results of these three measures. This is not in terms of the absolute percentage figures they produce. These show that in every case quantification by sherd count gives a higher percentage figure for presence than does quantification by weight, and this is illustrated clearly in Figure 5.22; this difference is probably explained by the relative fineness of this pottery, and recovery bias in so far as small flakes and fragments of oxidized red ware, perhaps with a shiny surface, are much more likely to catch the eye of the excavator than are equally small fragments of unoxidized, dark wares; in addition, since it is considered important even tiny fragments are usually carefully curated by diggers and others. Rather, correlation lies in the fact that although both the quantities and percentages of SGSW are small there is a clear tendency for it to be present rather than absent, and in the broad pattern that the weight, count and, to a lesser extent, RE data suggest: whilst the difference between the weight and count percentages is clearly not proportional the out-come of ranking the units produces results which are not wildly dissimilar as Tables 5.2 and 5.3 demonstrate; this occurs despite the fact that the SGSW samples are small.

The most striking feature of the data, however, is the consistently low percentage of assemblages represented by SGSW. Of the 29 phase and feature groups containing SGSW the highest percentages by weight are 6.59% and 6.55%, both from Stanwick, NYK 23. The lowest are 0.007 and 0.003 (from two ditches at Dragonby, SHU 1). That the percentages are low is verified by the mean weight. If the Ancaster, Old Sleaford and Thorpe groups are included in the equation, the mean percentage for SGSW by weight is 1.03%; (if only those groups containing SGSW are taken as the sample the mean is 1.52%). The percentages generated by sherd count and RE (which, as noted, should in this case, be regarded as less reliable indices than weight) similarly indicate that SGSW generally forms a very small proportion of first century groups. Regarding count, Stanwick apart, only two groups give a percentage in double figures. This situation is mirrored by the RE data, by which SGSW totals double figures in only three instances, with the highest total being 15.04%. These figures are all the more remarkable bearing in mind that the samples analysed are in most cases from sites which are customarily taken to be the most Romanized sites within the study area during the first century.

These figures provide an objective perspective from which to evaluate both the quantitative and qualitative evidence. They also serve as something of a caution, for, bearing in mind the importance that is commonly attached to samian evidence as a means of dating and for site characterization, it is remarkable that, at this relatively advanced state of our knowledge we remain so dependent upon what is a comparatively rare item.

Comparable analyses to the one undertaken here (including site reports) in which the SGSW percentage of an assemblage has been established are rare (*cf.* Millett 1980, 61; Fulford & Huddleston 1991, 38). This is particularly true for the region under study here. However, as regards comparative material a number of sources of evidence, both inside and outside the region can be set alongside this collected evidence, and a number of observations made. These assist in locating the pattern of these East Midlands and north-eastern sites within a broader context.

A primary observation is that the evidence of the quantified sample (Table 5.1) is internally consistent. The relatively high percentages at Stanwick and low percentages at Dragonby are of considerable interest but they may legitimately be characterized as lying towards the edge of the range rather than being outliers (see Figures 5.22 to 5.24).

SGSW from three other sites within the study area, not included in Table 5.1 may be briefly considered here. At Thorpe Thewles, CLV 4, in the Tees lowlands, a very small quantity of SGSW (11 grams) was present in Phase III, a period which continues into the second century. This SGSW comprised 3%, by weight, of the Roman pottery from this phase (Millett 1987, Table 12) and approximately 0.9% of the total phase composition when Iron Age tradition pottery is included. Bearing in mind that these figures must be depressed by the continuation of the phase into the second century (which is the reason for its exclusion from Table 5.1), the percentage evidently conforms to the general pattern. The dissimilarity between the evidence from Thorpe Thewles and that from Stanwick, which also lies in the Tees lowlands, is noteworthy; the mean percentage by weight for SGSW from the Tofts, Stanwick, is comparatively high at 2.78%; (1981-9 area only: 3.28%).

At Blake St, York, NYK 28 (Q), excavations within the area of the Legionary fortress produced stratigraphy assignable to two early phases: Period 1 was dated: "soon after A.D. 71"; Period 2 was dated c. A.D. 71/79 - c. A.D. 100 (Monaghan forthcoming). SGSW forms 5.61% by weight and 4.81% by EVE of the assemblage from Period 1 and 16.42% by weight and 31.10% by EVE of the assemblage from Period 2. The latter figures would be highly conspicuous when set against those of the sample quantified by the current author and hence require explanation. A reasonable interpretation of this abnormal representation has, however, been forwarded. The nature of the SGSW component of the assemblage is telling: there is a high proportion of decorated ware as against plain ware; many of the vessels represented, though broken into many sherds, are more than half complete when reconstructed; and, moreover, the vessels appear unworn (Dickinson & Hartley, B. R. forthcoming). Dickinson and Hartley concluded that: "we are dealing with a consignment of pottery damaged in transit, in unloading or in a store or perhaps thrown away during rebuilding" (forthcoming). The date of the vessels and the presence of adjoining sherds in Period 1 contexts show that the original deposition must have occurred during Period 1, yet much of this pottery came from deposits of Periods 2 and 4. The explanation for this must lie in the re-working of Period 1 deposits, this being a common archaeological phenomenon (*cf.* Chapter 2.5.2 (iii); Casey 1986, 74-6). Whilst these York figures can be explained to some satisfaction and the material record interpreted to illustrate an 'event' this is unfortunate for the purposes of the current analysis since it means that these data cannot justifiably be used for comparative purposes, arising as it does from an extraordinary occurrence (*cf.* discussion under 9.7).

The third site within the study area not appearing on Table 5.1, but considered here is that of Great Casterton, LEI 10. Two successive forts were located here, dating from the Claudian period through to (it is presumed) the early Flavian period. The forts were probably garrisoned by auxiliary units (*cf.* Todd (Ed.) 1968, 36-7). No quantification of the pottery from this site has been published nor has such data been collected by the current author. However, it is pertinent to note Todd's comment that: " samian ware was comparatively scarce" (1968, 42). Only 35 sherds of SGSW were recovered during the three seasons of trial trench excavation there. This suggests that SGSW may well comprise about the same proportion of the excavated assemblage here as that established as typical for the region by the quantified sample.

Outside the study area a similar pattern *vis-à-vis* the relative quantities of SGSW present in assemblages of this period is apparent. Pollard's study of assemblages in Kent established a figure for the SGSW component of groups in the order of 1% (pers. comm. R. Pollard 17.1.92). At Chelmsford the earliest phase of occupation identified in the south-eastern sector dated to c. A.D. 60-80, which should cover the Neronian military foundation and the earliest post-military occupation. The SGSW component for this phase was 1.42% by EVE of the total assemblage composition (Going 1987, Table 9). Going points to the lack of early imported fine ware at the site generally during this period when compared to the site of the Legionary fortress at Usk (and, it might be added, Kingsholm (Hurst 1985)), and he states that this: "may be a reflection of the small size and comparatively low status of the Chelmsford [auxiliary] garrison" (1987, 108). However, as regards SGSW the early Chelmsford sample is in accord with the pattern for 'receiving sites' within the current study area, and, indeed, the evidence from Kent. It appears that during the period under study here sites which have low SGSW percentages are not exceptional; rather it is when percentages (by weight or EVE) reach c. 3% and above that they are conspicuous.

The assemblages and groups comprising the quantified sample may now be considered on a site by site basis. As Tables 5.1, 5.2 and 5.3 make plain a number of assemblages display considerable internal variation, with fluctuations between phase/group percentages.

Two Leicester assemblages were quantified by the author: those arising from the Bath Lane 1968 excavations, LEI 13 (AW) and the investigative work following the lifting of the Blackfriars mosaic in 1977, LEI 13 (BE). At both sites the first four phases lie within the first century A.D. excepting both phases 4 which perhaps continue into the early second century. Both sites are located on the east bank of the Soar on the western side of the area occupied during the Roman period; this is also the area associated with late La Tène pottery and Roman imported finds of Augustan and Tiberian date. These latter finds are believed to indicate LPRIA occupation. Typical of many sites in Leicester both excavations were of necessity undertaken within small and restricted areas.

At Bath Lane the earliest phase, which was characterized by pits and post-holes and assigned a *terminus post quem* (*tpq*) of c. A.D. 50/60 by its excavator, yielded no SGSW (though small quantities of Roman imported pottery, including Terra Nigra, flagon and 'white ware' were present). Mellor reports that the composition of the pottery assemblage of this phase was: "reminiscent of the earliest occupation on the Jewry Wall site" (Clay & Mellor 1985, 2). This is an interesting observation, not least because it again raises questions about the dating of the early Jewry Wall assemblage (*cf.* Jarvis 1986), moreover, the comment is germane with regard to the absence of any samian from Bath Lane phase 1, since Kenyon states in her report on the Jewry Wall excavations that: "In the early group of pits ... there is only one samian sherd" (1948, 124). Hence there is a highly noteworthy parallel in this respect.

The situation in phase 2 though is somewhat different. The archaeology of this phase comprised short lengths of two ditches and a large sunken hearth or kiln; it had a late Neronian-early Flavian *TPQ*. Four sherds of SGSW weighing 101g were recovered. However, because this phase was of modest size these figures mean that during this period SGSW forms 5.6% of the assemblage by weight, 6.25% by sherd count. These are high figures (as Tables 5.2 & 5.3 confirm). A total of 5.66% by weight means that Bath Lane phase 2 has the third highest samian component of the units of the quantified sample with only two units from Stanwick, NYK 23, being larger. Whilst the fact that the SGSW comprises of only 4 sherds must inform any evaluation, nevertheless both percentages, being calibrations, indicate a comparatively high incidence of samian.

Phase 3 was manifest in a series of slots, apparently for timber buildings and a number of layers. Six sherds of SGSW were recovered weighing 37g, these comprised 2.66% and 1.32% respectively of the pottery from this phase, in other words, significantly less than in phase 2. Regarding the samian Mellor states that it: "still forms a remarkably small percentage of the group" (Clay & Mellor 1985, 9). However, though the actual quantities are numerically small set against the evidence of the quantified sample from the study area, with its mean of 1.52% by weight these Leicester units are relatively well provided with samian in the case of phase 2 and just below the mean in the case of phase 3. One of the attractions of establishing the mean for a wide ranging sample is that this can then be used as an objective measure for assessing whether component percentages are indeed high or low, as well as for the evaluation of impressionistic statements such as Mellor's.

Only one sherd was recovered from phase 4 at Bath Lane. This means that for this late first century - early second century phase SGSW comprised only 0.10% of the assemblage by weight. The overall pattern, as suggested in Table 5.1 is that at Bath Lane samian, following its advent in phase 2, actually decreases as a proportion of phase groups through the later first century.

The quantity of sigillata from the first four phases at Blackfriars 1977, LEI 13 (BE) is also, numerically small, comprising a total of 13 SGSW sherds plus two sherds of Arretine. The earliest features here, of phase 1, comprise two gullies together with post holes and pits. The finds indicate a pre-conquest date for this phase and Clay suggests a pre c. A.D. 40 date (Clay & Mellor 1985, 23). Two sherds of Arretine ware were recovered and eight sherds of SGSW. However, this material combined amounts to only 0.34% of the assemblage by weight (1.53% by count). The weight percentage through the next two phases, dated c. A.D. 40-55 and c. A.D. 55-65 remains closely similar (Tables 5.1 and 5.2), though only 1 sherd came from phase 2 and only 4 from phase 3. Phase 4 produced no samian.

As is the case with Redcliff, NHU 17 and (evidently) Old Sleaford, LIN 26, the pre-conquest status of Leicester is not emphatically apparent in the samian which its early layers have produced. Additionally a possible military presence at Leicester during the years c. A.D. 43-65 is not reflected in the samian evidence from Blackfriars 1977, and may not be by the phase 2 material at Bath Lane. Phase 4 at Blackfriars 1977 dates to the same period as phase 4 at Bath Lane 1968, that is the later decades of the first century and the early second century, yet between them they yielded only 1 sherd of SGSW. This is particularly interesting since the status of Leicester during this period is far from clear (*cf.* Wacher 1976, 336). It will be important to compare these apparent trends with the samian evidence from the sites to be published in the 'West Leicester' report (Clay forthcoming).

The pattern of the SGSW evidence from the unpublished excavations at East Bight, Lincoln, LIN 17 (V) can be summarized succinctly. In this work the Legionary rampart and associated buildings were sampled and contexts of Neronian and Flavian date were quantified by the current author. Both weight and count percentages display a general rise through the groups 1, 2/3, 4 and 5 (which are chronological) though the individual steps of each rise are almost infinitesimal (*cf.* Table 5.1), a reflection of the fact that the quantities present are tiny: Group 1 comprises 3 sherds, Groups 2 and 3 combined comprise 2 sherds, Group 4, 1 sherd and Group 5, 2 sherds. Compared with this the 47 sherds from the Groups 6 and 7 combined are conspicuous, especially since they translate into figures of 4.94% of the unit by weight and 12.63% by count. Not surprisingly these figures place this group high in Tables 5.2 and 5.3 and Figures 5.22 to 5.24. Groups 6 and 7 date to the end of the first and beginning of the second centuries A.D. and comprise the earliest deposits overlying the Legionary occupation. This is the time when Lincoln ceased to be a fortress and when the *colonia* was founded (see Gazetteer entry). The comparatively high percentage of samian present might therefore represent kit-bag or stock-room clearance as the soldiers left (as with the Inchtuthill gutter group (Hartley, B. R. 1985, 316)); alternatively it might reflect enhanced and invigorated exchange connections arising from the newly acquired civil status.

Table 5.1 also includes a pit group from Lincoln, context 45, from the unpublished excavations at The Lawn, (1986), LIN 17 (W). The site lies outside the fortress on its western side and context 45 is of Legionary date. Only one SGSW sherd was present amongst a group comprising over 200 sherds (0.07% of the group by weight). Hence as with Groups 1, 2/3, 4 and 5 from East Bight SGSW here comprised significantly less than the means of 1.52% by weight, 3.07% by count established for the research area as a whole by the quantified sample. This seems surprising for a site of this type. The evidence of other samples from the city must be evaluated in order to establish firmly whether this is actually a genuine pattern at Lincoln.

The relative paucity of SGSW apparent at Lincoln during these military years might explain the not uncommon presence in early deposits at the site of a range of distinctive fine table ware vessels which have a light red-brown slip coating (Darling 1981). Darling states that amongst the formal repertoire of this ware: "imitations of samian forms are relatively common" (1981, 400); forms copied include the Drag. forms 15/17 and 18. These vessels are known only at Lincoln so it may be that a potter(s) based at Lincoln was catering for a short fall in the supply of SGSW; alternatively their output may have actively deterred the supply of SGSW to Lincoln. This case demonstrates the desirability of evaluating the SGSW in relation to other fine wares that may be present in a group and to establish in particular what proportion of the fine ware element it comprises (*cf.* 5.3.6 (v); 5.4.4 (ii)).

At Dragonby, SHU 1 (C), huge samples from five ditch sections were quantified by the author (Table 5.1, FNs 1477 to 2100) together with the fill of a penannular gully (Table 5.1 FN 317). These deposits span the first century A.D. Only three of the ditches, however, contained samian and even in these cases it is on the border of absence: FN 1682 produced 4 sherds, FN 2086 and FN 2100 2 sherds each. Since the samples were very large this means that the SGSW component of FN 1682 comprised 0.39% of that unit by weight, and with FN 2086 and FN 2100 SGSW constituted a mere 0.007% and 0.003% respectively. Not surprisingly these two features rank the lowest on Tables 5.2 and 5.3 (reproduced as Figures 5.23 and 5.24). These are not the proportions one might have imagined from an apparently major nucleated site often equated with the oppida of southern Britain (eg. May 1984; Millett 1990, Table 2.4, Fig. 6) and contrast with the picture at Stanwick, NYK 23. However, the figures do bear comparison (*cf.* Table 5.1) with the evidence from Old Sleaford, LIN 26, and, indeed, Redcliff, NHU 17 (though Dragonby lacks the quantities of Gallo-Belgic pottery that these two sites produced (*cf.* 5.3.6) and its mid first century A.D. assemblage is far less Roman).

Three stratified samples from Stead's excavations at Old Winteringham, SHU 7 (A), just north of Dragonby, were quantified by the current author. Group AA constituted the pottery from sectioning the fill of a substantial ditch (the so-called 'central ditch') in the north-west corner of the excavated area. This context was dated as Claudio-Neronian and the pottery recovered taken by the excavator to be the earliest group of substance encountered during the work (Stead 1976, 305 & Fig.4). Group AB comprised the pottery from the upper filing of this feature which was dated as Neronian. Group AX is a combined sample of the pottery from the early features and layers below 'Building II' (1976, 306, Fig.12). These Group AX deposits were, apparently, not fully excavated and are dealt with in rather a sweeping fashion in the report. This is unfortunate given the early date ascribed to this group of A.D. 50-80 (Stead 1976, 17).

Quantification revealed these groups to contain, collectively, only twelve small sherds of SGSW weighing 32g. Group AA contained only three sherds weighing 4g which means that SGSW comprised only 0.08% of the group by weight, 1.9% by count (Table 5.1). Group AX contained only 1 SGSW sherd weighing 1 gram: 0.02% of the group by weight. Amongst the Group AB SGSW comprises a contrastingly larger proportion of the group. This context though comprised only 50 sherds of which eight were SGSW weighing 27g. The samian formed 2.15% of the group by weight and 16% by count. The interpretation of these high figures is uncertain, but they may express a chronological trend. Generally the proportions are low and less than might be expected of a fort or military supply base as the site has been presumed to be (Stead 1976, 18; Creighton 1990). Whatever the identity of the site at this time its finds assemblage (see Gazetteer entry) indicates that it was one of some importance. That the relative frequency of SGSW is low may suggest something about the site's status and exchange connections, or reflect a general pattern in the availability of SGSW. However, we need to know much more about Old Winteringham, especially the nature of its first century A.D. occupation, before we can evaluate this samian evidence in context. At present it is unclear quite what these three Groups represent in terms of the geography of the site (ie. are they to be associated with a fort, a supply depot, an annex, a *canabae*, or a wholly civilian settlement, or a combination of these).

The sample from the Flavian fort at Hayton, NHU 14 (A) comes from deposits associated with a barrack block in the north corner of the fort, the area designated S (plus a part of N). The sample contained eight SGSW sherds weighing 40g. These quantities represent 0.37% of the sample by weight and 1.68% by sherd count. This is interesting because these figures parallel those of the groups of approximately similar date in the Lincoln sample, though on conventional thinking the Hayton garrison would be auxiliary troops. This raises the question as to whether garrison type has an impact upon assemblage composition (*cf.* Chapter 9).

Finally at Stanwick, NYK 23, work at a number of locations has yielded SGSW. Amongst all of the large excavated assemblages (which have been quantified by the current author) it is present in quantity. These are Wheeler's sites A and F (see Gazetteer entry) and the 1981-9 area excavation in the Tofts field. Site A produced 14 sherds weighing 35g, that is 0.51% of the assemblage by weight, 2.58% by count. This assemblage was proportionally less Roman than that at F in terms of total group composition (*cf.* 9.5 and Figures 9.6 & 9.7). Site F produced more samian. The site F assemblage may be divided into the pottery from the sealed features and that from the 'sealing' layers/topsoil. SGSW from the features comprised 0.69% of the pottery from that unit by weight and 6.66% by sherd count, whilst amongst the layers the figures are 1.41% and 6.93% respectively. These are comparatively high percentages (*cf.* Table 5.1) and are not inconsistent with the evidence from the 1981-9 work. It is interesting to note that in Table 5.3 these two units from Site F occupy adjacent positions and close positions on Table 5.2. This might be read as indicating that the assemblage from the layers is a reliable index of the well stratified material in the features and that the pottery from the layers is a sub-set of that in the features; however, detailed study of the two groups by the current author suggests that such a conclusion would be mistaken.

The phase groups generated by the 1981-9 excavations in the Tofts, NYK 23 (B), contained varying proportions of samian (Table 5.1). The variations are wide with three groups registering very high proportions of SGSW by weight, three in which it is low or absent and one 'middling'. These do not follow site chronology and are most unlikely to reflect changes in supply. Rather it is possible that the fluctuations relate to the nature of the stratigraphy representing these phases. Further work needs to be conducted to establish whether this is the case. Evidence suggesting that the nature of the stratigraphy might be the cause of variation comes from the fact that the stratified deposits of the area of the oval enclosure sampled in 1988-9 were devoid of samian ware (specified as NYK 23 (B) 'Independent' in Table 5.1). This was despite a proportion of them being of an appropriate date to include this material; and indeed, in spite (or perhaps because ?) of the fact that the enclosure appears to have been an area of high status occupation (*cf.* Haselgrove *et al.* 1990).

These variations apart the quantified figures show the Tofts site to be rich in samian. Two Stanwick groups are first and second in rank in Table 5.2, having the highest percentages of SGSW present (by weight) of the quantified sample. In fact the site (specifically the 1981-9 area) has four of the top six positions in this table. The mean for the 1981-9 site, including the two groups with low proportions and the group with no SGSW present (see above) is still 3.28% (by weight) compared to the mean for the whole sample of 1.52% (ie. it is higher by more than a factor of x2). It should be stressed that the absolute quantities forming the samples are comparatively high: the SGSW percentages are not high because other pottery is scarce at this site. That SGSW constitutes a relatively high percentage of the pottery from the Tofts is consistent with the exceptional nature of the site and the composition of its finds assemblage as a whole (*cf.* further discussion in Chapter 9).

5.2.9 The Density of South Gaulish Samian Ware Distribution.

Finally it is not without significance that the density of find-spots within the research area appears remarkably even when all of these are plotted (Figure 5.2). This is despite the contrasting experiences of the regions either side of the Humber-Trent, and indeed of East Yorkshire. A number of differing variables undoubtedly combine to produce this picture. However, the apparent evenness of the distribution conceals the fact that most of the find sites north of the Humber-Trent are fort sites though this is not the case south of that line. In the northern area the 'evenness' is strongly related to the nature of military deployment, specifically the regular placement of forts (*cf.* Breeze & Dobson 1985). It is entirely possible that the pattern is influenced by the bias in excavations towards investigating military sites (*cf.* 5.2.3 (i)). The absence of early samian find-spots in north-east Yorkshire is noteworthy. Admittedly this area has received less of the current author's attention than have other parts of the study area; even so it is probable that the apparent pattern is reliable.

In the southern half of the area military sites are less prolific and there are more native/civil find-sites. The density and 'evenness' of find-sites across the area is confirmed by Figure 5.1 and Appendix 5.1. The level of density here is consonant with that for west and central Sussex mapped by Millett (1980, Fig.23) where ten SGSW find-sites were plotted and it is likely that both areas have received comparable levels of investigation. As with the quantitative evidence considered above this suggests the possibility of some common patterning in the distribution of samian ware in Britain during the first century A.D.

The most remarkable aspect of the distribution, which emerges clearly and consistently from the data, is that SGSW is widespread but thinly spread across the region. The quantitative evidence shows that SGSW is comparatively rare at all types of site. This pattern is probably not what would have been predicted on an intuitive basis and is not easily explained. The incidence of the other fine ware types examined in this chapter, for instance, is markedly different. As has been demonstrated above, within this general pattern differences are discernible. Whilst it has been found to be present at all forts and settlements where there is other significant evidence of Romanization it is not consistently present at sites at the bottom of the settlement hierarchy, such as farmsteads, rural enclosure sites, etc. (*cf.* 5.2.3 (i)).

The general infrequency of this pottery means that samples have to be fairly large before this material might be expected to be present, let alone occur as a diagnostic sherd. On the basis of sherd count for instance SGSW on average, forms only c. 3% of the groups in the quantified sample from the study area (Table 5.3); this gives a ratio of one sherd of SGSW for every 33 sherds recovered (and of course this sample includes some of the most Romanized early assemblages in the area). On the basis of current evidence from Leicestershire Pollard has estimated that at rural sites in that county, occupied during the period c. A.D. 40 to 110 and at which SGSW is present, samples of less than 100 sherds are unlikely to include SGSW sherds; samples of 150 sherds or more yield a better chance of representation (pers. comm. R. Pollard 17.1.92). An important corollary of this comparative rarity of SGSW is that if, indeed, the ware was particularly prized its sustained rarity through the period examined here will presumably have contributed to the maintenance of this status.

In contrast, the distribution of Central Gaulish Samian in the second century appears to have been both geographically and socially wider than SGSW, despite the probability that less of it crossed the channel (*cf.* Marsh 1981). (Millett publishes a map of the distribution of samian ware in central southern England which may be indicative of this trend (1990, Fig. 54), though one would need to know more about the date of this material and indeed, the nature of the data).

5.3 THE DISTRIBUTION OF GALLO-BELGIC POTTERY.

5.3.1 Introduction.

During the first century A.D., and in particular the period c. A.D. 20 - 70, a range of related fine ware pottery types principally (but not exclusively) from Gallia Belgica were imported into Britain. This pottery is known as Terra Nigra (TN) and Terra Rubra (TR) on the basis of its appearance, though it is distinguished by a number of criteria (*cf.* Hawkes & Hull 1947, 204; Laing 1966; Rigby 1973a, 11; Timby 1982, 20-2). By convention the range also includes other wares such as the butt beaker type Cam. 113 (Hawkes & Hull 1947, 238-9). A number of other vessel types not actually of Gallo-Belgic manufacture are conventionally classified with this pottery on the basis of typological affinity, complementary and overlapping chronology, and for historical reasons. These are the characteristically similar types originating from elsewhere in Gaul during the Augustan period, which customarily display a distinct micaceous fabric (*cf.* Rigby & Freestone 1986); Cam. forms 1 and 51, for instance, are known to appear in this fabric. Generally the types of this category are distinguished by their fabrics, finishing and forms. Gallo-Belgic wares are not uncommon site finds, though their distribution is particularly concentrated in the south-east of Britain (eg. Timby 1987a).

It should be clarified at the outset that Gallo-Belgic vessels were not the output of a single industry employing an invariable fabric and tight formal repertoire, rather they must be viewed as the products of a fairly long lived genre or tradition spread across a region with only a selected range of the forms produced actually crossing the channel, and these only for a limited period. There are variations both between and within the fabrics in which TN, TR and the Cam. 113, etc. occur (Stead & Rigby 1989, 117-27; Darvill & Timby 1982, 80-4). These variations have often not been recognized or have been under-stated despite the fact that they are often macroscopically detectable. They arise from the fact that production was located over a wide area and covered a long time period. Generally fabric variations are of degree rather than kind and fabrics appear broadly consistent.

The excavations at Camulodunum in the 1930s produced the largest excavated sample of Gallo-Belgic and related pottery. The classification and publication of this material established an enduring typology and work of reference (Hawkes & Hull 1947). Subsequently most groups of similar pottery from Britain have been classified using the Camulodunum typology. Works of synthesis have likewise followed the Hawkes and Hull typology (eg. Laing 1966; Timby 1982). Occasionally, site specific type-series have been produced though these too have been related to the Camulodunum types (eg. Rigby 1981; Symonds & Wade forthcoming). In this thesis the Camulodunum typology is followed, supplemented by reference to other publications (eg. Rigby 1973a). Minor variations in form have frequently been encountered in the course of this research but when items can be recognized as belonging to a basic Camulodunum class they have been allocated to it for ease of synthesis.

TN in Britain occurs principally in platter, cup and bowl forms. Examples of all of these classes are represented in the study area and their incidence is documented below. Beakers, such as the Cam. form type 120, and other closed forms, such as jars and flagons, in TN type fabric(s) are known from Britain and abroad (*cf.* Greene 1979, 108; see Note 5.6). Examples of these types have been recorded from the study area but are not considered in detail here (see Note 5.7).

TR in Britain occurs in platter, cup and bowl forms and, in contrast to TN, it is also known in a wide range of beaker forms. Again examples of all of these classes are recorded in the study area. Different types of TR have been distinguished and were classified in the Camulodunum report largely on the basis of slipping (Hawkes & Hull 1947, 204). Division on the lines established in that publication has continued to be customary practice (eg. Rigby 1981). The incidence of TR in the study area is examined by form and fabric below.

As with SGSW, Gallo-Belgic pottery in Britain is a sensitive dating index. The normal date ranges of the specific forms and fabrics have been established through protracted study though refinement of their chronology continues (*cf.* Timby 1982). The quality of this pottery and the fact that like samian it too was seemingly intended for use in social milieux suggests that it may reasonably be regarded as indicative of the status of sites (*cf.* Perrin 1988, 123).

In the following sections the incidence of Gallo-Belgic pottery across the study area and its relative frequency within assemblages is outlined and discussed. Of no little interest is the way in which the pattern of this distribution contrasts with that of the SGSW.

5.3.2 The Nature of the Evidence.

(i) Introduction.

Variables that may influence the nature and composition of archaeological samples have been outlined comprehensively above (*cf.* 2.2 & 5.2.3) and these, in varying combination and degree, will have shaped the character of the material under consideration here. Several additional factors may have been influential in the case of the Gallo-Belgic wares.

(ii) Recognition and Reporting.

It is relevant to note that TN, TR and Cam. 113 are less likely to have been recognized and reported than is the case with SGSW. Samian pottery is easily identified and widely known; conventionally it is considered to be significant and hence is more likely to be published. This is a bias which impinges upon all non-samian pottery. Awareness of this factor is important since it may mean that, for instance, any sherds of Gallo-Belgic pottery present amongst surface collected assemblages, such as those documented in EMAB and LHA would be less likely to have been reported. Similarly, this reporting problem extends to the publication of excavated assemblages. In his report upon the pottery from excavations at East Bridgford (Margidunum), NOTT 10 (B), Todd, for example, illustrates parts of two platters which may, given the nature of their extant profiles and the brief descriptions presented, be examples of TN (Todd 1970a, Fig.13 Nos 2 & 4). It is not stated in the text whether these items are or are not TN, but both might well be. Similar cases may be cited (eg. a vessel from Whitwell, LEI 26, published by de Bethune (1981, 28, Fig.14 No.21)).

(iii) The Problem of Undiagnostic Sherds.

Another factor of significance relates to form. The rims and walls of platters in TR and TN display profiles and elaborations which are fundamental for the ascription of items to form types. Hence only sherds with extant rims and/or walls can be allocated to a specific form group. However, invariably a high proportion of sherds from platters (both in TR and TN) derive only from the floor of vessels in question and are consequently undiagnostic of specific form. The identification of forms from sherds is less a problem in the case of SGSW.

A similar situation exists with body sherds from Cam. 113 beakers, specifically body sherds from above and below the decorated zone. Unless cross joins or a distinctive appearance can be related to diagnostic sherds the only guidance as to whether a sherd is from this type of vessel or from a jar or flagon (types which occur in similar fabrics) may be the thinness of the vessel wall. Diligent processing should exclude equivocal sherds from the Cam. 113 category, and allocate them to a separate category; this procedure was followed by the current author when processing the material comprising the quantified sample (see Note 5.8).

(iv) Form Variations within Basic Form Classes.

An interesting aspect of Gallo-Belgic pottery in Britain is that although a large number of form types are present these actually belong to only a small number of basic vessel classes, essentially platters, cups and beakers. This is a much more circumscribed range than is the case with SGSW, though it does mirror the pattern with other pre-Flavian fine wares which mainly appear in cup and beaker forms (*cf.* Greene 1979).

A number of points of archaeological interest arise from a consideration of the Gallo-Belgic repertoire. Some may be mentioned briefly here. The high representation of platters amongst the imported Gallo-Belgic material is remarkable since, with the exception of samian examples, ceramic platters in any fabric are otherwise at this time extremely rare.

The variety of platter wall profiles is curious and the reason for it obscure. Equally why complicated mouldings were reproduced religiously is unclear. Variations do occur and these are partially explained by chronology. The more easily executed forms Cam. 12/13, 14 and 16, for instance, become predominant towards the end of the importing period. It is possible that particular profiles were associated with different functions but there is no evidence of this. Different platter forms could be used interchangeably for the same practical purposes, size differences excepted. Hence the meaning of the small typological variations of these vessels, and therefore the archaeological value in distinguishing them, may turn out to be limited. This line of reasoning should not, however, preclude study based upon nuances of form since this area is still a matter for investigation. This is, of course, an example of one of the central paradoxes of the typological approach within archaeology: the value and validity of a typological study can often only become clear at an advanced stage in the work.

5.3.3 The Distribution of Terra Nigra.

5.3.3.1 The Geography of the Distribution and the Types of Site at which TN occurs.

The incidence of all TN in the study area is listed in Appendix 5.21 and is plotted in Figure 5.25. This listing documents 24 find-sites (25 if the finds from Whitwell, LEI 26, are bona fide TN) and this may be compared with Rigby's total of 9 TN and TR find-sites from the same area (1973a, Fig.8) and Timby's more recent survey which identifies 11 TN find-sites (1982, Appendix 1; 1987a, Fig.3). The reason why the current research has been able to list twice as many find-sites for this area is not a function of recent fieldwork (the sherds in question have all been out of the ground for more than 10 years at all of these sites bar 1), rather it is the outcome of sustained research in a discrete region (*cf.* 2.7; Fitzpatrick 1987).

The recorded distribution shows that TN occurs only at sites occupied during the middle and later decades of the first century A.D. and that find-sites are spread across the study area. This absolute distribution plot, however, conceals important regional, chronological and site type variations. From the distribution plot TN seems equally well represented north of the Humber and Trent as it is in the East Midlands. However, four of the sites appearing in this northern area are fort sites (Hayton, York, Malton and Catterick Bridge) at which only one TN form, the Cam. 16, is represented, a form which apparently uniquely continued to be imported into the Flavian period; (the find from the fort at Ebchester, DUR 6, is likewise almost certainly from a Cam. 16 (Gillam 1975, 91)). In addition, the fort sites of Brough and Binchester have yielded only Cam. 16 together with sherds of one other TN form, Cam. 51. If these find-spots are discounted a highly conspicuous gap exists between the Humber estuary find-sites and those of the Tees lowlands, namely the native/civil sites of Stanwick, NYK 23, Thorpe Thewles, CLV 4, and Catcote, CLV 1. This gap is also reflected in the distribution of TR and the Cam. 113.

A cluster of find-sites concentrate around the Humber estuary, the majority of which are native/civilian. That this area was a significant recipient of Gallo-Belgic pottery is further evidenced by the presence of TR and Cam. 113 at sites here, as well as by the quantitative data. Further south, in the East Midlands, the distribution is perhaps surprisingly thin. Nonetheless, the major centres of Leicester, Ancaster, Old Sleaford and Lincoln have TN;

and, with regard to the type of site at which it is represented, a similar pattern to that of the Humber estuary is apparent: TN is comparatively well documented amongst native/civil samples.

It might be suggested that Figure 5.25 is not a reliable indicator of the distribution of TN in the East Midlands since it appears to occur fairly exclusively only at the major sites and that this distribution plot is a function of recognition and reporting (*cf.* 5.3.2 (ii)). More evidence (and particularly evidence of better quality) would be beneficial in order to establish this one way or the other, however, as it stands the evidence is emphatic and there is no necessary reason to disbelieve that Figure 5.25 is an instructive index of the actual pattern.

5.3.3.2 The Distribution by Form: The General Pattern.

Figure 5.26 displays the number of TN forms recorded per site (see Appendix 5.21). Interpretation of this data should be approached with caution though. One problem concerns the definition of form types. In this listing the occurrence of 'variants', such as the alphabetically coded variants of the Camulodunum typology have for ease of synthesis been listed simply as examples of the basic form (eg. 56A, 56B and 56C would be listed as 56) but it is only an assumption that the incidence of these sub-forms is of less archaeological significance than say the occurrence of, Cam. forms 4 and 5. Indeed, in the current analysis the Cam. form types 12 and 13 are taken to be examples of one category since the two appear to grade into each other (note that in the Gazetteer they are where possible differentiated). Further, as noted above (5.3.2 (iv)) many categories will be varieties of platter or cup forms, which, on a practical basis could be employed for the same purposes, hence, what a 'high number of forms represented' might mean is uncertain. Study of the listing (Appendix 5.21) though indicates that it may be considered an index of site date, site exchange connections, and the scale of supply to a centre. That it is a fairly reliable index of these aspects is suggested by the fact that the pattern(s) it demonstrates accords well with those of other types of measure.

What is most dramatically evident from Figure 5.26 is that whilst a number of sites have only one form recorded and four sites have two or three forms recorded, there is a conspicuous gap between these and the several sites from which many (ie. 8 or more forms) are recorded. Several of the sites from which only one form is recorded are the military sites already mentioned above (*cf.* 5.3.3.1) with their Cam. 16s. In the case of some of the other sites from which only one form is recorded this may be a function of limited sample size (eg. South Ferriby Cliff, SHU 8) and non-publication (Ancaster, LIN 1). Brough, NHU 3, Binchester, DUR 1, and East Bridgford, NOTT 10, have two forms recorded, all three being Roman fort sites. Stanwick, NYK 23, has three TN forms recorded, a surprisingly low figure bearing in mind that Cam. 113 and TR are comparatively frequent there. However, the composition of the fine ware assemblage from this site is unusual in other respects (*cf.* below & 5.2.8 (iii)), and moreover, the nature of the archaeology of the site suggest that it should not necessarily be expected to conform to any 'normal' pattern for the study area.

The sites from which eight or more forms have been recorded are Dragonby, Old Sleaford, Old Winteringham, Leicester and Redcliff. The Gallo-Belgic assemblages from all of these sites derive from large samples examined and documented during the current research. These two factors could partially explain the comparatively high numbers of forms recorded, however, many other assemblages have been examined amongst which few or no TN forms were present, hence this does seem a genuine pattern. Three of these sites are native/civil centres occupied during the LPRIA and mid first century A.D. whilst the other two (Leicester and Old Winteringham) appear to be similar sites differing only in so far as there may have been a Roman military presence at both during the conquest period. At Leicester, though, it may be noted that TN is known from deposits apparently pre-dating A.D. 43. It may not be insignificant that all five sites lie within the area associated with the Corieltauvi or, in the case of Redcliff, on its edge (*cf.* 1.3 (iii)).

The evidence from the study area shows that TN occurs on Roman military sites, both pre-Flavian and Flavian, but amongst the current sample there is a strong tendency for assemblages from native/civil centres to demonstrate a much greater range of TN forms. Whether this pattern holds true for the rest of Britain is at present unclear; this question was not closely addressed in Timby's study (1982; 1987a). Sufficient data are available to establish the national pattern but would require an amount of time to assess. Within the study area there are no thoroughly published assemblages from conquest period fort deposits (ie.

Claudian/early Neronian) to compare with the aforementioned native/civilian assemblages. It may be noted, however, that no TN is reported in the publications covering the work at Great Casterton, LEI 10 (B) and (C); no TN was present amongst the sample of pottery from the fort ditches at Ancaster, LIN 1 (D) (pers. exam.); and only two TN forms are documented from East Bridgford, NOTT 10. In addition, at the conquest period military complex at Longthorpe, just outside the study area, TN appears to be absent from the assemblage from the site of the works depot (Dannell & Wild 1987), whilst extensive excavations in the area of the fortress and fort yielded only one item, an example of Cam. form 8 (Wilson 1974, 96, Fig. 51 No. 17).

The comparatively high number of TN forms represented at Dragonby, Old Sleaford, Old Winteringham, Leicester and Redcliff is not unrelated to the size of the samples from these sites, however, it is a pattern which accords well with the quantitative evidence which demonstrates that at these sites Gallo-Belgic wares are well represented in terms of relative frequency. It appears that where TN is present in quantity a comparatively high number of form types are present (and vice-versa). This explains the profile of Figure 5.26, and especially the gap between sites with only 1, 2 or 3 forms recorded and those with a wide range: within the study area TN appears in quantity only at a select number of sites, in fact sites which on the basis of other criteria lie at the apex of the settlement hierarchy.

5.3.3.3 The Distribution by Form: The Specific Forms.

(i) Introduction.

The majority of the TN form types precedented at Camulodunum (Hawkes & Hull 1947) are represented within the study area and the occurrence of these and of some forms not illustrated in that typology is listed in Appendices 5.22 to 5.35. Cam. forms 1 to 16 are all platters. These forms may be divided into three classes: the simple-walled platters, Cam. 1 and 2; those with moulded profiles, 3 to 10; and the slightly latter types, 11 to 16. The types are considered individually below, though not necessarily in equal detail. Prior to examining these though some absences may be noted. Somewhat surprising is the fact that no examples of Cam. 7 in TN have so far been recorded even though this form is not uncommon elsewhere in Britain as Figure 5.27 shows (see Note 5.9). The absence of Cam. forms 10 and 11 in TN (also platters) is not surprising as both forms appear generally to be rare; indeed form 11 is almost certainly a particularly early form which may only occur in TR (*cf.* Timby 1982, 36-7).

(ii) Cam. Form 1 in TN.

Cam. 1 (Hawkes & Hull 1947, 215-6; Timby 1982, 28) in TN occurs within the study area though only at Leicester, LEI 13 (Appendix 5.22). The form is early and it is thought to be generally a pre-conquest arrival. It is a comparatively rare find in Britain as Figure 5.27 demonstrates. That it is known only at Leicester is entirely consistent with the early date of some of the other imported wares at that site (*cf.* 9.2). Cam. 1 is known to occur in Gallo-Belgic TN, but it is more commonly known in the micaceous Central Gaulish fabric (*cf.* Stead & Rigby 1989, 120-1). At Leicester it occurs in the micaceous fabric amongst the assemblages from the Jewry Wall, LEI 13, (AA), Blackfriars (BE), and, perhaps, Bath Lane (AW), from where platter sherds in the fabric but of unidentified form occur. The examples from the Jewry Wall site are thought to be Augustan (Jarvis 1985b, 92; unpublished listing by Paul Jarvis, ids Val Rigby). This dating places these vessels amongst the earliest imported fine pottery in Britain. There is no reason to suppose that they did not arrive in Leicester shortly after their import into Britain. (Cam. 1 is also documented from Orton St 1960 (AK) but it is not reported whether the fabric is micaceous or not).

(iii) Cam. Form 2 in TN.

Cam. 2 is also a simple platter form (Hawkes & Hull 1947, 216; Timby 1982, 30). As with Cam. 1 it is known to occur in micaceous fabric, though this seems to be less frequently the case than with Cam. 1. In Britain Cam. 2 has been identified from some 30 or more find-sites where it occurs in pre-conquest and immediately post-conquest deposits. This accords with the evidence of Figure 5.27 which shows the form to be numerically comparatively common in Britain. Within the study area the form is recorded from six sites (Appendix 5.23). Figure 5.28, plotting the incidence of Cam. 2 in the study area shows an East Midlands distribution with only one find-site north of the Humber-Trent; this is Redcliff. All six of the find-sites have demonstrable or likely pre-Roman occupation and span the conquest period.

Several vessels of Cam. 2 are documented from Leicester. At least one of these is of the micaceous fabric, this being from the Blackfriars site (BE) and found in a context dated as pre-conquest (Clay & Mellor 1985, 23). However, the several examples of Cam. 2 from the Jewry Wall (AA) are apparently all of the standard TN fabric and include Claudio-Neronian items (unpublished listings by P. Jarvis, ids V. Rigby; pers. exam.). This is apparently also the case with the Cam. 2 from Bath Lane (AW), phase 3c, examined by the current author and which is not recorded as micaceous. None of the examples of Cam. 2 from the other find-sites is micaceous.

(iv) Cam. Form 3 in TN.

The platter Cam. 3 (Hawkes & Hull 1947, 216) in TN is known within the study area but only from Redcliff (Appendix 5.24). In Britain it has been claimed that this form is: "normally pre-conquest" (Hawkes & Hull 1947, 216, ie. pre A.D. 43).

(v) Cam. Form 4 in TN.

Cam. 4 (Hawkes & Hull 1947, 216) in TN is known from three sites, Old Sleaford, Old Winteringham and Leicester (Appendix 5.25). The type is present in Period 1 at Camulodunum and Hawkes and Hull suggested a pre-conquest to Claudian date range (1947, 216). The type is comparatively rare (*cf.* Figure 5.27) though its distribution in Britain is wide. The examples from Old Winteringham, SHU 7 (D), and Old Sleaford, LIN 26 (B), are not stratified. At Leicester (at least) two vessels are represented amongst the Jewry Wall assemblage (AA); both occur in the micaceous fabric and are likely to be Central Gaulish.

(vi) Cam. Form 5 in TN.

The platter Cam. 5 (Hawkes & Hull 1947, 217) in TN is recorded from five sites in the study area (Appendix 5.26, Figure 5.29). The form is conventionally dated as spanning the conquest period (Hawkes & Hull 1947, 217; Rigby unpublished). This form is the most common of the large moulded platters (*cf.* Figure 5.27) and is present amongst many Gallo-Belgic assemblages in southern Britain. Cam. 5 is recorded amongst three assemblages from Leicester, whilst sherds from at least six vessels were recovered at Old Sleaford, LIN 26 (B). According to Rigby (unpublished) four of these are typologically pre-Claudian, the other two are Claudian; none was usefully stratified. One example is known from Old Winteringham and this came from a Neronian/early Flavian deposit. Examples are also documented from Redcliff, NHU 17 (B) where they will be from deposits of Claudian date.

(vii) Cam. Form 6 in TN.

This rare form (Hawkes & Hull 1947, 217) in TN has a similar dating to Cam. 5 and is recorded from only one provenance in the study area, the Jewry Wall site, Leicester LEI 13 (AA), (Appendix 5.27).

(viii) Cam. Form 8 in TN.

Cam. 8 (Hawkes & Hull 1947, 219) in TN is known from five sites (Appendix 5.28, Figure 5.30). Hawkes and Hull state that it is mainly post-conquest (1947, 219) whilst Rigby suggests a c. A.D. 25 to Neronian dating (Rigby unpublished). The form is common in Britain being recorded from more than 30 sites (Figure 5.27 provides further verification). At Leicester the type is present in the Jewry Wall, LEI 13 (AA), and Blackfriars St (BE) assemblages; at the latter it was recovered from a phase 3 context (see above under Cam. 2). One example is recorded from Old Sleaford, LIN 26 (B), though not stratified. Several examples are known from Old Winteringham, SHU 7 (A) including items recovered from deposits dated as Claudio-Neronian. South Ferriby Cliff has produced one example to date; this was a surface find, SHU 8 (B). A small number of examples are known from Redcliff, NHU 17 (B).

(ix) Cam. Forms 12/13 and 14 in TN.

The platter forms Cam. 11 to 16 have slightly later date ranges than the forms already considered. As noted above no examples of 11 have been recorded from the study area. The forms 12, 13 and 14 (Hawkes & Hull 1947, 219-20), which only occur in TN are closely similar in form; 12 and 13 grade into each other and are amalgamated here for analytical purposes (*cf.* Timby 1982, 37). Both 12/13 and 14 are common in Britain (*cf.* Figure 5.27). The advent of Cam. 14 is later than that of 12/13 and the type is conventionally dated as Claudian or Claudian-Neronian (Timby 1982, 38; Hawkes & Hull 1947, 220). This dating is confirmed by its distribution in the study area for it is absent from the Flavian military sites north of the Humber and Trent. The 12/13 is recorded from five sites in the study area, the 14 from six (Appendices 5.30 & 5.31). Four sites have produced several examples of both: Leicester, Old Sleaford, Old Winteringham and Redcliff. The distribution of these two types is plotted on Figure 5.31. Rigby dates an example of a I2/13 from Old Sleaford as Tiberian or Tiberio-Claudian (Rigby unpublished).

(x) Cam. Form 16 in TN.

Cam. 16 (Hawkes & Hull 1947, 220) continued to be imported into Britain later than the rest of the Gallo-Belgic repertoire and this has the effect of extending the find-spots of TN in Britain to the Flavian forts. Examples of Cam. 16 in Britain are believed to date from the early Claudian period to about c. A.D. 75-80 (Timby 1982, 38; Rigby unpublished). Cam. 16 is widespread in Britain, almost certainly occurring at more sites than any other TN form. Figure 5.27 confirms that it is the most commonly encountered form after the 12/13. In the study area the 16 is recorded from 13 sites (Appendix 5.32) which is a higher total than any other TN form. When the find-sites are plotted (Figure 5.32) a marked contrast with the distributions of Cam. 2, 5, 8, and 12/13 with 14 (Figures 5.28 to 5.31) is evident. This has been discussed above (*cf.* 5.3.3.1), though here a couple of further points may be made. Firstly, the same range of sites which have examples of platters of Cam. 1 to 15 are still represented in the Cam. 16 distribution. Second, it appears that Cam. 16 in TN should be considered a frequent component of Flavian military assemblages, especially early Flavian ones. Third, the distribution of Cam. 16 is not simply a military one, though whether it becomes so after the conquest period is an interesting question that requires more research. Cam. 16 was certainly supplied to the army in the Flavian period, but did it remain in circulation within civil exchange networks? (See Note 5.10).

At Lincoln TN has not been recorded by the current author from the site of the fortress and it is known only in Cam. 16, and from one site alone, 181-3 High St, south of the Witham, LIN 17 (O). Here the earliest sherds came from Period 1c (Darling 1988a, 11). This accords well with other evidence which suggests a mid-Neronian start date for the known fortress (see Gazetteer entry) with perhaps earlier Roman (and some (?) limited LPRIA) occupation in the vicinity.

(xi) Cam. *Form* 51 in TN.

Figure 5.33 plots the distribution of the Cam. 51 across the study area. Cam. 51 is the distinctive, so-called bobbin profi'ed bowl form (Hawkes & Hull 1947, 225-6) which may be classed as a tazza. The type is known to have been produced at several centres in Gaul including Saintes in the Aquitaine; it was probably also produced in Central Gaul, a possibility consistent with the fact that examples frequently display highly micaceous fabrics (*cf.* Stead & Rigby 1989, 120-1). Timby states that: "none have been identified with a production source in northern France" (Timby 1982, 45). However, as with certain vessels in Cam. forms 1, 2, and 4 the fact that it appears in a fabric and finish analogous to Gallo-Belgic TN and is of a similar date range means that it is conventionally grouped with this pottery. The evidence from Camulodunum suggests that the form has a comparatively late date range; this seems to be misleading as subsequent evidence has shown (eg. Stead & Rigby 1989, 121).

Cam. 51 is known from five sites, of various types, within the study area, three in the Humber environs, and two in the north-east (Appendix 5.33). Three Cam. 51 bowls are known from Dragonby, SHU 1 (C); all occur in micaceous fabric. Sherds from two of these vessels were recovered from features dated as pre-conquest (Elsdon & May 1987, 64). The examples from the other sites are likely to be from deposits of later date. At Redcliff sherds were recovered from deposits of Claudian date, NHU 17, (B), while at Brough two sherds (from one vessel) were recovered during Corder's work in the 1930s NHU 3 (A). The exact context of this latter vessel is uncertain (it was never published); it may be associated with the military occupation, though its arrival at Brough before c. A.D. 70 cannot be ruled out since there was evidently a pre-conquest native phase at the site (see Gazetteer entry). If the Cam. 51 from Brough is to be associated with the Flavian occupation then this would be consistent with the presence of the type at Binchester, DUR 1 (C). At Binchester most of one vessel was recovered from a context dating to the later first century (pers. exam.). Evidence documented in this chapter shows Binchester to have produced enough Neronian/early Flavian pottery to call its conventionally assigned start date of c. A.D. 80 into doubt (*cf.* 5.2).

(xii) Cam. Form 56 in TN.

The cup form Cam. 56 in TN (Hawkes & Hull 1947, 226-7) is known from five sites in the study area (Appendix 5.34). The form was imported into Britain over a comparatively long period spanning the conquest (*cf.* Timby 1982, 50). It is recorded from only five sites in the study area which is surprising given the fact that it is generally a relatively common form (*cf.*

Figure 5.27). However, where it occurs in the study area it is well represented with the exception of Dragonby, from where only two examples are recorded (Elsdon & May 1987, 63). The distribution is concentrated within the southern half of the region (Figure 5.34) and this may reflect its chronology.

(xiii) Other Forms in TN.

All other examples of Gallo-Belgic TN forms present within the study area are listed in Appendix 5.35. A number of vessels in fabrics and finishes characteristic of standard Gallo-Belgic TN but in unusual forms have been recorded in the course of the current research. At Leicester there is a vessel in TN which is best categorized as being Cam. 24a, while from Redcliff there are vessels in standard TN which are examples of the Cam. forms 31b and 26b. These do not appear to be instances of Hawkes and Hull's "native British forms" imitating Gallo-Belgic types (1947, 221) but rather are comfortably ascribed to the Gallo-Belgic TN category. Also of note here is that instances of the Cam. form 17 platter in standard TN have been documented by the current author from Leicester, LEI 13 (AA) and Old Winteringham SHU 7 (A). This form is more usually encountered in 'Pompeian Red' ware. Examples of the uncommon bowl Cam. 50 in TN (Hawkes & Hull 1947, 225) are recorded from Dragonby SHU 1, and Leicester LEI 13 (BE). That variants occur and that the Camulodunum series is not all-embracing is widely apparent (eg. Rigby 1973a; 1981; 1986) and should occasion no surprise (*cf.* Greene 1979, 106).

(xiv) Summary.

An examination of the distribution of TN forms within the research area demonstrates several distinct patterns:

A). A wide range of forms are represented, including examples of the earliest and the latest imported types.

B). All of the most common forms that occur in Britain in micaceous 'TN' fabric(s) are represented in the region.

C). A few sites have many forms present whilst several sites have only 1 or 2 forms, often including the Cam. 16. This supports the thesis that most, if not all forms, with the possible exception of the later 16s may have been distributed by the same mechanisms and/or through the same networks. What this might represent is a native supply network(s) with a later military one (distributing the Cam. 16) superimposed on it.

D). The sites with the widest range of forms lie on or south of the Humber-Trent.

E). Cam. 16 is the most widespread form, and in a number of cases it is the only, or virtually the only, TN form on Flavian military sites north of the Humber and Trent.

F). In terms of the frequency with which specific forms occur the study area seems largely to conform to the general pattern for Britain. (If, for instance, the number of sites at which each type occurs is taken as a 'rule of thumb' measure, approximating to the frequency of the type, it is clear that the most common types in Britain generally (as established empirically from Timby's data (*cf.* Figure 5.27)) tend to occur at a relatively large number of sites in the area, while generally uncommon forms tend to occur at few sites in the region, if at all).

5.3.4 The Distribution of Terra Rubra.

5.3.4.1 The Geography of the Distribution and the Types of Site at which TR occurs.

The incidence of all TR recorded in the study area is listed in Appendix 5.36 and is plotted on Figure 5.35. Twelve find-sites are documented which compares with six for the area appearing on Rigby's map (1973a, Fig.9) and only four listed by Timby (1982, Appendix 1; 1987a, Fig.2). This figure of 12 find-sites for TR contrasts with 25 for TN (*cf.* 5.3.3.1). This difference is not surprising since the former is generally rarer and found on fewer sites than the latter in Britain as a whole (*cf.* Rigby 1973a, 19: Timby 1987a; Pollard 1988a, Fig. 18). Figure 5.35 shows an even, if sporadic, widespread distribution across the East Midlands and into North Humberside, with no find-sites in Yorkshire, Cleveland and Co. Durham with the conspicuous exception of Stanwick, NYK 23, the northern-most find-spot of TR in Britain. In fact the distribution looks remarkably similar to that for TN when Cam. 16s are discounted. This fact is of considerable interest for a gamut of reasons. Not least it implies that it was being distributed through a similar (or the same) exchange system as TN in the mid first century A.D. even though it is a distinct pottery with a differing formal bias. Moreover, it also demonstrates that though TR becomes less frequent with time, and certainly relative to TN from around c. A.D. 40, pottery samples from within the study area are large enough and early enough for it to register. Its absence from Flavian military sites in the north is indicative of its currency and their date. Again, as with TN the distribution is concentrated in Lincolnshire and around the Humber. This spatial incidence, when combined with Leicester, from where the most forms are recorded (*cf.* Figure 5.36), coincides neatly with the area associated with the Corieltauvi (*cf.* 1.3 (iii)). These patterns, identified from the combined distribution, need to be considered with the detailed evidence and this is outlined below.

As with the distribution of TN the general pattern evident from Appendix 5.36 is that TR occurs only at sites at which occupation during the middle decades of the first century A.D. is established by other data. Similarly the sites from which the highest number of TR form types are documented are those from which the most TN forms are recorded (Figure 5.37; *cf.* 5.3.3.1).

5.3.4.2 The Distribution by Form: The General Pattern.

Figure 5.36 charts the number of TR forms recorded per site within the study area (the sites are listed in Appendix 5.36). The figure includes all forms represented including platters, cups and beakers; (because of the difficulty in identifying specific beaker forms (eg. *vis-à-vis* Cam. form type) all sherds from butt beakers have been taken to represent one form type, and the same procedure is followed with sherds from girth beakers, and with sherds from pedestalled beakers). There are good reasons for believing Figure 5.36 to be a reliable index since the pattern it presents is 'sensible' in terms of our knowledge of site date and the incidence of TN.

Figure 5.36 demonstrates a conspicuous divide between sites with only one form recorded and those with several; this closely reflects the pattern for TN forms discussed above. Half of the twelve sites from which TR is recorded have only one form documented. With the possible exception of Ancaster, LIN 1, only one vessel is represented at each of these sites. The six sites appear to share no relevant common denominators; archaeological input at two (Colsterworth, LIN 7, and Osmanthorpe, NOTT 26) has been small scale and samples are modest; this is not the case though with Ancaster, LIN 1, Hayton, NHU 14 and Rudston, NHU 19.

The sites from which the most forms are documented are Dragonby (4), Stanwick (5), Old Winteringham (5), Redcliff (7), Old Sleaford (7) and Leicester (10). All were native/civil centres occupied in the LPRIA and mid first century A.D. with Leicester and Old Winteringham having possible military occupation in the conquest period; (at Leicester TR was recovered from deposits thought to pre-date A.D. 43). This concentration, with a few sites having a high number of forms recorded, is in part a function of sample size, however, these sites comprise most of the main civil centres of the LPRIA and conquest period in the region. Hence the evidence points to sites of this type as being the main recipients of the ware. This pattern is confirmed by the quantitative evidence (*cf.* 5.3.6 (ii)).

It is apparent from Figure 5.36 that TR is not strongly associated with Roman military sites or sites with this connection. A TR platter is known from Osmanthorpe, NOTT 26 (D), a site believed to be a pre-Flavian vexillation fortress. However, it is not represented amongst the assemblages from Longthorpe (Wilson 1974, 96; Dannell & Wild 1987) and the pedestalled beaker, of Cam. form 74/9, represented in the Hayton assemblage, NHU 14 (A), did not come from the fort site but, rather, the area of the native settlement (pers. comm. V. Rigby April 1991) its presence at this site may therefore pre-date or not be associated with the fort phase.

As with TN within the study area TR appears to have arrived in quantity only at a small number of sites. These sites are exactly those which, given all other evidence seem to lie at the apex of settlement ranking.

5.3.4.3 The Distribution by Form: The Specific Forms.

All of the TR forms recorded from the study area can be categorized using the Camulodunum series. The incidence of particular forms is listed in Appendices 5.37 to 5.46, these are platters, cups and the Cam. 112 beaker; the incidence of other beaker forms in TR is not listed because of their diversity and difficulties in ascribing small sherds to specific form types; (however, full details, where known, are presented per site in the Gazetteer). Six platter forms all of the moulded wall variety are recorded and listed, as are three cup types. There are no examples of the early Cam. 1 TR platter (*cf.* Rigby & Freestone 1986) from the region whether in the micaceous fabric or otherwise. This is perhaps a significant pointer to the date of the earliest arrivals of Gallo-Belgic pottery in the region.

Three platter types in TR are known only from Leicester, these being Cam. 3, Cam. 4 and Cam. 5 (Appendices 5.37 to 5.39). Cam. 3 is recorded from four Leicester assemblages: LEI 13 (AA), (AK), (AW) and (BE). At the latter site, Blackfriars 1977, a sherd was stratified with other Gallo-Belgic pottery in a period 1 deposit, the cultural material from this phase is dated: "between c. 15 B.C. and c. A.D. 40" (Clay & Mellor 1985, 23). The current author has no direct knowledge of form 4 in TR at Leicester though Timby lists this in her Gazetteer (1982, Appendix 1) and references the Jewry Wall report (Kenyon 1948) and information supplied by Patrick Clay. Cam. 5 in TR is recorded at Leicester from the Jewry Wall site (AA).

The Cam. 6 platter in TR is known from three sites: Leicester, Old Sleaford and Stanwick (Appendix 5.40). The example from Stanwick comes from the 1980s work in the Tofts field, NYK 23 (B), where it was stratified in a deposit of Claudian or Claudio-Neronian date.

Cam. form 8 in TR is recorded from Leicester, Old Winteringham and Redcliff (Appendix 5.42). This is perhaps the most common TR platter in Britain (*cf.* Hawkes & Hull 1947, 219) and it is not infrequently encountered in Claudian deposits. At Leicester the form is known from the Jewry Wall site, (AA), and a probable example comes from the Blackfriars site, (BE), stratified in a period 1 deposit (*cf.* above this section).

The cup Cam. 53 (Hawkes & Hull 1947, 226) mainly occurs in TR and is generally considered to be early. Once more examples (in TR) are known only from Leicester (Appendix 5.43) where five vessels are recorded from the Jewry Wall site (AA). These items are believed to date from c. 15 B.C. to c. A.D. 25 (Jarvis 1985b, 92; 1986; unpublished listing P. Jarvis, ids V. Rigby) which means that they are amongst the earliest identified imported pottery in the region.

Another cup, form 56 in TR, is documented from five sites (Appendix 5.44; Figure 5.38). The form is one of the most frequently encountered Gallo-Belgic forms, and it was imported into the Claudian period. Old Sleaford has produced several examples of the form, including vessels dated as Tiberian (Rigby unpublished). The cup form Cam. 58 (Hawkes & Hull 1947, 227: Timby 1982, 50-2) is recorded from two sites only, Redcliff and Old Winteringham (Appendix 5.45).

The distribution of only one TR beaker type, the Cam. 112 (Hawkes & Hull 1947, 238; Timby 1982, 56-8), is listed here (Appendix 5.46). This Gallo-Belgic butt beaker occurs in TR3 (see below) and is dated as Tiberian-early Claudian. The form was common at Camulodunum. (Sherds of the analogous girth beaker type, Cam. 84 can be mistaken for this form). Within the research area Cam. 112 has been recorded from more sites than any TR cup or platter form (Figure 5.39). Old Sleaford, Old Winteringham, Leicester and Redcliff have all separately produced several examples of the form. Rigby has stated that: "the majority of finds in Britain are from Claudian contexts" (Rigby unpublished).

To summarize, an examination of the distribution of TR forms in the region indicates certain distinct trends within the evidence:

A). As with TN a wide range of forms are represented including some items of comparatively early date.

B). The number of find-sites is markedly less than for TN.

C). Several sites have yielded many forms, whilst half the find-sites have only one form (possibly one vessel) recorded. The presence of a wide range of forms appears to relate to site status.

D). Consistent with the TN evidence, sites with the widest range of forms recorded are located in the southern half of the region, with Stanwick once more the exception.

E). The sites with the widest range of TR forms are also those with the widest range of TN forms which indicates that TR forms were probably being distributed via the same mechanisms as TN to 'core' centres. This pattern appears to verify Trow's reading, based upon the evidence from central and western southern Britain, that: "Beyond the south-east ... [early] fineware ... imports do not seem to have escaped the 'gravitational pull' of the major centres" (1990, 104).

F). Beaker types in TR are more common than platters and cups in TR.

G). The forms in TR which are represented within the study area appear to be those which are the most common in Britain as a whole.

H). Leicester has yielded the widest range of forms some of which are evidently pre-conquest arrivals.

5.3.4.4 The Distribution by Fabric Type.

TR in Britain is not a single fabric type; rather it occurs in variety reflecting its wide production area (*cf.* Timby 1982; Darvill & Timby 1982) and the fact that it was produced and imported into Britain over a time-span of c. 70 years (c. B.C. 15 to c. A.D. 55). Conventionally TR is divided into five categories: TR (1A), TR (1B), TR (1C), TR 2 and TR 3 (Hawkes & Hull 1947, 204; Rigby 1973a, 11-2). The criteria for ascription relate to fabric colour and finishing rather than fabric composition *per se* (*cf.* Rigby 1986, 223). Inevitably with such criteria allocations have a strong qualitative and subjective element and categorization, in practice, is often difficult. Moreover, the meaning and utility of allocations is questionable especially since recent work has demonstrated that these conventional categories do not correspond with discrete sources (*cf.* Darvill & Timby 1982, 83-4). The best that can be said of the prevailing schema is that there is evidence to suggest that the appearance of TR relates to date; though this requires empirical demonstration). The conventional approach to TR would benefit from review.

TR 1(A) displays an oxidized cream or off-white fabric with: "red slip on upper surface" (Rigby 1981, 159; *cf.* Rigby 1973a, 11; 1986, 223). This type has been identified at five sites within the study area (Appendix 5.47, Figure 5.40), but at each site only a small quantity is known. Generally it is considered to have an earlier date range than TR 1(C) and TR 2.

TR 1(B) is characterized by a: "fairly iron free matrix" and a slip which: "varies from bright orange to coral red ... covering the whole vessel" (Rigby 1986, 223). This type is rare in the study area and examples are known from only two sites, namely the Jewry Wall, Leicester, LEI 13 (AA), and Redcliff (Appendix 5.48, Figure 5.41). This distribution accords well with the observation that this type is essentially confined to vessels of pre-conquest manufacture (eg. Rigby unpublished).

TR 1(C) is characterized by an: "Orange paste [and] red slip on the upper surface" (Rigby 1981, 159). This type has a later date range than the previous two and is considered Tiberio-Claudian (Rigby unpublished). It is documented from five sites in the study area (Appendix 5.49, Figure 5.42) being comparatively well represented at Leicester.

TR 2 is defined by an: "Orange paste [and] self-coloured red surfaces" (Rigby 1981, 159). This type, which is considered by Rigby to be broadly Tiberio-Neronian (Rigby unpublished) is documented from four study area sites (Appendix 5.50, Figure 5.43).

TR 3 is characterized by the: "Same range of matrices as TR 1(A) to TR 2, so that colour varies from off-white to red [with] a variety of ['fumed'] finishes on the exterior, from dense black to a thin pearly grey haze" (Rigby 1986, 223). This TR type occurs only in beakers with most beakers appearing in TR3, including all of the girth beaker forms, Cam. 82-88, most of the globular beakers, and the Cam. 112. TR 3 in Britain spans the conquest period. It is recorded at seven sites in the research area (Appendix 5.51). Although these sites match exactly those from which the 112 is recorded it should be stressed that this is not only a reflection of the incidence of Cam. 112, for half of these sites have also produced sherds from girth beakers in TR 3. Girth beakers in TR 3 are generally less common than the Cam. 112, nevertheless examples are recorded from Old Winteringham (eg. Rigby 1976, 130, Fig. 62 No. 14), Redcliff (eg. Rigby 1976, Fig. 63), Old Sleaford (Rigby unpublished) and Leicester (eg. sites (AL) and (BE)).

5.3.5 The Distribution of the Cam. 113 Butt Beaker.

The white ware butt beaker Cam. 113 (Hawkes & Hull 1947, 238-9; Rigby 1986, 263; Stead & Rigby 1989, 137) was a frequent find at Camulodunum and its incidence at sites in Britain is diagnostic of occupation during the mid first century A.D. The type had a comparatively long life and is dated as pre-conquest (Tiberian) and Claudian (Timby 1982, Fig. 23). Hawkes and Hull believed the type to have been made more or less exclusively at Colchester; but this view has been strongly challenged by Rigby (1986; Stead & Rigby 1989, 137) who states the case for its origin and sustained manufacture in Gallia Belgica.

Cam. 113 occurs widely in mid first century A.D. deposits in the south of Britain. It is known from 18 sites in the study area (Appendix 5.52). The geography of this distribution is remarkably similar to that for TR and TN as Figure 5.44 demonstrates. Find-sites are spread across the East Midlands, the Humber environs and further north in the Tees lowlands, where they represent the northern most documented examples in Britain. There are only two areas of absence, and these are familiar from the plots of TR and TN find-spots (Figures 5.25 & 5.35): northern Yorkshire and the Trent Valley. As with TR its absence from Flavian fort sites in the northern half of the region accords with its conventional dating, though the fact that it is present at Castleford, WYK 1, and York, NYK 28, sites both thought to be established in the early Flavian period, is noteworthy.

Considering the nature of sites at which it occurs the incidence seems independent of site size and apparent rank for it is present at small centres and farmsteads (eg. Colsterworth, LIN 7, and Thorpe Thewles, CLV 4), as well as major centres. In fact it is recorded from every major LPRIA/civil centre of the mid first century A.D. in the study area at which work of some scale has been conducted. Its presence at these sites is consistent with the incidence of other Gallo-Belgic evidence (*cf.* Figure 5.37): all the major centres which display a range of TR and TN forms also have Cam. 113. This implies that it was circulating within the same system. Moreover, it is these sites which have produced the greatest quantities and highest relative frequencies of Cam. 113.

It is clear the distribution seems unrestricted by *civitas* boundaries and does not appear to be closely associated with the Roman military. If anything the distribution seems non-military in tendency as, indeed, does the distribution of TR. Curiously Wheeler, in discussing his Stanwick assemblage, commented that: "butt beakers suggest civil rather than military sources of supply" (1954, 13); the basis for this statement is not given (but in Wheeler's case might derive from an assumption that these vessels relate to 'native' feasting). What these distributions may actually express is a native/civilian supply network and/or native/civilian preferences for pottery types which were culturally close to their own expressions and which originated from a region with which they would have had an ethnic affinity. An alternative explanation is that the military had their supply catered for by potters associated with forts. This is suggested by the evidence from the Longthorpe military complex where no true Cam. 113s have been recovered and where devolved butt beakers were apparently being produced (*cf.* Dannell & Wild 1987, 139-41).

5.3.6 The Evidence of the Quantified Assemblages.

(i) Terra Nigra as a Component of Groups.

A number of assemblages quantified in the course of the research contained sherds of TN. The figures for fifteen assemblages are presented in Tables 5.5 and 5.6 where the absolute quantities and percentage of group figures, respectively, are recorded. All of the groups itemized are ones in which TN might reasonably be anticipated (*cf.* 5.2.8 (i)). TN is present in seven of the assemblages, that is just under half. SGSW is present in twelve of these fifteen which emphasizes the fact that SGSW is more widespread than TN.

Table 5.5 shows that TN is present amongst quantified assemblages from those sites which have produced the largest number of TN forms within the study area: Leicester, Dragonby, Old Winteringham, Redcliff and Stanwick, as well as being present in the Binchester groups. Table 5.5 shows that when TN occurs amongst an assemblage it is usually present in all samples from that assemblage (a similar pattern is evident from the Cam. 113 data (*cf.* Table 5.9). This is of interest with regard to the assemblages theory model (*cf.* 2.2).

The three early assemblages from which SGSW was absent, namely from Ancaster, LIN 1 (D), Old Sleaford, LIN 26 (C), and Thorpe, NOTT 32 (F), are amongst those without TN. It is likely that TN was absent from these groups for the same reasons that probably account for the non-appearance of SGSW (*cf.* 5.2.8 (ii); see Note 5.11). The five other assemblages from which no TN is recorded are from Lincoln (2), Hayton and two of Wheeler's trenches at Stanwick. The Lincoln assemblages are those from East Bight 1980-1, on the line of the northern defences of the fortress and *colonia*, LIN 17 (V), and the pit group, context 45, of Legionary date from The Lawn (1986), LIN 17 (W). The absence of TN from these groups is consistent with the fact that the fortress was probably founded in the mid or late Neronian period. It is particularly notable that no examples of Cam. 16 were present amongst these groups and indeed that Cam. 16 has not been recorded from the area of the fortress by the current author. This absence of the Cam. 16 accords with the likelihood that the fortress had its own or a local fine ware supply (*cf.* 5.2.8 (iii)). In the case of Hayton, NHU 14 (A), TN was absent from the sample from the north corner of the Flavian fort, though it is recorded from elsewhere at the site in the form of Cam. 16. In this instance 'absence' can be attributed to context date, and, perhaps site type.

The absence of TN from amongst the pottery from Wheeler's sites A and F at Stanwick, NYK 23 (A), appears conspicuous since sherds of TR and Cam. 113 were recovered from both together with other imported Claudio-Neronian pottery. However, a somewhat different perspective emerges when the evidence of the 1981-9 sample is considered. This larger body of material does contain TN sherds though in small quantity. As Figures 5.46 and 5.47 demonstrate, when set against the general pattern TN at Stanwick is comparatively under-represented relative to TR and Cam. 113. The absence of TN from these Wheeler sites is therefore consonant with the pattern for the site as a whole. This is only one of many instances of the Stanwick assemblage being at variance with the normal pattern for the region.

The seven quantified assemblages with TN derive from six sites. Table 5.5 presents the absolute quantities present in each phase or group, by weight, sherd count and RE; Table 5.6 presents the percentages which these absolute quantities represent. As with SGSW priority attention should be given to the figures for weight. The percentage figures generated from these three measures correlate reasonably well (*cf.* Table 5.6), as indeed they did with regard to SGSW. In 21 of the 23 samples with TN quantification by sherd count gives a higher percentage for presence (ie. relative frequency) than does weight. This is probably normal for fine ware. Two Redcliff groups, NHU 17 (B), are the exceptions, these being Feature 40, a large pit group of 1206 sherds and the pottery from the ditch, Feature 338; both exceptions relate to groups which appear to have been subject to an abnormal degree of fragmentation.

Tables 5.5 and 5.6 show that when TN is present in groups it is almost invariably present in modest quantity consistently forming a low percentage in groups. This is, of course, what we might expect intuitively of an imported fine ware, and indeed conforms with the pattern for SGSW. In only five of 23 instances does TN exceed 55g by weight (and three of these are samples from one site, namely Redcliff, whilst the highest RE total is 0.98 (also Redcliff). In only 8 of 23 instances does TN constitute 1% or more of its group by weight.

The figures for TN as a percentage component of the quantified groups by weight are ranked in Figure 5.45. First in order, with the highest percentage (8.99%) are the pits of phase one at Redcliff; a close second with a percentage of 8.64 are the phase 1-2 contexts at Binchester, DUR 1 (C). However, this latter figure arises from the presence of a large part of one vessel, a Cam. 51, in one context of this group. Hence this group might be discounted since the figure derives from a context which is not a 'normal rubbish' deposit. The next three positions in rank are occupied by the remaining three Redcliff groups, with one group producing the high percentage figure of 7.36 by weight. These rankings point to the fact that Redcliff was well supplied with TN. This seems to be a genuine pattern whatever measure is employed and it holds true for Gallo-Belgic pottery generally at the site (*cf.* below).

Figure 5.45 shows that when TN occurs it generally forms less than 2% of group composition by weight; in the majority of cases it comprises less than 1%. This emphasizes the high relative frequency of the ware at Redcliff. Contrastingly the Dragonby groups consistently rank amongst the lowest TN percentages. This pattern correlates well with that for SGSW at Dragonby where SGSW forms only a tiny percentage of groups (*cf.* Tables 5.2 & 5.3 & Figures 5.23 & 5.24). These tiny percentages for the Dragonby groups arise from the fact that whilst TN is present in four out of six groups it is present in small quantity amongst groups which are very large (FN 1477 produced a total of 8.7kg of pottery; FN 1682, 7.8kg; FN 2086, 28kg; and FN 2100, 27.7kg).

The percentages generated from the sherd count data for TN (*cf.* Table 5.6) are of interest for a number of reasons. They present a similar picture to that produced by weight analysis, however, these percentages demonstrate that samples have to be large before sherds of TN might reasonably be expected to be present. Table 5.6 shows that Redcliff excepted TN normally forms less than 2% of the sherd total of groups; in other words, in theory samples have to reach thresholds of 50, 100 or 200 sherds before items of TN can be anticipated to be present.

An important question is how these figures and patterns for the research area compare with those for assemblages outside the study area. This desirable analysis is frustrated, however, by the fact that most reports on Gallo-Belgic pottery from sites in Britain do not present compatible quantified data; rather a 'number of vessels present' method has been customarily followed (eg. Rigby 1985). Notable exceptions include two groups from Silchester (Fulford 1984, 128-39, quantified by RE) and the assemblage from the 1982-3 excavations at Ditches (Trow 1988).

(ii) Terra Rubra as a Component of Groups.

TR is present in seven of the fifteen quantified assemblages presented in Table 5.7. However, these seven assemblages distil to only four sites: Leicester, Old Winteringham, Redcliff and Stanwick. (TN was present amongst seven assemblages from six sites which comprised these four, plus Dragonby and Binchester). Table 5.7, together with Table 5.8, giving the figures for TR as a percentage component of groups, conform neatly with the pattern for TR discussed above (through section 5.3). They confirm empirically that though TR is present within the research area it is rare, being concentrated at a select number of sites and, when present, occurs with less frequency than TN.

The absence of TR from a number of the quantified samples is likely to be the result of their later first century date. Sites without pre-Claudian, Claudian and early Neronian occupation are unlikely to yield items of TR since its *floruit* in Britain pre-dates c. 60 A.D. Hence chronology explains the absence of TR from the samples from Lincoln, LIN 17 (V) and (W), Hayton, NHU 14 (A), and Binchester, DUR 1 (C). The quantified deposits from Ancaster, LIN 1, (D), will have been of the right date to have received TR, but, as noted above (5.2.8 (ii) & 5.3.6 (i)) both SGSW and TN were absent from them, consequently it is no surprise that TR is not recorded either.

TR is known from Dragonby (eg. Figure 5.50) but it is absent from the quantified groups even though they span the mid first century A.D. This absence should not be considered surprising since it is entirely consistent with the rarity of Gallo-Belgic pottery at the site in general. That TN forms a tiny percentage of these quantified groups has been observed (5.3.6 (i)) and since TR is usually rarer than TN (*cf.* Rigby 1973a, 20) its absence from these Dragonby groups becomes understandable. The absolute quantities of TN, TR and Cam. 113 from the site (Figure 5.50, Table 5.11) must be seen in the light of the fact that the work comprising SHU 1 (C) produced a huge sample of pottery (Elsdon & May 1987, 2-3) amongst which these wares are rare.

The quantified data, in particular the percentage for TR as a component of groups (Figure 5.48), show that TR accounts for no more than 1.6% of group composition by weight in any case. In fact amongst the total of 19 groups in which TR occurs in only two instances do percentages exceed 1%. Moreover, one of these two, comprising the contexts of the phase 2-4 group at Stanwick, NYK 23 (B), arises from an absolute total of only 5g. The other of these two groups is not surprisingly from Redcliff. In the majority of cases (16 of 19: a ratio of approximately 4:5) TR comprises less than 0.75% of group composition; (in the case of SGSW the number is 19 of 29 which gives a not widely dissimilar ratio of 2:3). A highly consistent pattern is therefore evidenced; TR is fairly widely present amongst groups at certain sites yet invariably constitutes a minuscule proportion of samples.

A note of qualification might be sounded here if one is concerned with quantification as an index of the actual number of vessels represented amongst a group, rather than quantification as a means of inter-site comparison. Weight data are a good measure for the latter purpose, but not necessarily for the former. The Gallo-Belgic wares are an example of this. A large proportion of the TR sherds present in the quantified samples derive from thin walled beakers (eg. the Cam. 112) which are comparatively light (light that is when compared with TN vessels). If the absolute quantities of TN and TR in the Leicester, Old Winteringham, Redcliff and Stanwick samples are summed the following ratios are forthcoming. In terms of weight TN out numbers TR to a ratio of 5.8 to 1, but in the case of the RE data - our 'good method' for establishing an approximation of the number of vessels represented - the ratio is reduced to 3 to 1. That the ratio of TN to TR generated from the sherd count data is 1.3 to 1 is a function of the fact that many of the TR sherds originate from thin and fragile beaker forms prone to fragment into tiny pieces before the point at which 'further breakage is unlikely' is reached. Hence if the sherd count data were to be used as a proxy for the 'number of vessels present' this would result in the over-representation of TR relative to TN.

Finally, it may be noted that the incidence of TR within this research area provides no evidence in support of Rigby's statement that: "oppida and native settlements appear to receive supplies of TR after the military establishments cease to do so" (1973a, 20).

(iii) The Cam. 113 Butt Beaker as a Component of Groups.

The Cam. 113 beaker occurs in eight of the fifteen quantified assemblages recorded in Table 5.9. These assemblages are from five sites: Leicester, Dragonby, Old Winteringham, Redcliff and Stanwick. These are the same sites at which TN is present in quantified groups, minus Binchester. This configuration accords well with the strong tendency for the different classes of Gallo-Belgic wares to occur at the same sites (eg. *cf.* Figure 5.37). The quantitative evidence for the frequency of Cam. 113 (Tables 5.9 & 5.10) conforms with the patterns discussed above (under 5.3.5).

Cam. 113 is absent from eight of the quantified assemblages. As with TR chronology explains this absence in several cases since the *floruit* of the type is pre-Flavian and it is less common after the Claudian period. It is not surprising therefore that the type is not present amongst the quantified pottery from the two Lincoln sites, LIN 17 (V) and (W), which should date from the mid, or mid to late Neronian period (though the fact that this is a military site may also be pertinent). Likewise its absence from the Hayton, NHU 14 (A), and Binchester, DUR 1 (C), samples which should be of Flavian date is not remarkable. No examples of Cam. 113 came from the Ancaster or Old Sleaford samples (Table 5.9), but this conforms with the absence of TR, TN and SGSW from the quantified groups at both sites as discussed above. It is noteworthy, however, that both assemblages include items from vessels of apparent local manufacture imitative of the type.

The figures for the absolute quantities of Cam. 113 present per group show it to occur in sizeable amounts in several groups. Again groups from Redcliff have yielded comparatively large quantities. The group of pits (of phase 1) yielded 125 sherds of Cam. 113 weighing over half a kilogram and with a RE total exceeding 2.00; the pit FN 40 also produced a large quantity. Phase 1 at Blackfriars St Leicester, LEI 13 (BE), yielded 293g and 49 sherds, with an RE of 1.27; these are the highest quantities with the exception of the two Redcliff groups. That phase 1 at Blackfriars contained these conspicuously high quantities is particularly noteworthy since it is believed to be of pre-conquest date and in addition large amounts of TN and TR were recovered from its contexts (Tables 5.5 and 5.7). These are characteristics which the phase shares with the Redcliff groups. Also worthy of particular attention is the fact that Cam. 113 is present in all five ditch samples at Dragonby (excluding Feature 317 which is a penannular gully). Though the amounts are small they are greater than those for TN at this site, whilst TR was not represented in these groups at all. This pattern at Dragonby may be explained by the fact that Cam. 113 appears (generally) to be slightly more prevalent than these other two Gallo-Belgic types. Most of the Stanwick groups contain Cam. 113 though the combined quantity is very modest.

The evidence of the percentage figures (Table 5.10 and Figure 5.49) shows some disparities. The TR percentages (eg. Figure 5.48) display an internally consistent pattern but those for Cam. 113 reflect the pattern of the TN percentages in so far as a small number of groups (three or four) contain high percentages grossly above the mean for all groups. In the case of TN two groups from Redcliff were found to have exceptionally high percentages. Two Redcliff groups are amongst the four groups which have exceptionally high percentages of Cam. 113 present (Figure 5.49) when weight is the measure and these are the two groups noted above as having produced large amounts of the type in terms of quantity. Amongst the group of stratigraphically early pits the Cam. 113 represents 9.9% of all pottery by weight, a remarkably high figure for a fine ware type. Figure 5.49 shows that two Stanwick groups rank in the top four percentages; amongst the sealed features at Wheeler's Site F 6.76% of the pottery was Cam. 113 and amongst contexts of phase 4-5 the type represented 11%. However, when all groups from the 1981-9 excavations at Stanwick, post-dating phase 2 are summed Cam. 113 represents 0.72% of the total by weight (5.10% by count & 3.47% by RE).

The general pattern revealed by the percentage figures is, as Figure 5.49 confirms, for this class of pottery to represent only a small component of groups. Whilst it is present in 26 of the quantified groups it represents less than half of 1% in 12 instances and less than 2% in 19. Nonetheless the quantitative evidence shows this type to occur with greater frequency than TR and, apparently by a small margin, TN and SGSW as well.

Finally it might be noted that Cam. 113, as with beakers in TR, is a fine, thin walled, fragile type, hence quantification by sherd count usually results in higher 'percentage of group' figures than is the case when weight is the measure. Figure 5.51 clearly demonstrates the existence of this phenomenon.

(iv) Comparative Analysis of the Relative Frequency of Gallo-Belgic Types (see Note 5.12).

One method of assessing the nature of the supply of Gallo-Belgic pottery to sites is to establish the relative frequency of the types *vis-à-vis* each other. This may be accomplished by summing the amount of Gallo-Belgic pottery in an assemblage or group and calculating the percentage which each type represents. This procedure is followed in the present section to establish the relative frequency of TN, TR and the Cam. 113. In the main the analysis is conducted at the level of assemblages rather than feature or phase groups (for each assemblage all instances of the types have been summed independent of context). This is a consequence of the fact that the figures for features and phases are simply too small in some cases to produce an analysis with which one might have confidence; however, it is also appropriate for comparative purposes. Analysis at the assemblage level is satisfactory for identifying the general trends of the evidence.

The absolute quantities of each type of Gallo-Belgic ware present within nine assemblages within the study area (as recorded by the current author) are presented in Table 5.12. These data are used to produce a range of charts (Figures 5.52 to 5.57). The percentages which these absolute quantities represent are recorded in Table 5.13. The assemblages used in this analysis include several 'combined' assemblages wherein groups from different areas of the same site are combined, as, for instance in the case of Leicester. The assemblages include all of the largest Gallo-Belgic groups recovered from within the study area bar that from the Jewry Wall, LEI 13 (AA), (the reason for its unsuitability are stated above, *cf.* 2.5.2 (iv)). Assemblages included in the analysis comprise two Leicester groups: the two 'Bath Lane area' sites (Clay & Mellor 1985) of Bath Lane 1968, LEI 13 (AW) and Blackfriars 1977 (BE), and, for the analysis of TN and TR only, data from the so-called 'west Leicester' sites (Clay forthcoming) of (AN), (AQ), (AS) and (AZ); this 'west Leicester' group is the only one not quantified by the present author (the quantities having been generated from information supplied by R. Pollard). The remaining assemblages comprise the material from Old Sleaford 1960-4, LIN 26 (B); Dragonby 1964-73, SHU 1 (C); Old Winteringham 1964-5, SHU 7 (A); Redcliff, the pottery accessioned by Hull Museum prior to the work here designated (B) begun in 1986, specifically NHU 17, (A), (C), (D) and (E); Redcliff, 1986-9, NHU 17 (B), that is the Gallo-Belgic ware from the four groups documented in Table 5.5; Stanwick, NYK 23, both the work of Wheeler 1951-2, being (A), and the area excavations of 1981-9, (B); and a sample from Binchester 1975-80, DUR 1 (C), comprising material present in contexts of phases 1, 1-2 and 2, together with all others viewed. Binchester apart, these assemblages are, of course, all from sites with mid first century occupation.

Turning first to examine the relative frequency of TN *vis-à-vis* TR a very consistent pattern can be observed from Table 5.13 and Figures 5.52 and 5.53. By either weight or RE measures TN is, with the exception of one assemblage, the dominant of the two classes; interestingly this pattern holds good independent of sample size. This picture conforms with the evidence outlined above (through 5.3). Quantification by weight shows that amongst eight out of nine assemblages TN comprises more than 75% of the recovered TN and TR. There can be no doubt that this is the normal pattern for the study area. Amongst the Binchester sample no TR was recovered; this is no surprising given that its Flavian start date is later than that of the other sites. However, this assemblage aside it is pertinent that TR is present in every sample (albeit in comparatively modest quantity). The clear deviant from the norm is the Stanwick sample wherein there is a near fifty-fifty split (though TN is still the larger component of the two). This discrepancy accords with the unusual nature of the Stanwick assemblages observed above (in 5.2 and 5.3). The mean percentages for the seven groups excluding Stanwick and Binchester are TN: 85.02%, TR 14.97%. It is noteworthy that the group from Old Sleaford 1960-4 produces closely similar figures to the mean (TN 86.50%, TR 13.49%) given the circumstances and nature of recovery which reputedly fell short of modern standards. Moreover, this may be taken as evidence that the bulk of sherds of TR and TN encountered during this work were retained (a probability further indicated by the presence of small/very small sherds amongst the assemblage (pers. exam.)). Also of particular interest is that the amalgamated unstratified group from Redcliff comprising NHU 17 (A), (C), (D) and (E) (*cf.* above, this section) also produces percentages close to the norm and indeed the group from the excavations at the site, NHU 17 (B).

When the quantification by RE figures are plotted a remarkably similar pattern is displayed (Figure 5.53). By this measure TN is again dominant. In eight out of nine assemblages it comprises 73% or more of the recorded TN and TR. The conspicuous exception is once more Stanwick where TR actually comprises 61% of the TR/TN total. It is noteworthy that the percentage figures generated from the RE data are closely similar to those produced from the weight data and that, consequently the resultant patterns are comparable as Figures 5.52 and 5.53 show. Excluding Stanwick and Binchester the mean figures for quantification by RE are TN: 83.55%, TR 16.44%; in other words there is merely a 2.5% difference from the mean percentage figures for quantification by weight. This is further confirmation that once groups are over a certain size (which may be quite small) the results of analyses by different measures of quantity tend to correlate well unless any of the pottery types involved have unusual characteristics (such as abnormally thin or thick walls (*cf.* 2.3.1)). In six out of the eight cases in which TR and TN both occur the percentage difference ranges between 3 and 5.5%. In the case of Redcliff, NHU 17 (B) the difference is in the order of 9% which probably suggests that in this sample TR is marginally underestimated by weight. The widest divergence is only 13% and this occurs with the Stanwick sample which is not only the smallest sample but is numerically very small. Also of interest is that in six of the eight cases the percentage formed by TR is higher by RE measurement than it is by weight measurement (*cf.* 5.3.6 (ii)). Given the nature of these two classes of pottery it might be wondered why this is not the case in all eight instances.

Extra-regional comparison for these figures for the relative frequency of TN and TR is hindered for the reasons stated above (5.3.6 (i)). Two comparisons may, however, be made. The excavations at Sheepen in 1970 (Niblett 1985) yielded both TR and TN of late Tiberian to Neronian date. Rigby quantified this material on the basis of 'number of vessels represented' and hence the results are not directly comparable with those of the present study, nevertheless it may be observed that by this method TN represented 74.8% of the assemblage, TR 25.2% (1985, 77). This ratio is therefore consistent with the general pattern for the present study area. Of particular significance however, especially with regard to the Stanwick percentages, is the assemblage from Ditches hillfort which is perhaps best understood as an element of the Bagendon complex (Trow 1988). Here 502g of TR and TN were recovered at a ratio of approximately 1 to 1 by weight (TR 52.58 %, TN 47.41%). These figures are closely comparable to those from Stanwick (*cf.* above). Similarly the RE percentages echo the Stanwick pattern: at Stanwick TR forms 61% by RE, TN 39%; at Ditches the figures are 68% and 32% respectively. Before any conclusions may be drawn from this correlation the figures for the other Bagendon assemblages (Clifford 1961; Reece and Trow forthcoming) would need to be ascertained. At this stage though the similarity may be noted especially since the figures for these two assemblages are so at variance with the mean for the study area. Chronology does not appear to be the reason for this phenomenon. TR tends to be more common in the pre-Claudian period than later, occurring with less frequency in deposits post-dating c. A.D. 40 (see Note 5.13). However, Stanwick seems unlikely to have received imported pottery before c. A.D. 43 whilst at Ditches the Gallo-Belgic pottery may have arrived in the Augustan and Tiberian periods but need not necessarily have done so (Rigby 1988b; Trow 1988, 76). Rather the prospect is that these exceptional figures relate to the extraordinary status of these two sites, both of which are identified with oppida of the LPRIA. If earthworks can be taken as a proxy of status (which admittedly is questionable) it is interesting that these two sites possess them on a massive scale, whereas other sites in the study area under consideration here do not.

Table 5.12 also documents the absolute quantity of TR and the beaker Cam. 113 present by weight in seven assemblages within the study area (these comprise those for which TN and TR are recorded, minus Binchester, which has produced neither TR nor Cam. 113, and the 'west Leicester' sites for which no information on Cam. 113 is currently available). These data have been used to produce the relative frequency percentages displayed in Figure 5.54. Again a highly consistent pattern is evident. In all seven instances Cam. 113 forms 76% or more of the total of these two types, but TR is not only present in all samples, it never forms less than 11% of any total. The mean percentages are Cam. 113: 81.96%, TR 18.03%; the greatest divergences from the mean occur, ironically, between the only two samples from Redcliff. In the sample from the 1986-9 excavations, NHU 17 (B), Cam. 113 attains its highest percentage of all the samples; however, amongst the pottery accessioned by Hull Museum prior to (B), that is (A), (C), (D) and (E), TR achieves its highest percentage for all the sample groups. (It could be that Cam. 113 is under-represented in the latter case due to recovery bias, specifically the fact that these butt beakers tend to fragment into smaller sherds than do a range of TR vessels and hence many may be passed over in instances when less than total recovery is operative, as was presumably so with most if not all of the undertakings designated as (A), (C), (D) and (E)).

The relative frequency percentages for TN as against Cam. 113 by weight are plotted in Figure 5.55; again the absolute quantities present are documented in Table 5.12. Eight assemblages are included in this analysis, these comprise all of those used in the analysis of TR and TN, bar the west Leicester groups. The percentages fluctuate considerably. The Binchester sample yielded no examples of Cam. 113, which is explained by its comparatively late date. Of the remaining seven samples the mean figures are: TN 53.58%, Cam. 113 46.41%. The lowest Cam. 113 percentage is 36.93%, this being amongst the sample from Old Winteringham. The lowest TN percentages are those from Stanwick, 22.09% and Dragonby 38.29%. The latter two are the two assemblages amongst which TR also registers most highly *vis-à-vis* TN which implies that these sites were comparatively 'under-supplied' with TN. In the case of Dragonby the reason for the high ratios of TR to TN and Cam. 113 to TN (which is generally a feature of pre-conquest (ie. pre A.D. 43) groups) might lie in the possibility that its modest supply of Gallo-Belgic pottery was prematurely truncated by instability engendered by the arrival of the Roman army in the region in c. A.D. 45 (*cf.* Creighton 1990) thereby fossilizing existing ratios.

The relative frequency percentages when all three Gallo-Belgic classes are considered are plotted in Figure 5.56 on the basis of weight, and in Figure 5.57 where RE is the measure. The absolute quantities from which these percentages derive are documented in Table 5.12, whilst the percentage figures are listed in Table 5.13. The figures for eight assemblages appear in both 5.56 and 5.57, these are the same assemblages as those for which TN and TR data are plotted (*cf.* above) minus the west Leicester groups. Comparison of Figures 5.56 and 5.57 shows the two types of measure to produce broadly similar results. The one qualification is that when RE is the measure the percentage represented by Cam. 113 is consistently higher than when the measure is weight (though Stanwick is an exception to this rule). This phenomenon is not surprising given that the Cam. 113 is a comparatively light, thin-walled vessel. This disparity has important implications since it points to the fact that different measures of quantity may be more appropriate than others for particular purposes; it shows that if one is interested in a proxy measure of the relative frequency of vessels in an assemblage RE measurement is likely to be a more reliable method than is weight.

This combined analysis further confirms that whilst TR is present amongst a number of assemblages it occurs in comparatively small quantity. Discounting the assemblage from Binchester, amongst which only TN was present, TR consistently ranks as the smallest percentage of the three types in all seven assemblages when weight is the measure. When RE is the measure TR ranks as the smallest percentage in six out of seven instances, the exception being Stanwick. When weight is the measure the percentage of the Gallo-Belgic pottery which TR comprises ranges from 6.28% to 16.56%. When RE is the measure the lowest percentage is 2.95%, the highest 24.56%; both high totals are produced by the Stanwick material.

When TN and the Cam. 113 are considered, it is readily apparent from Figures 5.56 and 5.57 that, as noted above, there is a considerable degree of fluctuation. Stated succinctly there is evidently no straight forward pattern for the region. Taking the weight figures first TN is more frequent than Cam. 113 in three instances and Cam. 113 is more frequent than TN in four cases. Nor are the percentage totals particularly close; the differences between the percentages for the two types are 4%, 20%, 21%, 24%, 17%, 3% and 47%. Turning to the RE figures the picture is somewhat altered, for by this measure not only does Cam. 113 form a larger component of the Gallo-Belgic pottery than does TN in five out of seven cases, but the margins by which it predominates over TN are, in four cases, considerable (ie. 60.5%, 55%, 44% and 28%); while in the remaining four instances Cam. 113 is the larger percentage of the two in one assemblage by 0.5% and TN is the larger in two assemblages, though only by 0.7% and 1.7%.

What Figures 5.56 and 5.57 suggest with regard to the status of sites is not emphatically apparent. What they do convey is the exceptional nature of the Stanwick Gallo-Belgic group. By both RE and weight three assemblages produce closely similar percentages for the three types, these are the Old Sleaford 1960-4 group, LIN 26 (B), Old Winteringham 1964-5, SHU 7 (A), and the collected material from Redcliff, NHU 17 pre (B). At first sight the similarity between the figures for the latter two Humber sites appears interesting, however, the constitution of the group from the 1986-9 work at Redcliff, NHU 17 (B) differs from that of the pre (B) assemblage and therefore spoils the parity. It maybe that the similarity between the figures for the Old Sleaford group and those generated by the pre (B) material from Redcliff arise from shared biases in recovery. However, that no neat overall pattern emerges from Figures 5.56 and 5.57 may arise from the probability that different variables were operative to differing degrees in the formation of the assemblages. Whilst variations between assemblages exist these may not be as significant though as the fact that all three Gallo-Belgic categories considered here are present in quantity at these sites but rare elsewhere.

(v) Comparative Analysis of the Relative Frequency of Gallo-Belgic Types and South Gaulish Samian.

In section 5.2 it was observed that SGSW was frequently present amongst the quantified assemblages though being absent from several. From 5.3 it is clear that TN and TR occur with less frequency amongst some of the quantified groups than SGSW whilst in others they occur with greater frequency. In this concluding section to 5.3 the relative frequency of these fine ware classes are compared in detail. In this analysis the units are the same as those throughout 5.2 and 5.3; the absolute quantities and percentage figures are contained in the Tables referred to above. The percentage of its group that each type comprised is plotted in stacked histogram form in Figure 5.58, for SGSW and for TN and TR combined, and Figure 5.59, which is the same as 5.58 but with TN and TR differentiated. The pattern is in several aspects striking Considering the overall pattern (ie. when SGSW, TR and TN are taken together) one of the immediate features demonstrated by 5.58 and 5.59 is that it is rare for these fine wares to represent 5% or more of their groups even when combined: in only 7 instances out of 35 groups (1:5) does this occur. In fact in the majority of cases (22) the combined percentage figure for SGSW, TN and TR is less than 2%. Whilst these combined totals are less than might be estimated on an intuitive basis sections 5.2 and 5.3 have demonstrated that these familiar imported fine wares actually constitute small, indeed often tiny, proportions of groups.

Considering the relative frequency of SGSW compared with TR and TN within groups provides some further indication that they were circulating differently. This is apparent from the examination of the assemblages. The two assemblages from Leicester, LEI 13, appear to present contrasting evidence. At the Blackfriars site, (BE), SGSW consistently comprises very small percentages through the first three phases and is absent from the fourth phase, while a relatively high percentage for TR and TN in phase 1 trails off through the subsequent phases. However, at Bath Lane 1968, (AW), SGSW is comparatively well represented amongst the phase 2 and 3 groups whilst the percentages for TR and TN combined fluctuate through the first four phases. This disparity may, to some degree, arise from the fact that though they are situated quite close spatially in the Bath Lane district of Leicester their specific site histories differ with Blackfriars being unequivocally a site of pre-conquest occupation. However, there are in fact some areas of comparability between these two Leicester groups: six of the eight phase groups have examples of both categories and, perhaps highly significant, in only one phase group (of eight) does SGSW actually form a larger percentage than that of TR and TN. The evidence of the early pits at the Jewry Wall site, LEI 13 (AA), appears to accord well with these two patterns. Taken as a whole the Leicester samples imply that TR and TN are most common (or most important) around the time of the conquest and that this *floruit* precedes the circulation of SGSW in quantity. (It is likely that TN and TR present in the later quantified phases at the two Leicester sites represent residual sherds).

The Lincoln groups, from LIN 17 (V) and (W), register only SGSW, but this is most likely to be a function of the comparatively late (Neronian) start date of the fortress (see

Gazetteer entry). The Dragonby groups produced only very modest quantities of SGSW and TR and TN representing tiny component percentages. Though the quantities are extremely small it may be noted that the mid first century ditch groups yielded more TN (there was no TR) than SGSW at a ratio of 2:1 on the basis of weight. This is consistent with the general pattern observed amongst the Leicester samples.

A similar configuration is evident amongst the Old Winteringham sample, SHU 7 (A). Here, amongst the ditch group AA, dated as Claudian-Neronian, TR and TN register a considerably higher percentage than does SGSW whilst amongst the slightly later group AB, which derives from the upper fill above AA, and which is dated as Neronian by its excavator, SGSW registers a much higher percentage (over 2%) which is greater than the percentage for TR and TN (the TR possibly occurring as residual material). In addition amongst the composite group AX, from a range of early features containing material dating from the Claudian to the early Flavian period SGSW forms only a tiny fraction of 1% of the pottery, whilst TR and TN comfortably exceed 1%. The Hayton fort group, NHU 14 (A), which will be of early Flavian date contained no Gallo-Belgic ware but some SGSW.

The trend seems further exemplified at Redcliff, NHU 17 (B), where amongst all four sample groups, which should be approximately Claudian in date, TN and TR comprise comparatively large percentage components, with SGSW registering as only tiny percentages and being absent from the ditch sample FN 761. This pattern is also reflected in the pre (B) material (accessioned by Hull Museum prior to (B)).

This means of displaying the data appears to demonstrate that at these major centres Gallo-Belgic table-wares are a more important component of groups than samian ware (at least numerically) in the pre-conquest to early Neronian period. However, thereafter SGSW appears to become a more important component of the quantified groups. This relates both to the overall decline of the importation of Gallo-Belgic wares, as well as to the stronger presence of SGSW in the region generally during the later decades of the first century; these patterns have of course been identified above (*cf.* 5.2 & 5.3). Two important conclusions follow. It is rare for SGSW to occur in groups in any quantity in the 20-25 year period following the conquest and this seems to be so independent of whether sites have a Roman military association or not. Second, Gallo-Belgic wares occur with greatest frequency at sites which were major centres in the LPRIA and/or native/civilian centres around the time of the conquest and they occur with greater frequency at these sites in the pre-Flavian period than does SGSW. This evidence implies that SGSW and Gallo-Belgic pottery were probably not in competition (contra Rigby 1973a, 20).

Figure 5.58 shows Stanwick to differ conspicuously from this general pattern. Amongst the groups at this site, which should be essentially Claudio-Neronian, SGSW predominates over TR and TN and reverses the trend apparent at the other sites in the region. The explanation for this does not seem to be chronological since the Gallo-Belgic wares at Stanwick are not a late 'suite' but include TR, but rather the presence at the site of an extraordinary samian element.

Finally, Figure 5.59 displays two notable features which complement Figure 5.58. First, it demonstrates graphically how dominant TN is amongst the TR and TN of the Redcliff groups. Second, it emphasizes the relative importance of TR amongst the groups from Stanwick.

5.3.7 Conclusions.

The overlapping distribution of TR, TN and the Cam. 113 implies that the types were distributed through the same networks. The distribution of this pottery within the study area lies in contrast to the pattern for SGSW. When the Cam. 16 is excluded its incidence is much more restricted than that of SGSW both geographically and, in terms of the sites at which it occurs. Compared to SGSW its distribution is 'lumpy' in the sense that where it is present it tends to occur both in variety and quantity. Both the presence/absence and quantitative evidence show that in this study area it is associated with high status centres which, significantly, and somewhat ironically given the presumed early *raison d'etre* of the industry, do not have Roman military origins or connections. The pattern is emphatic and this stands in juxtaposition to the widely held notion that military supply was the stimulus of this industry (eg. Elsdon 1989, 39). The distribution implies that these sites are centripetal centres, attracting Gallo-Belgic wares with apparently little 'trading down' or centrifugal dispersal to sites of lesser rank. This is a significant obεervation since it shows that in this region at least Gallo-

Belgic pottery, an artefact which has often been identified as a 'prestige good' (eg. Trow 1990), was probably not distributed in a manner identifiable with the prestige goods model (*cf.* Haselgrove 1982a). Hence this distribution appears to be an important window allowing an insight into the nature of the exchange network in the LPRIA. Indeed, what may be illuminated here are the distribution arrangements within the area of the Corieltauvi, with some of the consistent patterning evident from the above analysis, for instance in the ratios of TR to TN (*cf.* Figure 5.52 and 5.53), reflecting shared sources of supply or access to a common pool.

That the distribution of SGSW, in some ways of course an analogous fine ware, is more widespread but apparently 'thinner' is a contrast of considerable interest. This pattern might be interpreted as highlighting a change in the nature of exchange relationships during the latter half of the first century A.D., the consequence of altered social and economic frameworks, and perhaps the dislocation of ethnic identifications. Further, as noted in the preceding section (5.3.6 (v)), SGSW and Gallo-Belgic pottery do not appear to have been in competition for the same markets in the mid first century. How this evidence compares with that for other regions in Britain is at present uncertain since analyses similar to the current one have not been undertaken. Work of this nature might be considered a research priority.

5.4 THE DISTRIBUTION OF LYON WARE.

5.4.1 Introduction.

(i) The Ware.

Lyon ware pottery in Britain comprises a select range of fine ware forms typically characterised by a distinctive fabric, surface finish and decorative schema. On British sites Lyon ware is known from conquest period horizons and its importation is now understood to span the years following the conquest until the mid Flavian period (ie. c. A.D. 43-80). As its name suggests this ware was produced near Lyon, Gaul (Greene 1979, 14). The ware was evidently widely distributed (*cf.* Greene 1979, Fig.3). In Britain it is known from numerous southern sites though it rarely occurs in quantity. This pattern is reflected within the current study region. Lyon ware demands the attention of this survey for two reasons. First, at a number of sites it appears to be the most important (ie. numerous) imported fine ware of the pre-Flavian period after samian ware; this is the case, for instance, amongst the pottery from 5-12 Fenchurch St, London (Chadburn & Tyers 1984, 22), at Colchester (Symonds, 1983, 22), Kingsholm (Hurst 1985, Table 1), Cirencester (Rigby 1982, 179) and Blake St, York, NYK 28 (Q) (Monaghan forthcoming). Second, the patterned nature of the distribution of this ware within the study area is of particular significance for this thesis and complements the discussion (*cf.* this chapter) of imported fine wares within the region (see Note 5.14).

The characteristics of Lyon ware contrast markedly with those of SGSW and Gallo-Belgic wares and make it readily identifiable. The typology of this ware has been comprehensively researched by Greene whose publication (1979, 13-42) emphasizes its standardization. The fabric is fine and cream-coloured, often displaying a green tinge; all surfaces are colour-coated, usually dark greeny-brown, and more often than not display *roughcasting*. Greene states that the: "copper-coloured metallic sheen" of the slip-coating: "is probably an effect of soil conditions" (1979, 13). This is possible but it would not be surprising if a copper or 'antique bronze' appearance was intended by the potters. The roughcasting of surfaces contrasts with the smoothness of the customary finishing of vessel bodies and the sheeniness of the slip; this juxtaposition would seem to be relational. The formal range of this pottery is highly circumscribed (at least this is the case with vessels known from Britain), being limited principally to small cup forms (*cf.* Cam. form 62) and wide-mouthed beakers with high shoulders and short, everted rims, together with other specialized forms such as the small bowl with convex underside, raised on three conical feet (Greene 1979, Fig.6 No.11, now recorded from 6 British sites) and lamps, though these seem comparatively rare. That the standard forms are presumably drinking vessels is particularly noteworthy though they may not necessarily have been used as table-wares. No typological development seems to have taken place during the relatively short life of the industry, though there is some indication of a change in the balance of the forms circulating with time (*cf.* 5.4.1 (iii)). The ware appears to have been 'imitated' by potters operating in Britain (eg. Early Colchester Colour Coated ware (Symonds 1983, 23)) though these items are discernible from the imported ware (*cf.* Greene 1978a).

(ii) Dating.

Traditionally Lyon ware has been regarded as Claudio-Neronian and this dating is endorsed by Greene (1979, 17-8). He dates the origins of the ware to the Tiberian period but states that: "A sudden expansion must have occurred around A.D. 40 both in manufacture, distribution, and the range of forms produced" (1979, 17). No examples of the ware from Iron Age provenances in Britain are given by Greene and none are known to the current author. As regards its terminal date Greene suggests a date of c. A.D. 70 with "survivals" continuing to circulate up to c. A.D. 75 (*cf.* Millett 1987b, Fig.2). Such a dating is consonant with his preferred thesis that the industry was extinguished as a result of the Civil War of A.D. 69 (Greene 1979, 17-8). However, recent evidence suggests that the terminal date of importation/circulation is in need of review.

Chadburn and Tyers state that in London Lyon ware: "is not confined to Neronian levels but still circulates in small quantities in the Flavian period" (1984, 42). Whilst this might be so these authors provide no evidence for accepting this as 'continued currency' rather than the incidence of residual material. The case for the circulation of Lyon ware extending into the Flavian period is strengthened by the evidence from several Roman military sites in the north of Britain conventionally dated as mid Flavian. The ware is present for instance at Carlisle (Taylor 1991), Ribchester (pers. comm. P. Webster April 1990), Binchester, DUR 1 (B) and (C) (pers. exam. March 1990), Red House, Corbridge (unpublished; pers. comm. J. Dore June 1989), Elginhaugh (pers. exam. June 1989), Camelon (pers. comm. J. Dore June 1989; pers. comm. Vivien Swan April 1991) and, apparently, Newstead, if the rough-cast beaker published by Curle (1911, 248, Pls 46, Type 31 & 49 (B) Fig.6; here after referred to as the Newstead beaker) is Lyon ware as Dore has suggested (pers. comm. June 1989). Whilst the earliest occupation at the fort at Binchester may well be of a slightly earlier date than is usually thought (*cf.* 5.2.7) it is unlikely that these other sites mentioned, all of which, with the exception of Ribchester, lie further north, were founded before c. A.D. 75. Greene had stated that Lyon ware: "is completely absent from the sites founded in northern Britain by Agricola in the early eighties A.D." (1979, 142). This was fundamental in his dating of the ware. Since the sites listed here are lik·ly to have been founded between c. A.D. 75-85 (*cf.*

Breeze & Dobson 1985, Figs 1 & 2) the date range of the ware must be extended to include this period.

(iii) Typology and Chronology.

There is evidence to suggest that whilst there appears to have been no significant typological change in the industry (Greene 1979, 17) there occurred an alteration in the emphasis of the forms produced (or available) towards the end of the importing period. Whilst from Greene's data (1979, 36-7), principally from southern British sites, the ratio of cups to beakers appears to be 2:1 (see Note 5.15) the majority of vessels represented at Flavian sites are beakers; examples of cups in Lyon ware are comparatively rare north of the Trent-Humber (*cf.* 5.4.3 (iv)). Further the evidence from the study region and the rest of the north of Britain suggests that towards the end of the currency of the ware, folded (indented) beakers (*cf.* Greene 1979, Fig.8 No.21) become much more common amongst the beaker forms represented. Illustration of these trends comes from the following sites: York, where a number of folded beakers are represented amongst the Lyon ware from 9 Blake St, NYK 28 (Q), (pers. comm. J. Monaghan April 1989); Castleford, WYK 1 (A), where folded beakers form the large majority of the vessels represented, and from where cup forms are not recorded (pers. exam. June 1988); Castle St, Carlisle, from where the two illustrated examples of Lyon ware are both beakers (Taylor 1991, Fig.309 No.49 & Fig.313 No.118); Binchester, DUR 1, (B) & (C) where the only identifiable forms known to the current author are from beakers including a folded beaker (from (C)); Camelon, where cups were not represented (pers. comm. J. Dore June 1989); whilst at Newstead the aforementioned vessel is a folded beaker. This apparent pattern is consistent with the general decline in the popularity of cups from c. A.D. 70 (evident for instance in the SGSW repertoire) and the sustained popularity of beakers. Whilst this general phenomenon has been observed by Greene (1973, 29) its expression *apropos* Lyon ware is not noted by him (*cf.* Greene 1973; 1979). This particular pattern is worthy of future investigation. What is clear at present is that the currency of the ware in Britain is unlikely to have preceded c. A.D. 43 and, though the weight of evidence now indicates that it extended into the Flavian period, it is improbable that its currency lasted beyond the mid 80s

(iv) Distribution.

It was noted in Chapter 2 that Greene's map for the find-sites of Lyon ware (1979, Fig.4; reproduced here as Figure 5.61) displays a predominantly southern distribution with only three find-sites north of a line from Wroxeter to Longthorpe and one that would be consistent with a dating for the ware of c. A.D. 40-70. Of this he states: "the coverage is as complete as possible and should not be altered significantly by additional finds" (1979, 14). However, it is now evident that this map can be revised for several more find-sites are now known in Wales (eg. Loughor fort and Neath (pers. comm. David Evans April 1991)), whilst the current and other research has identified Lyon ware at a number of sites in the Midlands, northern England and Scotland. In the Midlands and the north of Britain Lyon ware is now recorded at 11 sites in addition to those plotted by Greene (Appendix 5.53; *cf.* 5.4.1 (ii), above). These newly documented find-sites do not, however, alter the pattern *vis-à-vis* the types of site on which the ware occurs in Britain. Greene's map records Lyon ware from 42 sites in Britain; of these 37 are sites known to be associated with the presence of the Roman military. Greene does not give references for these 42 find-sites so it is unclear without considerable research whether the precise provenances of the finds are actually associated with the Roman military or not. What can be said is that the distribution appears to correlate closely with the presence of the Roman army and that at least outside the south-east of England its circulation appears to be restricted to martial sites and sites likely to have had Roman administrative personal; in the south-east Lyon ware is known from such sites as well as from locations at which Romanization appears to have been underway from a comparatively early date. (It is noteworthy that Pollard's study of the Kentish evidence indicates that at least in the extreme south-east of the country the ware was circulating in small quantities to a number of native/civilian sites (1988a, 37). It is unclear at present if similar detailed studies elsewhere in the south will show this to be a regional pattern, or whether this is a more exclusive phenomenon perhaps related to the proximity of London, Southwark and Richborough).

Greene's research was comprehensive but the degree to which it has been extended over the past decade or so is a reminder that recorded distributions are fixed moment in time records (*cf.* 2.7.1) and that conclusions drawn from them must be contingent.

5.4.2 Some Aspects of the Nature of the Evidence.

(i) Reporting.

As with other wares (*cf.* 5.2 & 5.3) there has been a recognition and reporting problem with Lyon ware. The ware is distinctive and likely to be noticed amongst assemblages. Hence, particularly when sherds diagnostic of form are present it is likely that it will have been reported, even in reports which do not include a full catalogue of recovered pottery. Being particularly thin-walled, however, it is prone to shattering into small fragments and this must effect recovery, reporting and illustration. Moreover, it should be recalled that familiarity with the ware and its regular identification by pottery researchers are fairly recent developments, in large part the consequence of Greene's publications of the 1970s (1978a; 1979). Reports preceding Greene's work may include published examples of Lyon ware which are not identified as such, and which, from the descriptions given might not be identified as the ware with confidence by the report reader (see Note 5.16). In addition if the significance of the ware (eg. as an import) was not appreciated by a reporter the presence of sherds may have passed unreported.

Reference to the incidence of Lyon ware within the study area shows that there has existed a 'short-fall' in the reporting of the presence of the ware. Appendix 5.53 lists nine sites within the study area at which Lyon ware has been documented, however, if the survey had relied upon published identifications alone only two sites would be recorded (Lincoln & Leicester). In the other seven cases Lyon ware is present amongst assemblages but has to date not been published. The finds from Camelon, Elginhaugh and Corbridge, Red House are also unpublished. As discussed above (*cf.* 2.7) the nature of the reporting of pottery is often a key determinant when the distribution of a ware is plotted; non-reporting can seriously effect the pattern of a distribution (when this is plotted) and its interpretation. It might also be mentioned here that there exists only a limited literature on this ware and a lack of quantitative information.

(ii) Research Input and Provenance.

It was noted above (5.4.1 (iv)) that Lyon ware is associated with the disposition of the Roman army. To an extent this was observed in the case of SGSW (*cf.* 5.2) and as has been mentioned in discussing the distribution of SGSW (*cf.* 5.2.3 (ii)) the fact that Roman military sites have received a greater degree of attention than have native/civilian sites must be borne in mind when assessing the distribution. This notwithstanding the pattern with regard to Lyon ware seems highly consistent.

5.4.3 The Distribution by Form.

(i) Introduction.

Greene's typological study confirms that the standard forms encountered in Britain are small cups and beakers and that vessels in other forms are rare (1979, 13-42). The evidence from the study area appears to be consistent with this general pattern.

(ii) The Distribution of Cups in Lyon Ware.

Cup forms are recorded from five sites in the study area (Appendix 5.54; Figure 5.62). The distribution appears to be associated with the Roman military, consistent with the general pattern for the ware and to be largely pre-Flavian. All five find-sites are either the location of fortresses or suspected fort-sites. Further, deposits associated with the fort, the fortress and the military works depot at Longthorpe, just to the south of the study area, have also all produced examples of cups (Wilson, M.G. 1974, 98, Fig.51; Wild 1987, 130 & 150, Fig.41 No.62), whilst north of the region the only site at which the cup form is known is the fort site at Elginhaugh (pers. exam. June 1989). If Longthorpe and Elginhaugh are added to the study area find-sites, 6 provenances lie south of the Humber-Trent and have known pre-Flavian occupation, whilst only two lie to the north. The latter two comprise York, NYK 28 (Q), from where a comparatively large sample has been forthcoming and where occupation is believed to date from c. A.D. 70/71 and Elginhaugh which is understood to be a of mid Flavian foundation. On this evidence it appears that the cup form is essentially pre-Flavian.

In terms of form and decoration the vessels represented are of standard type. Where the specific form can be identified this invariably resembles the Cam. form 62 (Hawkes & Hull 1947, 228). A range of decorative mot'fs are evidenced (see Note 5.17).

(iii) The Distribution of Beakers in Lyon Ware.

Beaker forms in the ware are documented from seven sites (Appendix 5.55; Figure 5.63). Again a strong association with sites having a Roman military presence is evident. In this case though the incidence is more even across the geography of the region and this seems indicative of the chronology of the vessels. Of the seven find-sites six are sites associated with the Roman army. Old Sleaford, LIN 26 (B), is the other find-site from where no evidence of the presence of the Roman army has been forthcoming; though only one vessel is recorded (see Note 5.18).

Beakers in Lyon ware are documented from both the fort and fortress at Longthorpe (Wilson, M.G. 1974, 97, Fig.51), as well as from the site of the military depot (eg. Wild 1987, 142, Fig.39 No.27). The military association is also reflected to the north of the research area. The roughcast beaker from Newstead is said to be in Lyon ware (*cf.* 5.4.1 (ii)) whilst the finds from the Flavian military sites of Corbridge, Red House and Camelon are apparently from beakers (pers. comm. J. Dore June 1989). Carlisle has also produced examples of beakers (Taylor 1991, Figs. 309 No.49 & 313 No.118). Bearing in mind the date for the occupation of these sites this appears to indicate that beakers continued to circulate in the early Flavian period, that is, later than cups, a pattern not noticed by Greene's research.

(iv) The Comparative Incidence of Cups and Beakers.

This finding regarding the currency of beakers seems to be genuine. Since the 'normal pattern' based upon evidence from southern Britain appears to be a ratio of 2:1 in favour of cups (*cf.* 5.4.1 (iii)) the northern evidence appears to deviate: here beakers not cups are the more widespread form. The scarcity of cups in the north of Britain is not explained by a general rarity of Lyon ware cups relative to beakers, rather it appears to relate to a change in the balance of the circulation of forms.

Other evidence which may conflict with the general pattern of Greene's data may be noted. Of assemblages from London, Chadburn and Tyers observed that: "beakers are probably more common than cups" (1984, 21). Additionally it is readily apparent from Appendices 5.54 and 5.55 that at Leicester, in respect of sherds diagnostic of form, beakers are considerably more widespread than cups, being recorded from 11 locations in Leicester compared to 3 in the case of cups (see also Gazetteer entry for Leicester under 'Lyon ware'). However, it has to be recalled that other factors being equal beakers will produce more sherds than cups and hence be a more common find in terms of sherd count (and indeed weight); though they may not necessarily be diagnostic of form.

A more reliable index of the ratio of these vessel forms would be forthcoming from RE and EVE measurement. However, the amount of such data available is limited and with regard to the present study the sample of Lyon ware recorded is too small to generate figures which may be considered reliable.

(v) The Incidence of Other Forms in Lyon Ware.

The only item in Lyon ware from the study region which is not from a cup or beaker form is a fragment from the discus of a lamp from Lincoln, LIN 17 (O). Lamps in Lyon ware fabric are not common but are documented from a number of British sites. Again their incidence correlates closely with the known presence of the Roman army during the period up to c. A.D. 75. Examples are recorded from Longthorpe (Wilson 1974, 98, Fig.51 No.16), Kingsholm (Hurst 1985, 87), Colchester (Hurst 1985, 87; Crummy, N. 1983, 77, No.2094, ? Lyon ware), Usk (Hurst 1985, 87), London (Wheeler 1930, 66, Pl. XXVI No.5) and, apparently, Exeter (Bailey 1979).

5.4.4 The Quantitative Evidence.

(i) Lyon Ware as a Component of Assemblages and Groups.

As noted above Lyon ware is the second most common imported fine ware amongst several pre-Flavian assemblages in Britain. Quantities present amongst groups within the study area are, however, in all cases tiny. Amongst the quantified sample comprising 60 groups from 17 assemblages Lyon ware occurs in only 6 groups from 3 assemblages (*cf.* Table 5.14). Where it is present amongst the quantified groups it registers in minuscule quantities totalling no more than 5g in any one group, whilst in all six cases only 1 or 2 sherds are present. The quantities present at an assemblage level (ie. including items from post-first century and unstratified contexts) are likewise of extremely modest proportions. Amongst the assemblage from East Bight, Lincoln, 1964-6, LIN 17 (K), for instance, sherds from only three vessels were present (Darling 1984, 66 & Table 3) with the ware absent from first century contexts. Similarly no items of Lyon ware were present amongst the quantified sample from Old Winteringham, SHU 7 (A), and only two sherds, weighing 2g are known to the author from the site; only 7 sherds weighing 19g have been documented by the author from Binchester, DUR 1 (B) and (C); and only one item in each case is recorded from Broxtowe, Old Sleaford and High Cross. Significantly the known fortress sites, together with Leicester, have produced the largest absolute quantities: 55 sherds were recovered at Blake St, York, NYK 28 (Q) (pers. comm. J. Monaghan April 1990) and the ware is also recorded from other locations in the city (eg. Wenham 1971, 48-9, *cf.* Gazetteer entry) five sites in Lincoln have yielded the ware; whilst at Leicester Lyon ware is recorded from 15 locations. The fortress and military complex at Longthorpe too, has produced a comparatively large number of vessels, a range of which have been published (Wilson 1974, 97-8, Fig.51; Wild 1987, 130, 142, 150). Excavations at Castleford have also produced sherds from several vessels though the precise quantity is not known to the current author. These figures put the scale of importation and consumption into perspective. Clearly though the ware was widely distributed it is rarely present amongst assemblages in quantity (which is a pattern similar to that for SGSW only on a smaller scale). Clarification of this is apparent from the percentages which the ware comprises within groups (Table 5.15).

(ii) Comparative Analysis of the Relative Frequency of Lyon Ware, South Gaulish Samian and Gallo-Belgic Types.

Table 5.15 shows the percentage figures for Lyon ware as a component of groups. The data forms a coherent pattern. In none of the six instances in which Lyon ware is present amongst the quantified groups does it comprise more than 1% of group composition by weight; in fact the highest percentage is 0.53% in the case of Phase 1 at Binchester, DUR 1 (C) (see Note 5.19) whilst in all other cases Lyon ware amounts to less than a third of one percent (see Note 5.20). When sherd count is the measure the percentage figures not surprisingly are slightly higher in all cases than those by weight. Nonetheless amongst only two of the six samples does Lyon ware comprise more than one percent of the group total (2.98% in a Legionary horizon at East Bight, Lincoln, 1980-1, LIN 17 (V) Group 5; 1.92% amongst Phase 1 at Binchester, DUR 1 (C)). The only group to register a percentage by RE was the aforementioned Lincoln sample. (It has not been possible to establish the percentage of group figures for Lyon ware in the case of 9 Blake St, York, on the basis of data supplied by J. Monaghan (Monaghan forthcoming); however, the combined figures for all colour-coated wares (amongst which Lyon ware may be the major constituent), with amphorae excluded from the quantification, are available. The figures are consonant with the pattern evident in Table 5.15. When weight is the measure the percentages are 0.14% for Phase 1 (early Flavian) and 0.21% for Phase 2, (Flavian); by sherd count the figures are 1.44% and 1.03% respectively (Phase 1: 2 sherds/5g; Phase 2: 23 sherds/68g).

When Table 5.15 is compared to the equivalent tables for SGSW and Gallo-Belgic wares (Tables 5.1, 5.2, 5.3, 5.6, 5.8 and 5.10) it is clear that Lyon ware, compared with these contemporary fine wares is rare. Reference, for instance, to Table 5.2, which ranks the groups containing SGSW by the percentage formed by this ware (on the basis of weight), demonstrates that if these Lyon ware figures were included in the ranking the highest two percentages would rank only 12th and 20th in order; similarly if the figures for Lyon ware by sherd count were integrated with the rankings for SGSW by count (Table 5.3) the highest two percentages for Lyon ware would rank joint 11th and 18th. Direct comparisons regarding the relative frequency of these fine wares within the quantified sample are confounded by the fact that Lyon ware is present amongst only six groups of the quantified sample (a gross difference in itself) but also by the fact that three of these six cases are actually from Binchester, for which samian percentages are not available (*cf.* 5.2.8 (i)). The remaining three groups come from Bath Lane, Leicester, LEI 13 (AW), (Phases 3 & 4) in addition to the Lincoln group (*cf.* above). In these circumstances an appropriate approach is to consider the collective patterns for the quantified early phases at these two sites. The first four phases at Bath Lane, covering the period to c. A.D. 100 produced 138g of samian, and this accounted for 5.66% of the pottery in Phase 2 and 1.32% in Phase 3 (Tables 5.1, 5.2 & 5.3); whilst this quantity and, indeed, the percentages, appear modest they nonetheless dwarf the total quantity of Lyon ware present which was a mere 8g (Tables 5.14 & 5.15). Similarly at East Bight, Lincoln, 1980-1, SGSW from the first century phases amounted to 739g (Table 5.2) whilst only two sherds of Lyon ware were present weighing just 3g. Hence, amongst the quantified sample from the study area, even when Lyon ware is present it is far less common than samian ware.

Comparison of the figures for Gallo-Belgic wares at Bath Lane with those for Lyon ware is also noteworthy. Though the four phases yielded only 64g of TN (Table 5.5) this is still eight times more than the figure for Lyon ware (though the latter would of course produce proportionally thinner, lighter sherds). The figures for TR and the Cam. 113, however, appear comparable to those for Lyon ware (Tables 5.7 to 5.10).

The evidence from the study area seems consistent with that of other groups from elsewhere in Britain. Groups from horizons in London believed to be pre-Flavian, demonstrate that though Lyon ware occurs widely across the City it is invariably present in tiny percentages and that SGSW occurs with much greater frequency: at 18 Birchin Lane, the City, 1983, 10g of Lyon ware were recovered representing 0.2% of the group by weight, whilst SGSW comprised 7.8%; at Sugar Loaf Court, Little Trinity Lane, 1982, 4g of Lyon ware were present amongst a group comprising 14.5kg (0.03% by weight); at the GPO site, Newgate St, 1975, 5g of the ware were recovered from relevant horizons yielding 43kg of pottery (0.01% by weight); finally at 5-12 Fenchurch St, 1983, though 275g of Lyon ware were present this represented only 0.9% of the group by weight, with samian accounting for 3.8% (all figures calculated from data presented by Chadburn and Tyers (1984)). Similarly groups from Castle St, Carlisle, dated as early Flavian to A.D. 92-3, and therefore covering the same period as the early Binchester phases, contained 79g/12 sherds/0.18 RE of Lyon ware comprising 0.34% of the group by weight, 2.19% by count and 1.16% by RE; SGSW, however, accounted for 8.35% of the group by weight (figures calculated from data presented by Taylor (1991)). (See Note 5.21).

5.4.5 Discussion and Conclusions.

The current research has demonstrated that within the study area many of the major military sites of the period c. A.D. 43-85 have, where extensively explored, produced examples of Lyon ware. This close correlation between the presence of the Roman army and the find-sites of Lyon ware reflects the apparent pattern for the province as a whole. That this phenomenon is not a function of differential research (*cf.* 5.4.2 (ii)) is indicated by the absence of Lyon ware from native/civilian sites which have yielded large assemblages of pottery (including other imported Roman fine wares) notably Stanwick, Redcliff and Dragonby. It is likewise absent from numerous native/civilian sites which are of smaller scale from where correspondingly small assemblages have been recovered, for instance Whitwell, LEI 26, Dunston's Clump, NOTT 1, Dorket Head, Ramsdale Park, NOTT 9, Ferriby Sluice SHU 2, Faxfleet 'A', NHU 9, Catcote, CLV 1 and Thorpe Thewles, CLV 4.

The distribution indicates that the ware appears to have circulated more or less exclusively within a Roman military (? military-administrative) network. This seems generally true of the province as a whole though in the south the ware was reaching the most important civil centres such as London). A range of explanations could be forwarded to account for this, such as the existence of an economic (marketing) arrangement between suppliers and the Roman army, as suggested by Greene (1973, 28-9) which might have resulted in a distribution within the military network. An alternative explanation might be that Lyon ware was not desired by native and civilian populations. What needs to be borne in mind here when discussing this incidence is the minuscule amounts involved. It has generally been realised that Lyon ware is uncommon but this has rarely been appreciated through quantitative examination. The most remarkable aspect is how thin and wide the distribution is. In this respect a close parallel can be drawn with the pattern observed from the distribution of SGSW during the same period (*cf.* 5.2) only on a reduced scale. Hence in these cases the same distributive network may be being identified.

The military association of the distribution contrasts markedly with the incidence of the largely contemporary Gallo-Belgic table-ware pottery (*cf.* 5.3). The most significant variation is between the types of site at which the two categories occur. The distribution of Gallo-Belgic pottery in quantity is fairly exclusively limited to sites known to have been native/civilian centres (5.3.7). Another important difference is that of relative frequency. Amongst some assemblages, such as those from Redcliff and Stanwick, Gallo-Belgic pottery comprises a sizable percentage within groups (Figures 5.46 & 5.47), whilst at other sites (eg. Old Sleaford) it was clearly numerically significant (Figure 5.50). Conversely in all cases of its incidence within the region Lyon ware occurs in tiny quantities. What is highlighted here is the differential and structured circulation of these contemporary imported fine wares.

CHAPTER SIX

THE DISTRIBUTION OF AMPHORAE.

6.1 INTRODUCTION.

6.1.1 Definition.

Amphorae were storage and transport containers in the Roman world. They were not the only type of container serving these purposes; wooden barrels, for instance, were common (Fitzpatrick 1989a, 97-100), whilst dolia (Willis 1990b, 53) will have been employed for storage and, possibly, for transport as well (eg. Green 1986, 106; *cf.* Fitzpatrick 1989a, 99, for evidence that they were used as *in situ* storage tanks on ships). Amphorae are generally, however, a more common archaeological find than these two classes and in Britain amphorae comprise the main container evidence for the importation of goods, particularly foodstuffs from the Mediterranean.

Amphorae are customarily understood as being heavy duty pottery vessels, much larger than most contemporary ceramic items. This is true but size and form cannot be taken as the sole defining characteristics since some amphorae were comparatively small (*cf.* 6.3.14), whilst others resemble jugs and flagons in form and, indeed, overlap with such vessels in size. The term amphorae then is appropriate to a class of ceramic vessels used as containers for transporting and storing goods; it is a label independent of vessel size.

In Britain almost all amphorae are imported vessels, the examples of Dressel form 2-4 apparently manufactured at Brockley Hill (Castle 1978; Sealey 1985, 128-30) are exceptional. Being containers of goods from the Mediterranean world, the heartland of the Empire, the presence of amphorae in contexts of Iron Age date and at native sites, may be considered an important index of Romanization (*cf.* 1.6.2 & 1.7).

6.1.2 Classification.

Amphorae have been subject to detailed study for more than a century (*cf.* Paterson 1982) but over the past 25 years the level of study has much intensified, with attention being particularly focused upon typology and fabric provenance (*cf.* Peacock 1984, 37), aspects which had hitherto been under considered. This progress has been assisted by the fact that amphora forms were highly standardized. In Britain the work of Peacock during the 1970s emphasizing the central importance of fabric analysis to typological study and sourcing was seminal. Whilst important research was being undertaken on the continent Peacock's work inaugurated a revolution in the reporting of amphorae in Britain. It has become usual for site publications to include a specialist report on the amphorae and a number of synthetic papers have been published (eg. Peacock 1974; 1978; Williams 1981; Williams & Peacock 1983; Fitzpatrick 1985; Sealey & Tyers 1989); in addition progress towards identifying the likely or customary contents of particular types has been sustained.

No single universally accepted classifactory scheme for amphorae exists (*cf.* Peacock 1971, 162). This is perhaps not surprising given their wide occurrence, typological diversity and the regionalized nature of much research. Peacock and Williams' publication (1986) comes near to offering a basic classifactory scheme and nomenclature for the common types of amphora, however, it does not appear to be being adopted by those reporting upon amphorae in Britain (see Note 6.1).

Whilst many forms and fabrics are now familiar a considerable proportion of amphora sherds are frequently labelled 'unassignable' being undiagnostic of form, or of unrecognized form and/or fabric. This phenomenon serves as a reminder both of the scope for future research and of the fact that the nature of the material highlights the limits of the typological approach (see Note 6.2). As with much ceramic material details or knowledge of both form and fabric are often essential for classification (*cf.* Peacock 1974, 241-2) though it is evident that many amphora forms occur in distinctive fabrics and the recognition of either may be a reliable guide to the other (*cf.* Peacock 1977d; Williams & Peacock 1983, 263).

6.1.3 The Archaeological Value of Amphorae.

Different specialists have studied amphorae to different ends. Callender points to their potential value for establishing chronologies and their importance in the study of the economic history of the Empire (1965, xix). The emphasis of his study was epigraphic focusing upon the evidence of amphorae stamps and there is conspicuously limited discussion of amphorae and the Roman economy in his text. It is not surprising that the thrust of early research (eg. Dressel 1899; Callender 1965), was concerned with epigraphy and that systematic study and reporting is a recent development. It is important to recognize that amphorae will not have been regarded as particularly useful indices of chronology by archaeologists in the past: sherds of amphorae are not an abundant find on most archaeological sites (in Britain), and, indeed, featured sherds, diagnostic of form are comparatively rare (eg. Table 6.3); moreover, forms undergo little typological development.

Perceptions as to the value of amphorae as a means to elucidating aspects of the nature of economy and society have altered and expanded in recent years, consistent with changes in archaeological perspectives, and facilitated by the widening awareness of typology and fabric sources. The identification of the origin of these vessels is recognized as an important guide to the trading contacts of provinces, regions and sites. In recent work it is this aspect *per se* (ie. the geographic origin of the container) which is commented upon fully though with little attention being paid to the significance of what was being transported, a matter of at least equal archaeological interest. The implications of the presence of the contents of the vessels (particularly the range of foodstuffs they contained) on late British Iron Age sites has attracted comparatively little discussion.

In an important way, the advances in the study of amphorae typology and reporting have yet to yield their richest archaeological fruits. It is through works of synthesis, focusing upon the nature of supply, and covering the sources of amphorae and the volumes of particular types of imported food that they represent that the most rewarding insights will emerge. To date remarkably little work of this sort has been undertaken; Williams and Peacock's paper (1983) was a pointer to the potential of this type of study. Sealey's report upon the amphorae from the 1970 excavations at Sheepen (1985) set an important precedent, as Fulford and Huddleston recognized, in that it included: "the analysis of the capacities of the different types of amphorae and the quantification of the volumes of eg. olive oil, wine, fish paste, etc., reaching the site in the early Roman period. The countries providing the products are also ranked ... " (1991, 15).

In truth synthetic and comparative studies in this field continue to be rare in Britain despite the now extensive data base available. In this connection Paterson's perceptive prophecy, now ten years old, may be recalled: "It may well be that the decade of the '70s will come to be seen as the high summer of amphorae studies" (1982, 146).

6.2 THE NATURE OF THE EVIDENCE.

6.2.1 Reporting.

The systematic reporting of the presence of amphora sherds amongst pottery assemblages is a recent development. Amphorae are only infrequently noted in excavation reports of British sites which pre-date c. 1970 (see Note 6.3). The report on the excavations at Brough 1958-61, NHU 3 (B), (Wacher 1969), for instance, includes illustrations of 753 items of non-samian Roman pottery but only two are of sherds from amphorae. Similarly though amphorae are reported upon separately in the report on the Jewry Wall site, Leicester, LEI 13 (AA), with an illustration of three rims said to be the "Amphora Type series" (Kenyon 1948, Fig. 33), plus two other rims illustrated elsewhere, the entire length of commentary upon them is a mere 13 lines; conversely the total length of the report upon the non-samian Roman pottery covers 149 pages. Some reports of major work include no mention of amphorae even though sherds are known by the current author to have been recovered. Corder's report upon the excavations at Malton 1927-30, NYK 14 (A), (Corder 1930; Hull 1930) is a case in point, as is the report upon the excavations at Aldborough during the 1930s, NYK 1, (Myres *et al.* 1959). Often amphorae are mentioned only when they occur in exceptional circumstances. The latter is the case with the vessel discovered at Aldborough during the excavations of 1964, NYK 1 (E) (Jones 1972, 53) thought to have been used as a *pissoir* (see Note 6.4); apart from this item, which is referred to in the structural report only, amphorae are not mentioned. Some reports post-dating 1970, including very recent publications, contain highly selective details of the presence of amphorae or, when amphorae are reported, it is only featured items which are documented and for these the details of fabric and form supplied are often minimal and of limited value (eg. Cunliffe 1971b, 206 & 208, Figs 99 & 100; and perhaps Wilson, M. G. 1984, 201-2, Figs 80-1). In the report on the excavations at Old Winteringham 1964-5, SHU 7 (A), (Stead 1976, esp. 126), the only items published are stamps. The implications of this situation for a study such as the current one are obvious; it means that information on the incidence of the amphorae is particularly partial.

It is of some interest to compare the reporting of mortaria with the reporting of amphorae; both, of course, are distinctive classes of vessel, sherds of which share the qualities of being usually 'chunky', coarse, oxidized, undecorated, and so forth, and are regularly encountered amongst Roman pottery assemblages. Both mortaria and amphorae have long been recognized to be indicators of Romanization and understood as being (normally) of non-local manufacture. Despite these shared characteristics a study of reports demonstrates an historical tendency for mortaria to be drawn and published in detail (eg. Hull 1930; Kenyon 1948, esp. 75-80; Birley 1948; Hartley, K.F. 1976) in a manner which is at variance with the relatively poor attention amphorae have until recently received. This bias, appears to endure to some extent; for instance in the recent report on the archaeology of Roman Doncaster (Buckland & Magilton 1986) mortaria are the subject of a specialist report, whilst amphorae appear to be poorly reported, with only two or three unstratified items (rims) being reported through illustration (1986, Fig.41).

A range of reasons for this 'under-reporting' may be identified. A general point to be acknowledged is that there has been a customary bias in the publication and illustration of pottery in favour of fine wares rather than coarse wares. Particularly with regard to amphorae, however, a number of factors seem to have given rise to highly selective reporting. Significant amongst these must be the general ignorance of amphora typology, chronology, sources, and so forth, and their potential archaeological value that appears to have existed in Britain before the work of Peacock and others. It may also be that amphora sherds were regarded by excavators and reporters as being common place and unworthy of reporting. In addition it should be recalled that only featured items are usually illustrated in reports, hence in the past a sherd would have to include a rim, handle, base or stamp for it to be documented. In this connection it is important to note a point stressed by Williams and Peacock, specifically that amphorae possess: "a very large proportion of body compared with the featured parts such as rims, handles and bases and hence a majority of finds comprise non-distinctive body sherds" (1983, 263). It follows that a pottery group needs to be large before featured parts might normally be expected to occur. This phenomenon has important implications *vis-à-vis* quantification particularly with regard to the incidence of rims (*cf.* 6.2.4).

Moreover, there are practical difficulties with regard to publication, particularly that of scale. Sherds from amphorae can take up much publication space when illustrated, even when they are drawn at a reduced scale (ie. at one eighth instead of one quarter (eg. Hawkes & Hull 1947, Pls 70 & 71; Monaghan 1990, Fig. 3)).

In sum, prior to the mid 1970s, pottery reports usually contained highly selective information on amphorae; moreover, it is not uncommon for fairly recent reports to contain only partial information upon this class of vessel. In consequence the mapping of the incidence of amphorae is frustrated. In the course of the current study the incidence of approximately nineteen different amphora forms dating to the first century A.D. has been documented from (only) eighteen different sites (Appendices 6.1 to 6.19). The patchy nature of the distributions is probably exaggerated by the unevenness of reporting and research input (*cf.* 2.7 above). Two publications are a source of much information on amphorae present at Lincoln (Darling 1984) and York (Williams 1990) and this is a reason why these two sites feature prominently in the analysis here. In the case of the Lincoln report information on form and fabric is published together with useful quantitative details. The report upon amphorae from selected sites in York includes a listing by form with some details of fabric, though the latter are surprisingly limited; this particular report contains no quantitative information useful to the current study. More forms are documented from Leicester than from any other site in the region; this documentation has been made possible in large part by the fact that information has been made available by Pollard in advance of publication (Pollard forthcoming). Conversely it must be recognized that the non-publication to date of the results of a number of excavations, particularly ones carried out in the East Midlands in the 50s and 60s is a markedly limiting factor. Similarly the lack of information on the incidence of amphorae included in the excavation reports upon sites like Great Casterton, LEI 10, Aldborough, NYK 1, Bainbridge, NYK 2, Malton, NYK 14 and Doncaster, SYK 1, unfortunately results in the same effect.

6.2.2 Recognition and Identification.

In contrast to the classes of pottery considered above (chapter 5) sherds of amphorae are not always immediately recognizable as deriving from this class of vessel, nor are their fabrics necessarily distinctive of their form or origin. Considering the first point, it may be noted that some classes of amphora (such as the Pélichet 47, Dressel 28, Cam. 139) are comparatively small, thin walled vessels, and sherds from these forms may be easily mistaken as deriving from flagons or jugs. Body sherds identified as being amphora may be undiagnostic of form. Similarly fabrics may be unrecognized and/or unsourced.

This problem of identification is a significant one both quantitatively and qualitatively. The problem is quantitative in so far as the proportions of the amphora component of assemblages which are unidentified are often more than negligible. Amongst the amphorae from a selection of excavations at York published by Williams (1990, Table 22) 11% of sherds were unassigned; this was the third largest percentage for a category after the Dressel 20 and 'Gallic' categories and moreover, it formed a larger percentage than all the remaining 13 categories combined (see Note 6.5). The problem is also qualitative in so far as recognition may exaggerate the relative importance of one or more amphora types and consequently of our understanding of the commodities supplied and their source areas. Familiar and distinctive fabrics such as that of the Dressel 20 or the so-called 'Black sand' fabric, for instance, are usually recognized and identified. Fabrics which are less distinctive, or less frequently encountered, or less well researched may derive from amphorae the chronology, contents or origin of which may be of particular archaeological interest not necessarily proportional to their frequency.

6.2.3 Dating.

The 'type-life' of most amphorae classes is known only approximately and is not so tightly anchored as with the fine wares considered above. Taking the Dressel form 12 for instance, Peacock and Williams record the dating as: "mid first century B.C. to the later second century A.D." (1986, 114). In part this is because amphorae forms were conservative (*cf.* Paterson 1982). This approximate dating of amphorae typology does not present special problems for the current study - in fac' it might be observed that such dating is the norm, and that it is the 'close dating' of the early Roman fine wares which is remarkable - rather it is an aspect of the material which needs to be borne in mind.

Some of the forms considered in the current analysis are not chronologically specific to the first century A.D. However, this has not proved problematic. Dressel 2-4, for example, dates from the mid/later first century B.C. though it is unlikely that any examples arrived in the study area before the turn of the millennium. The form is thought to continue into the second century A.D., though again, none of the examples documented here can be shown to have arrived after the close of the first century. Similarly Dressel 20 was a long-lived type, but the instances listed in the current analysis represent items either stratified in deposits dated to the first century A.D., bearing a stamp of a type dated to the first century A.D., or are sherds including rims typologically of first century A.D. date.

6.2.4 Amphorae and Quantification.

Amphorae generate problems for quantitative analysis as a result of their inherent character. Their presence can 'distort' (skew) quantification by all the methods employed in the current study. This is something which is now familiar and generally understood, and hence requires only brief illustration and summary here. Most commonly this skewing is manifest where a few 'chunky' sherds of amphora are present. The presence of several, or even just one or two sherds of amphora in a context or phase group can depress the weight percentages of other categories considerably. One instance of this is evident in the phase 3 group from St Nicholas St, Leicester, LEI 13 (AS), (*cf.* Tables 6.3 & 6.4); here two sherds of Dressel 20 are present comprising 0.89% of the group by sherd count, however, they weigh 1.559 kg, a figure which means that by weight this category constitutes 24.90% of the phase group; in other words there is an asymmetry between the results of the two methods. As Figure 6.24 demonstrates this lack of correspondence between the 'percentage of group' by weight figure and that arrived at by sherd count is typical. Figure 6.24 shows that in the case of amphorae quantification by weight normally results in a higher 'percentage of group' figure than is forthcoming when sherd count is the measure, though not invariably. However, the figure also expresses the fact that there is no consistent relationship between the results of the two measures. This problem has a further dimension since the size (or more accurately the weight) of amphora sherds is so variable: sherds weighing only several grams or less occur with frequency, but sherds weighing hundreds of grams are also common. This variability can undermine the credulity of comparative quantitative analysis since, for instance, it can give rise to situations in which comparison is to be made between a group containing two sherds of amphorae weighing 1.2kg and another wherein 8 sherds weigh 120g. Weight might be regarded a more reliable guide to the relative frequency of amphorae, as with other classes of pottery, but in situations such as the above, the incidence of just one robust sherd might skew comparison.

In terms of sherd count skewing can occur when amphorae are present as numerous small sherds. This can arise when the vessels represented are thin walled and hence prone to fragmentation. This is the case with the pit group FN 40 at Redcliff, NHU 17 (B) (*cf.* Tables 6.1 & 6.2) from which 637 sherds of amphorae were recovered with an average sherd weight of 5.25g, a remarkably low figure. In fact amongst this group amphorae actually comprise a larger proportion of the group when sherd count is the measure (53%) than they do by weight (47%), the reverse of the normal pattern. This is unusual (*cf.* Table 6.2). In addition certain amphorae fabrics have a propensity to laminate, as with the Dressel 20 fabric (*cf.* Williams & Peacock 1983, 264). This characteristic of the Dressel 20 fabric largely accounts for the presence of the 42 sherds in the group from early contexts at Old Winteringham, SHU 7 (A) Group AX (Table 6.3).

Comparative analysis of the relative frequency of amphorae based upon EVE or RE values would be far more reliable and particularly apt for amphorae. However, it was noted above (*cf.* 6.2.1) that amphorae have a comparatively large proportion of body relative to their featured parts and consequently the majority of finds consist of body sherds. Moreover, the nature of the vessels means that rim sherds are particularly infrequent because rims are so robust and tend to break into only a small number of fragments (*cf.* 2.3.1). When they are encountered they tend to represent quite large proportions of the rim circumference and give high RE values. This is verified emphatically in the quantified data from the study area: there are 29 groups amongst which amphora sherds are present and for which RE data have been ascertained, but only in 9 of these were rims present (Table 6.1). In the case of the Dressel

20 fabric there are 19 groups amongst which sherds occur and for which RE data have been ascertained but only in 3 of these were rims present (Table 6.3). In this connection it seems apposite to recall Orton's observation that: "we do not yet know in detail how various sorts of EVEs behave in practice, and what adjustments and corrections may be necessary" (1982a, 167).

These problems for quantitative analysis are not easily resolved. They give rise to the question of whether amphorae should be treated in the same manner as the rest of the pottery or whether they should be quantified in a different manner, or indeed separated from the non-amphora pottery in quantitative analysis (a practice undertaken, for instance, in the case of the report on the pottery from Blake St York, NYK 28 (Q) (Monaghan forthcoming) and here in chapter 9). A point in favour of the latter is that the presence of amphora sherds can depress the weight percentages which other categories comprise. However, arguments in favour of retaining them within the main analysis are several: for instance, since the object is to establish the relative frequency of a pottery type between groups (not between pottery types within the same group) like is being compared to like; in addition to divorce the amphorae from their groups and to assign them to an independent analysis in a sense does violence to the integrity of the group as a whole. Since for the assemblages in the present sample in which amphorae are present the mean percentage of groups which amphorae comprise by weight is only 11.9% (*cf.* Table 6.2) this issue does not appear to be deeply problematic in the present case. Their inclusion does not generally result in extensive skewing or make nonsense of the quantitative approach (eg. by generating dominant 'percentage component of group' figures). In the analysis below weight is taken as the primary measure for comparison since it is apparently the least unsatisfactory method; sherd count figures though are not ignored. (It is apparent that the quantities of amphorae present are too small to convert meaningfully into commodity equivalents, as would have been desirable if higher figures for weight and/or RE had been forthcoming).

6.3 THE DISTRIBUTION BY FORM.

6.3.1 Introduction.

Information gathered in the course of the current study has included details of the amphora forms and (where possible) fabrics, present in assemblages (*cf.* Gazetteer). This information is summarized in Appendices 6.1 to 6.19 where the incidence of all amphorae of first century A.D. form known to the author are listed by form. Appendices 6.20 to 6.22 list the incidence of particular fabric types. This information has been used to map distributions within the study area in Figures 6.1 to 6.22. In the following sections, namely 6.3.2 to 6.3.22, the incidence of each form type is examined (6.3.2 to 6.3.20), beginning with wine amphorae and then continuing with amphorae used to transport olive oil, for fish products, and for fruit, before turning to amphorae forms the standard contents of which are not certainly known; finally the incidence of two particular fabrics is examined (6.3.21 to 6.3.22).

6.3.2 The Distribution of (?) Dressel Form 1 Species Amphorae (Figure 6.~~66~~1).

Dressel 1 species amphorae, which are Campanian in origin, have a date range of c. 130 B.C. to 10 B.C. and their usual content is conventionally taken to have been wine (Sealey 1985, 21-6; Peacock & Williams 1986, 86-92). Within the study area there is only one instance of this status being ascribed, specifically to a handle/shoulder sherd from the site of the villa at Beadlam, North Yorkshire (Appendix 6.1). This site has to date yielded no evidence of occupation pre-dating c. A.D. 150. The sherd was amongst material recovered during evaluation work undertaken in 1969 by Stead (1972). The full results of this and subsequent work have not been published though the sherd has been the subject of an article (Rigby 1988a). The specific context of this find was a sectioned ditch underlying the north range of the late Roman villa. The pottery from this section has been examined Jeremy Evans who believes it to date to the second half of the second century A.D., with no items necessarily of first century A.D. date; Dr Evans has also noted the presence of other items in the same fabric from the site (pers. comm. J. Evans June 1992). (This dating of the ditch group is at variance with that published by Rigby (1988a, 314)).

Rigby states that: "In the hand specimen the sherd is clearly part of a typical Dressel type 1 amphora, probably variant B, because the handle section is rather flattened" (1988a, 314). However, there is a problem with this identification because although the fabric seems certain to be the Italian 'Black sand' fabric (Peacock 1971, 164, Fabric No.2), since a sample was thin sectioned and identified by Dr Freestone (Rigby 1988a, 314), the assignment of the sherd to the Dressel 1 species is not necessarily reliable since there is insufficient of the form represented to be unequivocally diagnostic (*cf.* Rigby 1988a, Fig. 17.1). There is a possibility that the Beadlam item may actually be from a form characterized by Arthur and Williams following the collection of examples during field survey in the *ager Falernus* and subsequent work (Arthur 1982, 30-1, Fig.5, Nos 7, 8 & 14; Arthur & Williams 1992). This amphora type is believed to have contained wine and is dated to the mid Imperial period. The form has long handles, oval in section which are not unlike those of the Dressel 1 species. Moreover it is known to occur in Campanian 'Black sand' fabric (Williams 1990, 345, and for example, 350-1, Fig. 138 Nos 1619 & 1620, Fig. 139 No. 1748; compare these with Rigby 1988a, Fig. 17.1). Sherds of the type are known from several sites in the north of England (Arthur & Williams 1992, 258). It is possible therefore that the Beadlam sherd is an example of this type, an interpretation favoured by Arthur and Williams (1992, 254). This possibility might resolve the apparent anomaly of an Augustan find at a site which has yielded no firm evidence of occupation preceding c. A.D. 150 (though we need to know more about this site). Explanations, if the sherd is from a Dressel 1, are discussed by Rigby (1988a). Whilst its attribution to the 'Arthur 1982' category is not to be presumed it is clear that the identification of the Beadlam item as an example of the Dressel 1 species should be treated with caution.

This virtual (if not complete) absence of Dressel 1 species from the study area is consonant with the known distribution in Britain which is focused in the south and south-east of England and south Wales (Fitzpatrick 1985). The geography of the known distribution should not frame expectations as to where future examples of this class of amphora may occur, however, a number of factors suggest that it is unlikely that many if any Dressel 1 species amphorae will be encountered in the study area. The type-life of the Dressel 1 species extends only until c. 10 B.C. (Sealey 1985, 25-6; Peacock & Williams 1986, 86-92) whereas the earliest imported Roman pottery in the study area is of slightly later date. At Leicester the earliest imported material dates to around the turn of the millennium (*cf.* Jarvis

1986, 13-4; unpublished listing by P. Jarvis, ids V. Rigby), that is, a date after which the production of Dressel 1 had ceased. There is the possibility though of a slight over-lap here if Leicester received vintage wine in Dressel 1 amphorae. At Old Sleaford and Dragonby, two other sites with early Roman imports, the earliest imported Gallo-Belgic wares are Tiberian (Rigby unpublished). Hence the chronology of the importation of Roman pottery into the region suggests that the Dressel 1 species will be a rare if not improbable find in the region. Further, the known distribution of the Dressel 1 species indicates the possibility that there existed political or cultural constraints upon the distribution of the type which relate to tribal dominion (*cf.* Haselgrove 1982a; 1984a).

6.3.3 The Distribution of Dressel Form 2-4 Amphorae (Figure 6.2).

Amphorae of Dressel 2-4 are one of the most common amphora forms to occur in the study area. This form is understood to be the successor to the Dressel 1 species and is comparatively well researched (Sealey 1985, 27-50; Peacock & Williams 1986, 105-6). The form is known to have been produced in a number of areas, principally in the western Mediterranean region between the late first century B.C. and the early second century A.D. if not later (Paterson 1982, 150); they apparently become rarer by the late first century A.D. The usual content is established as having been wine (though fish sauce, dates and olive oil are known to have been conveyed). The variety of sources is reflected in fabrics.

Dressel 2-4 are documented from thirteen sites (Appendix 6.2) but this known distribution probably seriously under-represents their actual distribution within the area. The known incidence shows no particular biases in terms of geography, site type, chronology and source. As Figure 6.2 demonstrates the distribution is geographically even with examples recorded from sites across the study area, from Leicestershire to Cleveland, with the form recorded at no more than three sites in any one county. The types of site at which the form occurs vary considerably (Appendix 6.2) with examples recorded from Legionary contexts at Lincoln, LIN 17, and York, NYK 28, (see Note 6.6), from the (? auxiliary) fort sites of Brough, NHU 3, Castleford, WYK 1, and Templebrough, SYK 5 (though here the sherds in question may possibly be from the Cam. 184 form), at major native/civilian centres, for instance, Stanwick, NYK 23, and Dragonby, SHU 1 (C), as well as at apparently lesser native/civilian sites such as West Heslerton, NYK 26, and Ingleby Barwick, CLV 2. As regards the date of these examples the earliest known arrival in the region could be the vessel recovered from the so-called 'Pit 4' at the Jewry Wall site, Leicester, LEI 13 (AA), of Tarraconensian fabric (Jarvis 1986, 12-3; Jarvis suggests that this item might be a pre-conquest arrival). The examples from the military sites at York and Brough are presumably Flavian; the form was clearly still reaching the north of Britain during the mid Flavian period since about eight vessels of Dressel 2-4 were represented amongst the assemblage from the Legionary fortress of Inchtuthil (Darling 1985, 333-5). Examples from the area of the *colonia* at York (eg. NYK 28 (I)) could be late first or early second century in date.

The Dressel 2-4 amphorae from the study area display a range of fabrics. This is not surprising; the 44 Dressel 2-4 vessels recovered during the 1970 excavations at Sheepen, for instance, occurred in 15 different fabrics (Sealey 1985, Table 10). Dressel 2-4 occurs in the study area in Peacock's Italian and 'Black sand' fabrics, sourced to Campania, Latinum and Etruria, and the Pompeii region respectively (Peacock 1971, 164 Fabrics 1 and 2). The 'Black sand' fabric has been recorded at Old Winteringham, SHU 7, Brough, NHU 3, Stanwick, NYK 23, York, NYK 28, and Castleford, WYK 1, whilst examples in Italian fabric are documented from Stanwick, York and, probably, Castleford (*cf.* Appendix 6.2). Both of the main Tarraconensian fabrics (Peacock & Williams 1986, 94-5) are represented in this form: two sherds, possibly from two Dressel 2-4 amphorae, occur in Fabric 1 at Stanwick, NYK 23 (B), whilst the form occurs in Fabric 2 at Leicester, LEI 13 (AA). Other examples of Dressel 2-4 in Tarraconensian fabric are reported from West Heslerton, NYK 26, and Castleford, WYK 1, but in the first instance precise details of fabric are not published (Rigby 1988a, 318) whilst in the second exact details await publication. Unfortunately, in his report upon amphorae from selected excavations in York, Williams only gives details of form 2-4 fabric when this is 'Black sand' or Italian, so it is unclear whether Tarraconensian amphorae are present at the site. To the current author's knowledge no examples in Gallic fabric have been recovered from the region. It may be that some of the unsourced fabrics represented actually derive from this or other regions (see Note 6.7).

In sum the incidence of Dressel 2-4 implies that its distribution was not restricted to particular types of site. The limited nature of the available data means that firm conclusions cannot be drawn; knowledge of more examples in particular from dated contexts is desirable so that the distribution might be evaluated from a chronological angle. Quantitative information provides an important perspective (*cf.* Tables 6.7 & 6.8). The occurrence of Dressel 2-4 at seven native/civilian sites of varying size (Appendix 6.2) is particularly noteworthy given that the likely contents (wine) presumably had a high economic and social value. The cosmopolitan origins of these amphorae present within the study area is noteworthy though evidence from other British sites suggests that this diversity may be 'normal' for Britain; a variety of wines were evidently reaching Britain in Dressel 2-4 amphorae during the second half of the first century, albeit in very small quantities by comparison with the Mediterranean provinces.

6.3.4 The Distribution of Rhodian Form / Cam. Form 184 Amphorae (Figure 6.3).

Amphorae of Rhodian form/Cam. form 184 (hereafter Cam. 184) occur at several sites in the study area. This form is believed to have been produced at a number of locations in the Aegean region, with perhaps the most important centre(s) being on Rhodes (Peacock 1977d); the date range of the form mirrors that of the Dressel 2-4, being late first century B.C. to early second century A.D.; the usual content is established as being wine, though the transport of figs is known (Sealey 1985, 51-8; Peacock & Williams 1986, 102-4; Fitzpatrick 1989a, 61). Peacock has characterized six distinctive fabrics in which Cam. 184 appears (1977d, 266-9); of these his Fabrics 1 and 2 are judged to derive from Rhodes (or the islands of the Rhodian League) and are said to be: "the more important" fabrics (Peacock & Williams 1986, 103). A further fabric has subsequently been identified by Williams (1985, 163; Sealey 1985, 54).

Cam. 184 has been recorded from five sites from across the study area (Appendix 6.3). As Figure 6.3 demonstrates only one of these sites is located in the northern part of the region, at Stanwick, NYK 23; this may be a function of the nature of reporting. Two of the five sites have certain military connections, these being Lincoln, LIN 17, and York, NYK 28, whilst Old Winteringham, SHU 7, and Leicester, LEI 13, may have been the site of forts. Stanwick is the only find-site which has (unequivocally) no connections with the Roman military; at least two Cam. 184 amphorae are documented.

As regards chronology little may be said on the basis of such a small sample. There is some disagreement as to whether the form arrived in Britain before 43 A.D. (see Note 6.8). The earliest examples in the study area should be Claudian or Neronian arrivals, as at Stanwick and Old Winteringham (where a rim sherd has been recorded by the current author from a ditch fill dated by the excavator as Claudian-Neronian (Stead 1976, 305)), as well as, possibly, Leicester.

Turning to fabric it is clear that within the study area Peacock's Fabrics 1 and 2, sourced to Rhodes, are the most common fabrics in which Cam. 184 occurs. Examples certainly in Fabric 1 occur at four of the fives sites: Lincoln, Old Winteringham, Stanwick and York, whilst an example from Leicester is possibly in Fabric 1. A second example at Stanwick is either Fabric 1 or 2. This leaves only two other examples, one from Lincoln, LIN 17 (W), the fabric of which was not sourced (pers. exam. December 1988) and a handle fragment, possibly from a Cam. 184 from Leicester LEI 13 (BC) for which no details of fabric have been published (MacRobert 1987, 67).

Peacock has observed that amphorae of this form in Rhodian fabrics are relatively common at some military sites of pre-Flavian date in Britain (in comparison with native/civilian sites) and he cites the evidence of the Kingsholm assemblage (1977d, 269-70; *cf.* Sealey 1985, 134). He points to the possibility that wine was extracted from Rhodes as a punitive tribute to Rome during the Claudian period (1977d, 269-70). This thesis is supported by Sealey (1985, 135) who regards the evidence from Sheepen as complementary. This argument has, however, been questioned by Millett (pers. comm.) and Fitzpatrick (1989a, 63). The evidence suggests that Cam. 184 occur with comparatively greater frequency at some first century military sites than they do at civilian sites (Sealey 1985, 135), however, this apparent tendency needs to be proven quantitatively and perhaps compared with the relevant data for Dressel 2-4 at military and civilian/native sites. Peacock's thesis may not be the only interpretation of this phenomenon.

The value of the evidence from the study area is limited by the modest size of the sample, nevertheless of the eight Cam. 184 documented six are recorded from four sites with certain or probable associations with the Roman military; only Stanwick is the exception. The predominance of Rhodian fabrics (*cf.* above and Appendix 6.3/Figure 6.22) is also noteworthy, with Fabric 1 clearly the most common fabric represented. No examples of Cam. 184 are known amongst the pottery from the native/civilian sites at Redcliff, NHU 17 and Dragonby, SHU 1, and this might be seen as further evidence of a military bias to the distribution.

Only one sherd from a Cam. 184 has been identified at York to date (Williams 1990, 347 & Table 22); this item came from NYK 28 (Q), a site lying within the fortress. Given the predominant pre-Flavian chronology of the form one find is not surprising. Further, bearing in mind that the start date for military occupation at York is c. A.D. 70 this find is not in conflict with Peacock's argument.

6.3.5 The Distribution of Pélichet 47 / Gauloise 4 Form Amphorae (Figure 6.4).

Examples of amphorae of Pélichet 47/Gauloise 4 form are documented from three sites in the study area (Appendix 6.4). This form is a Gallic product known to have been manufactured mainly in southern France, predominantly around the mouth of the Rhône; the date range of the form extends from around the mid first century A.D. to the third century, though it is not thought to arrive in Britain before c. A.D. 60 (see Note 6.9); wine is known to be the standard content (Peacock 1978; Peacock & Williams 1986, 142-3; Symonds & Wade 1989). (This form appears in the Camulodunum series where it is form 188).

Since the form continues beyond the first century A.D. only sites where examples are stratified in deposits of first century A.D. date or where occupation dates solely to the first century A.D. are documented in Appendix 6.4 listing the incidence of the form. Many sherds of the form have been recorded at Leicester, for instance, from LEI 13 (AN), (AQ), (AW) and (AZ), but there are to date, to the current author's knowledge, no examples of the form stratified in deposits of first century A.D. date. Three sites are listed in Appendix 6.4, these being Broxtowe, NOTT 6, York, NYK 28, and Castleford, WYK 1. All of these sites are, of course, closely associated with Roman military occupation. The find-sites do not contradict the suggestion that the type in Britain, post-dates c. A.D. 60 since York and Castleford were founded after c. A.D. 60, whilst at Broxtowe the finds are associated with the Neronian - early Flavian occupation. This evidence could suggest that the form had a predominantly military distribution during the later first century A.D. at least in the north of Britain; it may be relevant in this connection that approximately five vessels were recovered from the excavations at Inchtuthil (Darling 1985, 333-5, Fig.101 Nos 74-7).

6.3.6 The Distribution of Miscellaneous Gauloise Amphorae Forms (Figure 6.5).

This umbrella category covers the Peacock and Williams' classes 27 to 30 and under this amphorae from two sites in the study area, which will be of first century date, are included since their precise forms are uncertain (Appendix 6.5). Gauloise amphorae were produced principally in southern France; most of the forms are mainly of first century A.D. date, but as noted above (*cf.* 6.3.5) Gauloise 4 had a longer life; these forms were employed to convey wine (Peacock & Williams 1986, 142-8). Williams observes that compared with the incidence of Pélichet 47/Gauloise 4 the occurrence of these miscellaneous Gauloise forms in Britain is rare (1990, 344).

The two sites in question in the study region are Broxtowe, NOTT 6, and Castleford, WYK 1, both of which are amongst the three sites to have produced unequivocally first century examples of Pélichet 47/Gauloise 4. It may be that the body sherds from Broxtowe catalogued as belonging to amphorae of Gauloise range (pers. exam. November 1989) are actually from Gauloise 4. The exact typological status of the Gauloise range items from Castleford may be established in the forthcoming publication (Rush forthcoming).

6.3.7 The Distribution of Dressel Form 28 Amphorae (Figure 6.6).

Amphorae of this distinctive flagon-like form are known from one site in the study area with certainty, whilst at another the form is probably represented (Appendix 6.6). Dressel 28 amphorae were manufactured in southern France, Tarraconensis and possibly Baetica; the date range of the form extends from the late Augustan period through to the mid-second century A.D.; vessels from southern France are believed to have contained wine (Peacock & Williams 1986, 149-50; Sealey 1985, 95-8).

Within the study area an example is known from Redcliff, NHU 17 (B), whilst a sherd from the base of an amphora from Stanwick, NYK 23 (B), is probably also of this form; the sherd comes from a flat-based vessel and displays a foot-ring. This item has been examined by David Williams who suggests that it is quite likely to be from a Dressel 28 (forthcoming). The fabrics of the Redcliff and Stanwick vessels are suggestive of an origin in southern Gaul.

Both Redcliff and Stanwick are native/civilian sites with Claudio-Neronian Roman imports; the vessels represented will have arrived at these sites during this period. It is curious that no finds are recorded from Roman military sites in the study area, though a sherd from a Dressel 28 is known from the 'works depot' of the fortress at Longthorpe (Peacock 1987). The form is not rare on sites in southern Britain and it is likely that the known distribution for the study area under-represents its actual distribution.

6.3.8 The Distribution of Dressel Form 20 Amphorae (Figure 6.7).

The Dressel 20 is by far the most common and familiar form found in Roman Britain. The form was produced along the Guadalquivir valley and its tributaries in southern Spain from the early first century A.D. to the third, and possibly fourth, centuries; the form conveyed olive oil (Williams & Peacock 1983; Sealey 1985, 67-75; Peacock & Williams 1986, 136-40). Since the currency of the form extends well beyond the first century A.D. only the incidence of items of certain first century A.D. date is documented in Appendix 6.7. In this Appendix all instances represent items either stratified in deposits of first century A.D. date, bearing a stamp of a type dated to the first century A.D. or are rims typologically of first century A.D. form. Finds from twelve sites fulfil one or more of these criteria; again it is likely that the actual distribution was considerably wider than that documented.

As with the other widespread type, Dressel 2-4, the known incidence displays no particular biases in terms of geography, site type and chronology. As Figure 6.7 demonstrates the find-sites occur fairly evenly across the study area, Dressel 20 being recorded from sites in eight different counties. Considering the types of site at which the form occurs it appears that the distribution is indiscriminate. The type is present at the Legionary fortresses at Lincoln, LIN 17, and York, NYK 28 (several examples at both sites), at the (? auxiliary) forts at, for instance, Hayton, NHU 14, and Castleford, WYK 1, (see Note 6.10), whilst it also occurs at the major native/civilian centres of Dragonby, SHU 1, and Redcliff, NHU 17, and at the lesser native/civilian sites at Easton, LIN 9, and Thorpe Thewles, CLV 4. The pattern for the study area, therefore, tallies with Williams and Peacock's observation for Britain generally that: "Dressel 20 amphorae are very common in the second half of the first century A.D. on both military and civilian sites" (1983, 267), (see Note 6.11).

Considering briefly the chronology of the distribution it is pertinent to observe that at some sites Dressel 20 are present at a comparatively early date. The form is known from late Iron Age Britain in some quantity (Williams & Peacock 1983, 266; Peacock 1984, 40). Within the study region the form was present in a phase 2 context at Blackfriars St, Leicester, LEI 13 (BE), thought to cover the period *c.* A.D. 40-55 (Clay & Mellor 1985, 23), (*cf.* Note 6.12). At Dragonby, SHU 1 (C), at least one sherd was recovered from a context dated as pre-Claudian (context 1666c, *cf.* Tables 9.1 & 9.2) whilst other sherds were present in contexts dated as Claudian and Neronian (contexts 2100b and 2100a respectively, *cf.* Tables 9.1 & 9.2); these may represent pre-conquest arrivals. Similarly items present at Redcliff, NHU 17 (B), should be Claudian and, in this context, pre-conquest.

Dressel 2-4 is known from thirteen sites, one more than the Dressel 20. This reflects the fact that the types are fairly common in the first century in Britain, and of widespread distribution. However, this evidence should not be taken uncritically to indicate that Dressel 2-4 is as common as Dressel 20 at this time. In this connection two points need to be stressed, firstly that quantitative information demonstrates that Dressel 20 normally occurs with much greater frequency than Dressel 2-4 (*cf.* Tables 6.7 & 6.8; *cf.* Williams & Peacock 1983); second, there is an inequality in recording in favour of Dressel 2-4: since 2-4 is essentially a first century A.D. form all instances have been listed in Appendix 6.2, independent of context, however, as stated because Dressel 20 is a long-lived form only sherds unequivocally of first century A.D. date are documented; this potentially excludes items form vessels of first century date occurring as residual or unstratified material.

It is clear that small quantities of olive oil from the Mediterranean world were being consumed in Britain by the LPRIA (*cf.* Williams & Peacock 1983, 272; Haselgrove 1984a). From this perspective it is not surprising that Dressel 20 amphorae are recorded from mid first century contexts at native sites within the study area (eg. Dragonby, Redcliff and perhaps Stanwick). These amphorae, and presumably their content, were apparently both available and acceptable to native communities in the east of England, from a comparatively early date. Whether this oil was used for culinary purposes or in other ways (eg. as lamp fuel, for softening leather, for treating metal implements, as a lubricant, etc.) the incidence of its container on native sites (and indeed at auxiliary fort sites) is a potentially useful indicator of Romanization (*cf.* 1.7). The nature of the distribution within the study area suggests that there may have been no social constraints upon its dispersal, even at this early date.

6.3.9 The Distribution of Cam. Form 186 / Beltràn Forms I & II Amphorae (Figure 6.8).

Amphorae of Cam. form 186 species (*cf.* Peacock & Williams Classes 16 to 19) are a relatively frequent amphora find in Roman Britain and examples are known from several sites within the study area. Amphorae of this class vary considerably in formal detail and there is no single agreed nomenclature for individual forms; moreover, form names are specific to particular typologies and are not necessarily interchangeable, rather there is only broad equivalence. This complicates study and has led some reporters to refer to amphorae of this class by the nature of their contents: *salazones* (*cf.* Sealey 1985, 77). In the present work the Camulodunum series is followed where possible. Despite the formal variety the class of amphorae are united by a number of shared characteristics.

Cam. 186 species were produced along the coasts of Iberia from Lusitania to Tarraconensis, with a main focus being around Cadiz and perhaps other Baetican centres; they date from the late first century B.C. to the early second century A.D. (Cam. 186c is probably a later derivative of 186a and dates from the late first century A.D. to the early second century); amphorae of this range contained fish products, particularly fish sauces, hence the coastal production locations - Sealey notes the incidence of other contents - (Peacock 1974; Sealey 1985, 77-85; Peacock & Williams 1986, 117-25; Fitzpatrick 1989a, 75). Peacock has stated that: "the bulk of amphorae from Britain in the general form Cam. 186 may have been produced in the Cadiz region" (1974, 242); whether this is indeed the case is not yet proven.

Examples of this class are documented from seven sites within the study area (Appendix 6.8); the majority of these sites having yielded sherds from several vessels. Again both military and civilian sites were recipients of the form and the distribution of these find-sites appears geographically even (Figure 6.8). Cam. 186 species amphorae are known from several excavations at York, NYK 28, including the site of the fortress, and Lincoln, LIN 17, where, again, work within the fortress has produced examples of the class; Castleford, WYK 1, is another Roman military find-site. The species is also represented amongst the assemblages from Inchtuthil (Darling 1985, 333, Pl.46a) and Longthorpe (Wilson, M. G. 1974, 97, Fig. 51 Nos 1 & 4; Peacock 1987). The class is therefore well represented at military sites. However, the class is also represented at Stanwick, NYK 23, where it should be a Claudio-Neronian arrival and, apparently, Dragonby, SHU 1 (C), where a large sherd was present in a ditch fill context of mid first century A.D. date which also produced Cam. 113 (pers. exam. May 1989).

Amphorae of this class are fairly well documented from Iron Age provenances in Britain (*cf.* Williams 1986). Fitzpatrick suggests that the example from the Jewry wall site Leicester, LEI 13 (AA), may be from an Iron Age context (1989a, 81 & Fig.9, Appendix 7). The chronology of the find-sites of Cam. 186a and Cam. 186c within the study area accord well with the established dating of these variants. Cam. 186a is prominent in the mid first century A.D. (*cf.* Peacock 1974, 236) and it occurs at the Jewry Wall site Leicester and Blake St York, NYK 28 (Q), where it occurs in deposits of later first century date. Examples of the species from Longthorpe were also Cam. 186a (Wilson, M. G. 1974, 97, Fig.51 Nos 1 & 4; Peacock 1987). The later derivative form, Cam. 186c, appropriately occurs only at sites within the region founded in the later Neronian or early Flavian period, being present at Lincoln, LIN 17 (K), York, NYK 28 (Q) and (T), Aldborough, NYK 1, and Castleford, WYK 1; it is also noteworthy that the vessel recovered at Inchtuthil is also a Cam. 186c (Darling 1985, 333, Pl.46a).

As Sealey notes, because of the nature of their contents: "the incidence of salazon amphoras is obviously inseparable from considerations of diet and cookery" (1985, 85). It is of no small interest to note the occurrence of examples of the class at the native/civilian sites of Stanwick and Dragonby.

6.3.10 The Distribution of Dressel Form 14 Amphorae (Figure 6.9).

Dressel 14 has a long type-life extending from the early first century A.D. until, apparently, the third century; the form originates from southern Iberia; as with the class discussed previously fish-based products were the stored and conveyed commodity (Peacock & Williams 1986, 126-7; Fitzpatrick 1989a, Appendix 13.2). The form is documented from only one site within the study area, namely Leicester where it has been recovered from two excavation sites (Appendix 6.9). It must be stressed that the sherd from Bath Lane (AW) was recovered from a post-first century A.D. context and therefore may not represent a first century arrival. The other find is from Harvey Lane (AN) but contextual details are not available so it is unclear whether the find was of first century date. Fitzpatrick has stated that: "the type is apparently absent from Claudio-Neronian sites and its absence from the large Sheepen assemblage is probably chronological. Most dated finds are Trajanic or later" (1989a, 76); nevertheless he identifies an amphora from Aston Clinton, Buckinghamshire, which is apparently associated with a late Iron Age/mid first century A.D. burial (Farley 1983, 299-300, Fig.14) as Dressel 14.

6.3.11 The Distribution of Haltern Form 70 Amphorae (Figure 6.10).

Haltern 70 is documented from three sites within the study area (Appendix 6.10). This form invariably occurs in a fabric characteristically similar to that of the Dressel 20 (6.3.8) and is sourced to the Guadalquivir valley; its date range extends from the mid first century B.C. to c. A.D. 60; the form is now understood to have conveyed *defrutum*, a non-alcoholic syrup, with or without olives included, since amphorae of this form from the Port Vendres II shipwreck carried inscriptions naming this product; however, it seems likely that wine was also conveyed in this form (Paterson 1982, 154, Footnote 64; Sealey 1985, 59-66; Peacock & Williams 1986, 115-6; Fitzpatrick 1989a, 2.5.1). As noted above the fact that Dressel 20 and Haltern 70 occur in identical fabric can complicate the allocation of body sherds to form type; it is likely that sherds from Haltern 70 are frequently misidentified as being from the Dressel 20 (unless they are conspicuously thir).

Within the study area Haltern 70 is known from Leicester, LEI 13, Harvey Lane (AN) and Blackfriars St (BE). A typologically late version of the form with a vestigial collar is recorded from Stanwick, NYK 23 (B) (Sealey & Tyers 1989, 68, Fig.5 No.22), this item is nonetheless likely to be pre-Flavian. York has yielded examples amongst several assemblages. This might seem anomalous given that the life of the form has a Neronian terminus whilst York is an early Flavian foundation; however, activity at York dates from c. A.D. 70 (if not earlier) and hence there is virtually no temporal gap between the demise of the form and the York start date. Moreover, whilst four provenances in York have yielded examples (Appendix 6.10) no more than one sherd has been identified at each; additionally the York sample is very large. Significantly no examples are known from amongst the large sample of amphorae sherds from Castleford which was founded in the mid-Flavian period (pers. exam. June 1988); this absence should be explained by chronology.

Haltern 70 is a regular find at sites with Claudio-Neronian occupation in the south of Britain. The presence of this type at well Romanized sites such as Leicester and York should occasion no surprise. It is of considerable interest though to note that a pre-Flavian amphora type which would normally have contained highly exotic goods arrived at Stanwick before the formal incorporation of the north within the Empire. However, it may be recalled that the form is precedented in late Iron Age provenances in Britain (Fitzpatrick 1989a, 87; Note 6.13).

6.3.12 The Distribution of London 555 Form Amphorae (Figure 6.11).

The London 555 amphora, which is a derivative of the previous class, is known only from Leicester within the study area (Appendix 6.11). As with Haltern 70 the fabric is qualitatively similar to that of the Dressel 20, indicating a Baetican origin; the form dates from c. A.D. 60 to the early second century; as with Haltern 70 the standard contents are believed to be *defrutum* with or without olives (Sealey 1985, 167-8; Peacock & Williams 1986, 214 (Class 59); Sealey & Tyers 1989).

London 555 at Leicester is documented from St Nicholas Circle 1969, LEI 13, (AZ). Contextual details are not known to the current author hence it is unclear whether the vessel(s) represented were first century arrivals. That other examples of the form are not documented from the study region may result from the fact that the category has only recently been identified as a discrete type. Additionally amphorae of this form do not appear to be a frequent site find outside of the south-east of England (pers. comm. R. Symonds) though their distribution is apparently wide (Sealey & Tyers 1989).

6.3.13 The Distribution of Dressel Form 21-22 Amphorae (Figure 6.12).

Dressel 21-22 is again known only from Leicester (Appendix 6.12). Dressel 21-22 is understood to be Italian, possibly from Campania or Lazio; the form is exclusively of first century A.D. date; the commodity conveyed was apparently fruit (Sealey 1985, 91; Peacock & Williams 1986, 96-7; Fitzpatrick 1989a, Appendix 11.7).

The form is believed to be rare outside of Italy and the Mediterranean littoral (Fitzpatrick 1989a, 747). At Leicester Dressel 21-22 was present amongst the pottery from Harvey Lane 1962, LEI 13 (AN). That Leicester is the one find-site within the study area is perhaps not surprising given that it is (to date) the sole regional find-site of several other uncommon amphora forms. An amphora claimed to be Dressel 22 is documented from Chesterfield just outside the study area (Anderson 1990b); this find is presumably to be associated with the early military occupation (Ellis 1990).

6.3.14 The Distribution of Cam. Form 189 Amphorae (Figure 6.13).

Cam. 189 are documented from four sites within the region (Appendix 6.13; see Note 6.14). This distinctive form, often referred to as the 'carrot amphora', is imperfectly understood. It is of uncertain origin, though the eastern Mediterranean is suggested; the known type-life extends from the turn of the millennium into the Flavian period; the principal contents have yet to be established, but dates are usually cited and seem likely (Wheeler 1930, 141; Cunliffe 1971b, 208; Sealey 1985, 87-9; Peacock & Williams 1986, 109-10; Fitzpatrick 1989a, Appendix 13.1; Darling 1984, 74; *cf.* Murphy 1984 for evidence of dates in Roman Britain).

Darling states that no amphorae of this form are known from PRIA sites in Britain and comments that: "they seem to appear only on first century sites where the Roman army and/or administrators would be expected" (Darling 1984, 74; *cf.* 1985, 335). This thesis is followed by Peacock and Williams who state that in both Britain and Germany the type is associated with early military sites (1936, 109). The pattern for the study area and the north of Britain accords with this observation. The type is known from Catterick, NYK 3, Castleford, first century Legionary levels at York, NYK 28 (Q), as well as from three excavation sites at Leicester, where an early Roman military occupation has been postulated. The form is also known from the fort and annex at Elginhaugh (pers. exam. June 1989), at Inchtuthil (Darling 1985, 333-5, Fig.101, No.78) and from South Shields where sherds are associated with the earliest activity (pers. comm. P. Bidwell April 1989 & March 1993).

This tendency for the form to be associated with Roman military sites appears to be genuine. This is curious since it is clear from the above that other classes of amphorae apparently containing exotic and valuable commodities do not seem to be restricted to military sites. This implies that there may have existed a barrier to the circulation of the type (and implicitly its contents) outside a military supply network. If the form carried figs or dates its presence at military, not native/civilian sites might be explained by taste; however, the palates of native/civilian communities do not seem to have been averse to other exotica such as fish sauces (see Note 6.15). An alternative explanation may lie in the possibility of a simple transport association with Rhodian vessels which share a similar distribution tendency (6.3.4) and which are the only other certain eastern Mediterranean type represented in the region.

6.3.15 The Distribution of Kingsholm Form 117 Amphorae (Figure 6.14).

Only one site within the region has produced any evidence of the Kingsholm 117 (Appendix 6.14). Again this site is Leicester, specifically the excavations at Harvey Lane 1962, LEI 13 (AN). The form is a recent identification; it shares typological similarities with Cam. 189 and its fabric suggests it may originate from the same (uncertain) region; the form also appears to have the same date range as Cam. 189, though it may have appeared earlier; a specimen from the La Tradelière shipwreck contained dates (Timby 1985, 72-6; Sealey 1985, 89-90; Peacock & Williams 1986, 217; Fitzpatrick 1989a, Appendix 11.5). The form is seemingly a rare find in Britain with none so far known from Iron Age provenances. It is not surprising therefore that it is only recorded from Leicester, a site which, as noted above, is the sole find-spot in the region of other amphora forms.

6.3.16 The Distribution of Fishbourne Form 148.3 Amphorae (Figure 6.15).

The Fishbourne 148.3 is documented from three sites within the region (Appendix 6.15). This type is not well understood; it is essentially known only as a rim form, the precise character of the body being uncertain, whilst the rim appears in variant forms. The origin of the form is uncertain; the fabric of examples from Lincoln and Leicester is similar to that of the Cam. 189, hence an eastern Mediterranean origin has been postulated; fabric differences are, however, known and point to the likelihood of more than one source; the start date of the class is uncertain though at Fishbourne it was present in a context dated c. A.D. 43-75; it apparently continued into the early second century (Cunliffe 1971b, Fig.100 No.148.3; Darling 1984, 74; Pollard forthcoming).

The form is now known from several sites outside the study area, including Colchester (pers. comm. R. Pollard March 1988), Wroxeter, where an example was present in later first century contexts (Darling 1984, 74) and perhaps Kingsholm (Timby 1985, 76, Nos 123-5). Within the study area the form is known from Leicester, Lincoln and York, all of which have strong associations with the Roman military as too have the former three find-sites mentioned. This is a pattern of some interest, especially when it is recalled that the type may be related to Cam. 189.

At Leicester a 148.3 rim was recovered from a Flavian-Trajanic context at St Nicholas St (Hebditch & Mellor 1973, 75, Fig.28 No.18). Two other assemblages at Leicester (not documented in Appendix 6.15) have produced sherds in a similar fabric to that of some examples of the form, these being from St Nicholas Circle 1969, LEI 13 (AZ) and Thornton Lane (AO); these sherds are, however, undiagnostic of form.

6.3.17 The Distribution of Cam. Form 139 (Figure 6.16).

Cam. 139 is an interesting vessel being recorded from three sites within the region. It is unusual in that it is flagon-like in form, possessing a single handle and a flat or near flat base; moreover, it is small compared with most other amphora forms. As noted above though (6.1.1), size cannot be considered the determinant of amphora status and amphorae with a single handle are known, if uncommon, (*cf.* Peacock & Williams 1986, 188-90, Class 45). That this form is a transport vessel is clarified by the fact that examples from within the study area occur in Peacock's 'Black sand' fabric (1971, 164, Fabric No.2). At Camulodunum the fabric is described as being "very pale buff" (Hawkes & Hull 1947, 243), hence, as with other amphorae classes, more than one source is indicated. Sherds diagnostic of the form from Redcliff are certainly in the 'Black sand' fabric; (Williams has examined a rim and a body sherd and confirms this identification (pers. comm. October 1988)). A sherd from Redcliff was sent to R. Pollard as a sample for fabric comparison with sherds of the form at Leicester and close similarity was observed (Pollard in correspondence June 1988). Additionally whilst the fabric of the two rim sherds noted from Lincoln (Darling 1984, 58 & 60, Fig.14 No.32) was apparently not recognized by Williams its description accords with that of the Redcliff and Leicester fabrics: "light red-brown ... sub-rounded pinkish quartz, black inclusions and common mica flecks" (Darling 1984, 60) and at least seems indicative of an Italian or Campanian fabric. Moreover, as with the Redcliff and Leicester vessels the published rim from Lincoln has: "dirty cream surfaces (not obviously slipped)" (Darling 1984, 60).

The form is recorded as being present in Period II at Camulodunum (Hawkes & Hull 1947, 244) that is, around the time of the conquest in A.D. 43. This tallies with the presence of the form at Redcliff, where it should be a Claudian arrival, and Leicester, where a sherd was recovered from a pre-Flavian context at St Nicholas Circle; (since this item weighs only 4g and 64 sherds weighing 1.6kg were recovered from context(s) of Flavian to Trajanic date this one item may be intrusive). A terminal date for the form is not known though no examples from the region need be later than late Neronian.

The content of the form is not known, though its form and the Campanian source of at least some examples suggest that it may have conveyed wine. The modest capacity of the vessels implies that their contents may have been of unusual value.

The rarity of Cam. 139 may arise from problems of identification. There seems every possibility that sherds of the form could be mis-allocated to the Dressel 2-4 category, a possibility facilitated by their fabric, form and date. Hawkes and Hull observe of their 139 form that: "fragments [are] easily mistaken for form 182" (1947, 244), that is Dressel 2-4. The handle of Cam. 139 comprises a single 'rod', round in section, which could be mistaken as a detached single rod from the bifid handle of the 2-4; similarly the straight neck and angle of shoulder of the 139 are features which find parallel in Dressel 2-4 (compare Hawkes & Hull 1947, Pl.69, No.139 with Pl.70 Nos 182a, 182b, 183a & 183c).

6.3.18 The Distribution of Cam. Form 176 (Figure 6.17).

This elegant form (Hawkes & Hull 1947, 250, Pls 12 & 69, No.176) is known only from Redcliff. Apart from Redcliff and Camulodunum no other British find-sites are known to the author. Sherds from Redcliff, NHU 17 (B), include the base and a near complete horizontal handle which clinches the identification. Paul Sealey has measured the diameter of the base and the arc of the horizontal handles of the type-specimen in Colchester Museum on behalf of the author and the measurements accord with the Redcliff items (in correspondence 1989).

In the Camulodunum report the fabric is described as: "sandy, gritty red-buff, white coated" (Hawkes & Hull 1947, 250). The sherds from Redcliff also display white surfaces which does not appear to represent a slip. The fabric is likewise a deep salmon pink. Inclusions in the sherds from Redcliff give this fabric a 'sandy', 'gritty' appearance and in fact the fabric appears to be Peacock's 'Black sand' fabric (1971, 164, Fabric 2); Williams has examined the sherds diagnostic of form and confirms the fabric identification (pers. comm. October 1988). A Campanian source for the form seems established.

At Camulodunum sherds were recovered from Claudio-Neronian contexts. The Redcliff sherds were stratified with pottery and other finds of Claudian date and here Cam. 176 should be a Claudian arrival. The type is recorded at Haltern which means that its currency dates from the Augustan period, if not before. The current author is unaware of any evidence indicative of the contents of the type. That both this form and the Cam. 139 have been recovered at Redcliff is remarkable given that both forms are rare, yet as demonstrated elsewhere the Redcliff assemblage is exceptional.

6.3.19 The Distribution of Dressel Form 6 Amphorae (Figure 6.18).

Dressel 6 is documented form one site within the study area: Dragonby (Appendix 6.18). This form originated in the Istrian peninsula; its date range extends from the early to the late first century A.D.; there is disagreement over content, particularly whether form variants conveyed specific goods; olive oil seems likely to have been a principal commodity conveyed, although *tituli picti* indicate that wine and *garum* were also transported in the form

(Paterson 1982, 153; Williams & Peacock 1983, 264; Peacock & Williams 1986, 98-101; Fitzpatrick 1989a, 92-3).

Dressel 6 is rare in Britain. Two finds are, however, known from Iron Age provenances in the south-east (Williams & Peacock 1983, 267; Peacock 1984, 39-40; Fitzpatrick 1989a, 93). The form is recorded from Dragonby, SHU 1 (C), by Williams and Peacock (1983, Table 1). This is the only reference to the incidence of the form at Dragonby known to the current author who has not seen the sherds. The excavator has been unable to supply any information in this connection, hence their context cannot be discussed. It is notable that this rare type, that perhaps contained Istrian olive oil which was of high repute, is known only from a native/civilian site (*cf.* 6.3.17 & 6.3.18).

6.3.20 The Distribution of Richborough Form 527 Amphorae (Figure 6.19).

Richborough 527 is another amphora type documented from only one site within the study area, the find-site being Leicester (Appendix 6.19). This type is distinctive in terms both of form and fabric. It is known to occur in one fabric only, the so-called volcanic glass fabric characterized by Peacock (1977d, 264-5). Its source is not established, but a preferred origin is the Puy de Dome in central France; it is believed to be generally of first century A.D. date; the standard commodity conveyed is unknown; analytical work has identified wine in one example and olive oil in two others (Peacock 1977d, 264-5; Sealey 1985, 91-3; Peacock & Williams 1986, 111-2; Green 1986; Fitzpatrick 1989a, 2.5.3).

That Richborough 527 arrived in Britain before A.D. 43 is known from evidence at Skeleton Green, Hertfordshire, (Peacock 1981, 200-2). Sealey documents a number of other examples from first century A.D. contexts in Britain and Gaul (1985, 93). However, sherds are also recorded from second to third century contexts at London and Verulamium (Sealey 1985, 93), as well as second to fourth century deposits at Leicester (Pollard in correspondence June 1992) though it is unclear whether these items represent residual material. Understanding of the chronology of this type is hindered by its rarity, for it is documented from only eleven sites in Britain. Dating is further confounded by the presence of no less than three vessels in early to mid third century deposits at New Fresh Wharf 1974-8. Green concludes that this: "suggest[s] that the type may have been produced with unchanged form for upwards of 150 years (1986, 10). However, the unusual context of these finds must be borne in mind.

At Leicester sherds were recovered at St Nicholas St, LEI 13 (AS), from a deposit pre-dating *c.* A.D. 70 and St Nicholas Circle, (BA)/(BB) (Sealey 1985, 93; pers. comm. R. Pollard March 1988 & June 1992). That the current research has documented examples solely from Leicester is consistent with the observation of Peacock and Williams that: "the form has mainly been recognized on sites in southern Britain" (1986, 111; *cf.* Peacock 1977d).

6.3.21 The Distribution of Amphorae in Italian Fabrics (Figure 6.20).

Mapping the incidence of amphorae by form may constitute an index of the distribution of certain commodities, of chronology, and/or source when this is established for specific forms. Mapping by fabric is of potential value when the fabric is reliably identifiable and in particular when its source is known. Sections 6.3.21 and 6.3.22 map the incidence of fabrics from two sources. As is apparent from the above sections (6.3.2 to 6.3.20) analysis by form and fabric is complementary.

The incidence of amphorae in Italian fabrics is listed in Appendix 6.20. Two distinctive fabrics of Italian source have been characterized by Peacock (1971, 164, Fabrics 1 & 2). Sherds in these fabrics found in Britain have usually been considered to be from vessels of later Iron Age and/or first century A.D. date. Conventionally the majority of these Italian vessels have been understood to have arrived by the mid first century A.D. This 'established' chronology has led their incidence to be considered especially noteworthy. However, there is growing evidence that Italian amphorae (of Dressel 2-4 and other forms) were continuing to arrive and circulate in Britain during the Claudio-Neronian period and into the late first century and that in consequence, their distribution is geographically fairly widespread in Britain. It is also apparent that not all items in 'Black sand' (Campanian) fabric in the study area are necessarily early arrivals for amphorae classed as being of 'Arthur 1982' form, which are probably post-first century in date, are also known from the region (*cf.* 6.3.2). Consequently Appendix 6.20 lists only the incidence of items in Italian fabrics which are unequivocally from early forms, specifically (?) Dressel 1 species, Dressel 2-4, Cam. 139 and

Cam. 176. If Cam. 139 and 176 were containers for wine (which is a distinct possibility) Appendix 6.20 and Figure 6.20 effectively document the incidence of Italian wine in the east of England in the first century A.D. (Even if Cam. 139 and 176 were not used to convey wine and are excluded from the list the plot is virtually unaltered for only Redcliff and perhaps Lincoln 'drop-out', since Dressel 2-4 (or Dressel 1 species) occur at all other sites plotted). Whatever Cam. 139 and 176 contained the distribution is of considerable interest since it presumably demonstrates that goods originating at the very core of the Empire were reaching this highly peripheral zone at a comparatively early date. Moreover, the finds are more than occasional with amphorae in these fabrics so far documented from nine sites in the region with several sites producing evidence of a minimum of several vessels. Additionally, the distribution indicates that unless vessels were being reused wine of the Italian peninsula, which may have included wines of quality, familiar to the Italian-Roman palate, was travelling away from the heartland to be consumed by native and civilian in frontier territory at this date; (admittedly it may well have consisted largely of poor quality product considered as fit only for export (though see Sealey & Davies 1984)). This is remarkable for the general pattern from around the turn of the millennium was evidently for the traditional flow of wine out of Italy to the provinces to be rapidly and emphatically reversed (Purcell 1985; though note Arthur & Williams 1992).

Within the study area the distribution extends across the region (Figure 6.20) with Italian fabrics being as widespread here as any particular amphora form (*cf.* Figures 6.1-19). In addition these Italian fabrics are documented at a variety of site types: Legionary fortresses, forts and native/civilian sites (Appendix 6.20). In the case of the latter only two or three find-sites are known; if the Beadlam find is discounted (*cf.* 6.3.2) the two remaining sites are Stanwick and Redcliff both of which are apparently high status native centres. This may mean that Italian amphorae were not circulating to sites below this level.

6.3.22 The Distribution of Amphorae in Tarraconensian Fabrics (Figure 6.21).

Brief comment may be made upon the incidence of amphorae in Tarraconensian fabrics. Four sites are listed in Appendix 6.21 with both of the main fabric types (Peacock & Williams 1986, 94-5) being recorded in the region. Dressel 2-4 is the only form represented in

Tarraconensian fabric within the study area; presumably wine was the product transported. The incidence suggests that wine from this important provincial source was being consumed at different types of site across the region. The recorded incidence will probably grow as reporters become more familiar with these fabric types and the value of conveying this information is recognized. Only when sherds in these fabrics are systematically identified and reported will it be possible to quantify the scale of the importation from this source and to evaluate its importance *vis-à-vis* other sources (*cf.* Sealey 1985, 113-51).

6.3.23 Discussion of the Distribution by Form.

From the preceding sections it is clear that a diversity of amphora forms from a wide range of sources entered the region during the first century A.D. Presumably this represents the arrival of a gamut of cosmopolitan commodities and this has cultural implications (*cf.* 1.6.2 (i). As noted some patterning can be detected from the incidence of some forms; this is interesting though in consideration of the modest amount of data available apparent trends should be understood as a matter for further investigation. Similarly the figures mapping the incidence of particular forms (Figures 6.1-19) are likely to be enhanced as research progresses (it might be noted that such maps for the distribution of amphorae in Roman Britain are astonishingly rare). These qualifications should not, however, obscure the existence of several important observable patterns including: the geographically wide incidence of amphorae within the study area; their wide distribution in social terms, for they appear at apparently major and minor native/civilian sites; and the fact that some forms demonstrate exclusively military distributions.

The number of documented find-sites is comparatively small (*cf.* Figure 6.23) when compared with the number of sites from which SGSW is recorded with the former being a quarter of the size of the latter; indeed, the actual number of vessels represented in this documentation outside York and Leicester may be fairly modest. As discussed above though this is likely in part to be a function of an historical neglect in reporting (*cf.* 6.2 (i)) which should be held in mind. Nonetheless, that these vessels were comparatively rare in the region during this period is suggested at both an impressionistic level and by the quantitative data (eg. Table 6.2 & discussed below).

The diversity of forms represented is noteworthy in itself but is particularly curious in so far as whilst so many form types are known, in most cases only one or a few examples are documented. This pattern must, of course, be evaluated against that of other regions. To undertake a satisfactorily comparison requires the existence of other systematic surveys but surprisingly few studies exist. Surveys have been undertaken of the Iron Age evidence for the country as a whole (Peacock 1971; 1984; Fitzpatrick 1989a) but not for the early Roman period at a regional or provincial level; (Pollard's study (1988a) contains some commentary). To judge from the evidence of individual site reports, however, it appears that this diversity can be considered unexceptional (see below, this section).

An important aspect to emerge from this evidence is that generally particular forms were not circumscribed to specific types of site. Rather the more common forms appear on a range of site types. There appear to be only one or two exceptions to this trend, as perhaps in the case of the Cam. 189. This might suggest a dynamic circulation of forms (and commodities) within the region, though it must be remembered that the sample is of modest size and that we are dealing with a period of c. 100 years. More data and especially chronological information are required to elucidate this trend. One question which needs to be addressed is whether amphorae occur regularly at middle and small scale/status civilian/native sites during this period, or if circulation is constrained by site status and identity.

The incidence by form shows Leicester to be the recipient of more form types than any other site by a clear margin (Figure 6.23). This is consistent with the evidence of SGSW and Gallo-Belgic wares (*cf.* Figures 5.1 & 5.37).

Figure 6.23 displays the number of early amphora forms recorded per site in bar chart form. This should be regarded with caution since it reflects to a considerable degree the patchy nature of the available data upon amphorae (*cf.* 6.2.1) which gives rise to marked variations in the extent of information for particular sites. Information on the number of form types present at Castleford, Leicester, Redcliff, Stanwick and York is reliable due to comprehensive study; conversely the numbers for Great Casterton, Old Sleaford and Templeborough do not presumably provide an accurate guide, a phenomenon which is directly attributable to the quality of reporting. Nonetheless the nine sites from which three or more forms have been documented (Figure 6.23) are well studied assemblages and may reasonably be considered useful samples. As noted Leicester has more forms recorded than any other site; next in rank are three military sites: the fortresses of York and Lincoln with, respectively, eight and six forms documented and the fort site of Castleford (6). The high status native/civilian sites of Stanwick, Dragonby and Redcliff have all produced evidence of a range of forms, with each having four and five types documented to date. Four form types have been recorded from Old Winteringham by the author.

The appendices listing the incidence of amphorae show them to be a comparative rarity at small ('rural') native/civilian sites. The principal question here is whether this absence is a function of the nature of reporting or 'genuine', the result of perhaps site size, scale of excavation, and so forth. In the case of individual sites at which the presence of amphorae might be anticipated but from which amphorae are not documented particular factors can be pointed to: at Ludford, LIN 21, the minimal nature of archaeological fieldwork must be significant; at Chainbridge Lane, Lound, NOTT 22, the small scale of excavation is a possible factor; this might also be the case with Tattershall Thorpe, LIN 34, though here site chronology may also be determining; with Dunston's Clump, NOTT 1, the absence seems reliable and presumably arises from site status and scale.

At a regional level this is a question that would benefit from specific investigation. The quality of erstwhile reporting must be a factor (eg. presumably in the case of East Bridgeford, NOTT 10, and Horncastle, LIN 15). However, some perspective can be gained from information currently to hand. Firstly there is fairly consistent evidence to show that the numbers of amphorae reaching the study area at this time were generally not particularly great. The quantitative sample shows that even at comparatively well Romanized sites sherds are infrequent (*cf.* Table 6.1). The RE figures, which are most indicative of numbers of vessels present, are minuscule. Secondly, the evidence from assemblages of post-first century A.D. date is informative. Whilst the nature of the supply of amphorae changes in the mid and late Roman period it is nonetheless noteworthy that amphorae are apparently not common amongst assemblages from non-urban sites in the region. A brief survey of some Humberside sites points to this phenomenon. Stead, in a one-line footnote on the incidence of amphorae at Winterton villa, SHU 11 (A) states that: "very few amphorae sherds ... were found" (1976, 126); it will be of interest to learn whether this pattern was parallelled in the subsequent excavations directed by Goodburn, SHU 11 (B)). At the roadside settlement at Shiptonthorpe, North Humberside, amphorae sherds are present though the number of vessels represented is likely to be very small (pers. exam.). Finally, the sizeable mid and late Roman groups from the North Humberside rural sites at Hawling Road, Market Weighton, NHU 31, and Bursea House, NHU 4, contained no sherds of amphorae. This evidence begins to contextualize the apparent rarity of amphorae at the small sites within the region during the first century. It appears that away from military sites and major centres amphorae are uncommon and remain so through the Roman period despite the Romanization of much of the rural hinterlands. A corresponding pattern has been identified by Booth in the case of Warwickshire; on the basis of quantitative survey he states that amphorae are generally quite rare in that region through the Roman period and: "very rare on rural sites" (1991, 9).

The lack of comparative surveys hinders discussion of the distribution of forms in the region. Distribution plotting and quantitative work is still required to establish the normal patterns for other regions in Britain and for different types of site (*cf.* Darling 1977; Hurst 1985, 126-7) so that site evidence may be evaluated and for inter-regional comparison (both inside and outside Britain). It was noted above that the diversity of types present seems consistent with the pattern for the south of Britain at this time. This diversity reflects the dynamism and cosmopolitan nature of the amphora trade across the empire during the first and early second centuries A.D. Peacock has stated of the incidence of amphorae in late Iron Age and early Roman Britain that: "the conquest and development of Roman Britain had virtually no impact on the composition of cargoes arriving in Britain ... no attempt was made to design specific cargoes for the British market" (1984, 41). He concludes that this: "presumably indicates that the requirements of at least eastern England were not all that different from those of the Roman world" (1984, 41). An alternative explanation might focus not on the 'requirements' of the recipients as causal but question the assumption that the distribution was in any way 'market demand' led. Amphorae found on British sites might relate not to any (presumed) market in Britain but rather reflect passively what was circulating in the western Empire at this time, perhaps in glut (pers. comm. M. Millett). Whilst Peacocks' thesis might be contested and criticized for lacking a quantitative foundation it does at least constitute an attempt to place the evidence from Britain into the context of what was happening in the rest of the Empire.

More synthetic analyses of amphora distributions are urgently required. An awareness of the wider patterns of the amphora trade can provide a valuable perspective for the interpretation of regional data (see Note 6.16). Quantitative data are required in order to evaluate whether regional supply was extraordinary.

Finally, it may be recorded that there is no evidence from the study area of the rejection of amphorae by indigenous populations as seems to have been the case with the German tribes (Fitzpatrick 1985, 311-2). There are too few examples of amphorae from pre-conquest provenances for a reliable pattern to be isolated for the late Iron Age. However, amphorae at Stanwick and Redcliff are pre-conquest arrivals and vessels at Leicester and Dragonby may also be. During the immediate post-conquest period there are likewise comparatively few documented finds-sites. However the impression received from the current evidence is that there appear to have been no absolute cultural barriers in any part of the region to the circulation of most types; there may though have existed social restrictions within the area.

6.4 THE EVIDENCE OF THE QUANTIFIED ASSEMBLAGES.

6.4.1 Introduction.

A number of stratified assemblages of the first century A.D. from within the study area quantified in the course of the research contained sherds of amphorae. The quantitative figures for eighteen assemblages are presented in Tables 6.1 and 6.2; data for fourteen assemblages were gathered by the author, whilst in the case of the remaining four information was garnered from published or forthcoming reports (see Note 6.17). Table 6.1 lists the absolute quantities of amphorae present per group by three types of measure, whilst Table 6.2 lists the presence in percentage terms. All of the groups itemized (bar one) date to the first century A.D. (or early Trajanic period) and are from provenances which would suggest the possible presence of amphorae. Thirteen of these assemblages had sherds of amphorae present, five did not.

6.4.2 The Absence of Amphorae from Five Quantified Assemblages.

Three assemblages which produced no amphorae sherds did not contain SGSW or Gallo-Belgic wares either; these comprised: Ancaster, LIN 1 (D), Old Sleaford 1984-5, LIN 26 (C), and Thorpe 1963, NOTT 32 (F). As observed above (5.2.8 (ii) and 5.3.6 (i)) groups quantified from Ancaster, although spanning the conquest period were composed largely of Iron Age tradition pottery. This was also the case with the 1984-5 groups from Old Sleaford. The absence of Roman imported wares amongst these groups has been discussed (above 5.2.8 (ii)). (Whether amphorae were represented in the pottery arising from the work at Old Sleaford in the early 1960s, LIN 26 (B), is not known to the current author; no such material was encountered amongst pottery examined). The absence of amphorae amongst the quantified groups from Thorpe 1963, NOTT 32 (F), context 55 may be explained by the unusual composition of the group which suggests that it is not a normal rubbish deposit (*cf.* 5.2.8 (ii)).

Another sample from which amphorae were absent is that from the Flavian auxiliary fort at Hayton, NHU 14 (A), comprising the material from the north corner of the fort (Area S, plus a part of N; sample size: 5.4 kg, 238 sherds). Amphorae are, however, reported amongst groups recovered from other areas (see NHU 14 (A); Johnson 1978, 90-2), hence it may be that the absence of the class from the quantified sample is a consequence of the identity and use of the area sampled.

The sample from Binchester, DUR 1 (C), is the other instance of absence. This appears to be a genuine pattern (ie. it does not arise from post-excavation sorting). Louisa Gidney has stated that very few sherds from amphorae were present amongst the assemblage as a whole, but that a small selection of sherds had been sent to Southampton University for specialist reporting (pers. comm. March 1990). These items were examined there by the current author (21.5.90); all were examples of the Dressel 20 fabric and none was from a Phase 1, 1-2 or 2 context. This absence may be considered surprising since the sample is large (760 sherds in total) and comes from a fort site where amphorae might be anticipated. Moreover, its position on the main north-south road on the eastern side of the Pennines (Breeze & Dobson 1985, Fig.2) suggests that it should not have experienced adverse supply circumstances. Since sherds from amphorae regularly occur amongst the groups in the sample, that they are not represented amongst the samples from these sites is especially noteworthy.

6.4.3 Assemblages with Amphorae: The Quantitative Evidence.

Table 6.1, listing the incidence of amphorae amongst the quantified groups, demonstrates that within the sample there is a clear tendency for sherds to be present amongst groups. The table shows that when amphorae are represented in an assemblage they are usually present in the majority of its early stratified groups (in these cases 40 have sherds of amphorae present, 10 do not), but even so their numbers are not large: 28 of the groups in Table 6.1 from assemblages with amphorae have between one and eight sherds present, only 12 groups have nine sherds or more (amongst the groups with relatively high amphorae sherd counts several vessels are usually represented, ie. the 'high' counts do not result from the shattering of a single vessel). This evidence indicates a 'wide-spread but thin' distribution. Only three of the forty groups yielded more than 50 sherds of amphorae: the Phase 3 group from St Nicholas Circle, Leicester, LEI 13 (AZ) and two groups from Redcliff, specifically a group of pits and a single large pit, FN 40, which contained 637 sherds (*cf.* 6.2.4). The latter was the second largest group by weight (3.3kg) this being topped by the 4.9kg from the so-called 'early (Legionary) levels', at East Bight 1964-6, Lincoln, LIN 17 (K) Group 2. Of the 38 groups for which weight figures are available only 9 yielded quantities of amphorae in excess of 1kg (ie. less than 25%), which seems further confirmation that the incidence is widespread but thin.

The percentage figures are displayed in Table 6.2. The table manifests one of the main problems arising from the quantification of amphorae, namely the disparity between the percentage of group figures represented by weight and those generated from sherd count (*cf.* 6.2.4). However, one of the most striking features of the Table is the unevenness of the percentage figures amphorae comprise even between groups in the same assemblage. This is at its most extreme in the case of percentage by weight: for instance, at Redcliff amphorae comprise 47% and 17% by weight of the pottery from two pit samples, though amongst two other quantified groups (from two contemporary ditches) amphorae account for just 0.49% and 2.85% of the recovered pottery by weight (this disparity may, of course, relate to feature function; an analogous pattern is evident in the case of the percentage figures for Cam. 113 (Table 5.10) but not with TN or TR (Tables 5.6 & 5.8); this might imply that amphorae and Cam. 113 were in associated use). Percentages when count is the measure, demonstrate a similarly uneven pattern. Explanation lies in the fact that sherds of amphorae occur regularly in groups though usually in very modest numbers, however, the weight of these sherds covers a wide-range from tiny flakes to chunky fragments, hence the skewing.

Considering the 'percentage of group' by weight figures first it can be observed from Table 6.5 that of the top nine percentage figures (in which amphorae comprise more than 25% of the group) six are groups from Lincoln. In fact the groups from Lincoln (from LIN 17 (K), (V) and (W)) overall form a consistent group amongst the quantified sample: amphorae form a higher proportion of groups by weight at Lincoln than at any other site. Curiously some of the smallest percentage totals by weight are found amongst the Leicester assemblages; Table 6.5 shows remarkably that seven of the bottom 9 ranking groups are from Leicester. This is especially noteworthy bearing in mind the fact that it was an early recipient of Roman material culture and that the site has produced evidence of a greater range of types of early amphorae than any other site in the region (*cf.* Figure 6.23). However, this may tally with the uncertain status of the site following the conquest (*cf.* Chapter 9). The figures for the groups from Redcliff, NHU 17 (B), and Stanwick, NYK 23 (B), compare favourably with those for Leicester (six Stanwick groups cluster together in the middle of the ranking) whilst those from Dragonby, SHU 1 (C), seem comparable (though of course different factors may result in similar percentage totals). These strong trends should be indicative of the relative frequency of the amphora supply to these sites. Turning briefly to the percentages which amphorae comprise when sherd count is the measure a similar general pattern may be observed (Table 6.6). Despite the fact that count can be effected by numerous site formation processes the trend of the evidence is clear: groups from Lincoln are predominantly in the upper half of the rankings (ie. they have the highest percentages); those from Leicester in the lower half.

Table 6.6 also demonstrates that by count amphorae normally comprise less than 10% of the groups in which they occur (in 34 of the 40 instances; when weight is the measure the comparative figures are 19:19). The highest percentage figure by count is 52.82% for the Redcliff pit group FN 40 which in part results from the extra-ordinary fragmentation of sherds from this feature (*cf.* 6.2.4). The second largest percentage is 37.03%, amongst the stratified pottery from the oval enclosure at Stanwick thought to be of high status; (though the group is of modest size: 54 sherds).

From a chronological perspective the evidence from Leicester and Lincoln is inconsistent. At Leicester, where amphorae fragments occur in some number (as at St Nicholas St and St Nicholas Circle, LEI 13 (AS) & (AZ)) there appears to be a slight trend towards greater frequency with time (Table 6.2). This might coincide with the demilitarization of the site by the late first century, that is if there had been a military presence at Leicester. Conversely the quantified evidence from Lincoln seems to indicate the possibility of a decline in the frequency of amphorae amongst groups with time, in particular by the late first century (Table 6.2; esp. LIN 17 (V)); (however, the modest quantities involved mean that no firm conclusions should be drawn).

6.4.4 The Composition of Amphorae Assemblages from Selected Sites.

A small number of sites within the region have produced sufficient amounts of amphorae from stratified first century A.D. deposits to enable an assessment of the composition of this component to be undertaken. The results of this analysis by weight are presented in Table 6.7 and Figure 6.25, by sherd count in Table 6.8 and Figure 6.26. The number of sites for which this type of analysis is possible is limited by the rarity of amphora sherds amongst early assemblages. Six stratified groups from sectioned ditches and a penannular gully at Dragonby, SHU 1 (C), for instance, which produced a sum total of 4121 sherds contained only eight sherds of amphorae (Table 6.1) rendering the Dragonby sample too small for quantitative analysis of this sort. Similarly, the first four phases from the Bath Lane 1968 site at Leicester, LEI 13 (AW), produced only 9 amphora sherds whilst the Blackfriars St site, (BE), yielded only 4 from its first century phases (Table 6.1). The other two Leicester sites appearing in Table 6.1. namely St Nicholas St (AS), and St Nicholas Circle

(AZ), cannot be used in this analysis since the information made available to the current author does not discriminate by form type. Sherd count data only are available for two sites: Blake St, York, NYK 28 (Q) where the amphora sample comprises a mere 27 sherds which means that this evidence should be considered with caution, and Castleford, WYK 1, Phase 1, sub-phases A-C, the assemblage from which was not quantified by weight (Rush forthcoming). The amphorae from three excavation sites in Lincoln, LIN 17 (K), (V) and (W), are here grouped together as one unit, the groups being contemporary.

Figure 6.25, which displays the proportional composition of amphorae assemblages by weight, includes evidence from four assemblages from outside the study area for comparative purposes, three being Claudio-Neronian, the other Flavian in date. These assemblages comprise: the amphorae from the Flavian fortress at Inchtuthil (Darling 1985, 335, Table XXIV); the material from the so-called military works depot at Longthorpe (Peacock 1987, 131, Table VI); and two very large samples from pre-Boudiccan Legionary and early *colonia* levels at Colchester, namely Culver St 1981-5 (site code 1.81) and the Gilberd School 1984-5 (site code GBS) (unpublished info. supplied by R. Symonds). In the case of sherd count, data from only one assemblage from outside the study area is included for comparison (*cf.* Figure 6.26 & Table 6.8), this being from Inchtuthil (Darling 1985, 335, Table XXIV) (no count data are included in the publication of the Longthorpe 'works depot' assemblage).

Table 6.7, which displays the proportions by weight, demonstrates that all of the samples are sizable, each exceeding 3kg with the exception of the Old Winteringham sample (1375g). Samples of this size might be expected to produce a fairly reliable picture. Sample sizes when count is the measure are included in Table 6.8. All of the assemblages exceed 50 sherds bar the sample from York mentioned above. The sample size figures are again sufficient to suggest confidence. However, it should again be emphasized that weight is in principle likely to be a more reliable guide of the relative frequency of pottery for inter-assemblage comparison (*cf.* 5.2.8 (iii)).

Considering the evidence by weight first a very striking pattern is evident from Figure 6.25: wine amphorae are dominant amongst the two assemblages from native/civilian sites, Redcliff, NHU 17 (B) and Stanwick, NYK 23 (B), but amongst all the other sites with their strong military associations Dressel 20 forms the major proportion of the assemblage, with wine amphorae generally very modestly represented. The only assemblage from a military site somewhat out of sequence with the general pattern appears to be Inchtuthil. However, in actuality this assemblage is nearer to the pattern for other martial sites since two amphorae, one a Dressel 20, the other a Cam. 186 form, have been excluded from this quantification because they have been reconstructed (Darling 1985, 333); with their inclusion the proportions would consequently adjust, considerably depressing the wine amphorae percentage of 57%.

Amongst the Redcliff sample if the Cam. forms 139 and 176 in Campanian fabric are taken to be conveyors of wine, wine amphorae represent 94.28% of the sample by weight, whilst at Stanwick, NYK 23 (B) wine amphorae constitute 72% of the entire amphora assemblage when the unidentified items are excluded. Amongst the assemblages from sites associated with the Roman army wine amphorae form much smaller proportions: at Old Winteringham, SHU 7 (A), 28%; at Lincoln, LIN 17 (K), (V) and (W), 2.67%; at Longthorpe 7%; at Colchester 7.49% and 12.91%. At these latter sites it is the Dressel 20 fabric (and presumably form) which occurs with the greatest frequency. It comprises 65% or more of the amphorae forming the Lincoln, Old Winteringham and Longthorpe samples, as well as both Colchester samples and it is the most common amphora type at Inchtuthil by this measure. Whilst Dressel 20 comprises only 5.70% and 7.18% of assemblages from Redcliff and Stanwick it is nonetheless represented in some quantity.

From Figure 6.25 it can also be observed that the fish products amphorae of Cam. 186 species constitute a significant percentage of several samples, including that from Stanwick. Though the form does no register amongst the quantified groups from Old Winteringham and Inchtuthil the species is precedented at both sites (*cf.* 6.3.9 & Appendix 6.8).

At a general level the pattern indicates a discrimination in the distribution of commodities with wine the major amphora borne commodity consumed at the large native/civilian sites, whilst the olive oil amphora dominates amongst assemblages associated with the Roman military. This observation is particularly noteworthy for it suggests that the conclusions of Williams and Peacock that the Dressel 20 is almost invariably a major constituent of amphora assemblages (1983; see below) might be refined.

When sherd count is the measure the picture is similar as Figure 6.26 and Table 6.8 demonstrate. In fact, in the cases of the samples from Lincoln, Old Winteringham, Redcliff, Stanwick and, to a lesser extent, Inchtuthil, the pattern when sherd count is the measure is remarkably close to that generated when weight is the means of quantification. Bearing in mind the nature of the material one might instinctively have expected the results of the two types of measure to have differed considerably. That there is a near correlation is of considerable interest from a methodological perspective.

At Redcliff amphorae probably to be associated with wine account for 97.85% of the sample assemblage, whilst at Stanwick the equivalent figure is 82.25% for the identified material. Figure 6.26 also shows wine amphorae to be a major component of the Inchtuthil assemblage, by this measure, but, as mentioned above, the actual figure would be significantly depressed if two reconstructed non-wine amphorae were included in the quantification. The sample from the two earliest phases at Blake St, York, NYK 28 (Q) dating to c. A.D. 70-100 also produces a relatively high percentage for wine amphorae: 55.55%, though here the sample size (27 sherds) may be influential.

Quantification by count also suggests that wine amphorae are relatively infrequent at two sites within the study region associated with the Roman military: Lincoln during the Legionary period (10.71%) and Old Winteringham (11.76%). This is consonant with the proportions when weight is the measure.

Turning to consider the incidence of the Dressel 20 fabric (and presumably form) it can be readily noted from Figure 6.26 that the type is present in all of the samples, but again it comprises only small proportions at the two native/civilian centres of Redcliff (2.12%) and Stanwick (4.87%). Conversely it is again strongly represented at sites associated with the Roman military; it dominates the samples from Lincoln (79.76%) and Old Winteringham (88.23%) and forms just under a half of the assemblage from Phase 1 at Castleford, WYK 1 (A) and just under a third at Blake St, York, NYK 28 (Q).

Figure 6.26 and Table 6.8 indicate that by sherd count amphorae of Cam. 186 species which would have conveyed fish products, form at best only a modest proportion of assemblages, comprising not more than 10% of the total in any case, and normally, when present, around 5 %. This tallies with the observations of Williams and Peacock that amphorae of Cam. 186 species/Dressel 7-11: "seldom exceed 10% of an [amphora] assemblage" of first or second century date (1983, 272) and that: "the figure is normally in the order of 10%" (1983, 268). Amongst the current sample it may be noted that when weight is the measure amphorae of Cam. 186 species do not exceed 17% of any amphorae assemblage.

Finally, it is of interest that amongst the Redcliff sample imports of Iberian origin form only 5.7% by weight, this being the Dressel 20 category alone. There are no examples of the Cam. 186 species known from the site, nor any wine amphorae of Spanish source. In fact material in Italian fabrics constitutes a surprisingly high figure of 42.26% (by weight), pointing to the relatively high consumption of wine of Italian origin at the site.

CHAPTER SEVEN

THE DISTRIBUTION OF MORTARIA.

7.1 INTRODUCTION.

7.1.1 The Study of Mortaria: Introductory Discussion.

Mortaria are the heavy bowl-shaped vessels of the Roman ceramic repertoire believed to have been employed in culinary trituration (*cf.* Webster, G. 1969, 10, for brief definition). In common with the fine wares considered above (Chapter 5) mortaria were produced by specialist potters working (on the whole) at particular centres and widely traded, being objects of trade in themselves. The distribution of mortaria is particularly significant to the study of Romanization for they are without precedent in the British Iron Age, and, indeed, Iron Age Gaul and Germany (pers. comm. C. Haselgrove 25.8.92; Okun 1989, 44) and hence their incidence may have been associated with changed food preparation practices or dietary norms (*cf.* Baatz 1977); they may though simply be ceramic replacements of wooden or other vessels which native peoples were unable to produce in pottery form. Even if their presence amongst native/civilian assemblages does not relate to changed practices (*cf.* discussion under section 1.7) their incidence in such cases is nonetheless of considerable interest; it may be that the possession of these vessels was considered indicative of status. With regard to the study of Romanization it is curious that mortaria have usually not been bracketed with the imported fine wares and amphorae and considered (with emphasis) as 'prestige items' or indices of site status; this may be an error of perception (Note 7.1).

Traditionally vessels of this class have received comparatively detailed attention in reports upon Roman pottery, a situation no doubt arising out of their distinctive, readily recognizable character and, indeed, the frequency with which rim sherds bearing producers stamps are encountered. The fact that these vessels have been regularly reported and illustrated has resulted in their relative 'over-representation' in publications which may perhaps engender a distorted impression as to their frequency. In fact mortaria both during the period in question here, and indeed, throughout the Roman period are perhaps surprisingly uncommon (eg. *cf.* Going 1987, Table 10). The fact that these vessels constitute a specific class with apparent specialized function(s) and that they were exchanged over wide distances makes them a subject of considerable interest. Moreover, that they display discrete form and fabric variations and stamps, has facilitated grouping, dating and sourcing. This means that sufficient data exist (largely as a result of the work of Kay Hartley) to enable synthetic study to be undertaken.

7.1.2 Function.

Mortaria are generally understood to have been used for grinding foodstuffs. As with other classes of vessel it is likely that in practice these items were used in a pragmatic manner and that there was no imposed 'closure' upon the function(s) they were employed to perform (*cf.* Reece 1988, 27-8). The main issue, however, is that of their principal use (or uses). Felix Oswald argued that these bowls were not mortars but rather were utilized to generate milk products (1944, 45-6). Some elements in his thesis seem valid. He pointed out that the spouts, which many forms possess, would be inappropriate for dry or semi-dry ground materials, whilst, conversely, they could be used for separating curds and whey. He contended that the gritting of the interior surface of the bowl was present to facilitate milk separation and cheese making, it providing niches where bacteria could reside. Further, he observed that objects which might be identified as pestles were never encountered in association with pottery "pelves" (Oswald, F. 1944, 45-6), a fact which remains the case. However, though this thesis is in some ways attractive it is not borne out by literary and archaeological evidence. Cato, for instance, writes of the mortarium and bread-making whilst Columella, who refers to the preparation of food using mortaria does not mention the processing of milk amongst its uses (Hartley, K.F. 1988). Turning to the vessels themselves it appears from the nature of their basic form that they are well-suited to pounding, grinding and mixing uses; the customary presence of surface gritting, at least after c. A.D., 55, implies that grits were applied for the purpose of trituration, especially since they frequently appear to have been worn down; finally examples which display basal wear, or indeed, where a hole has been worn through the base (*cf.* Collingwood & Richmond 1969, 252), are not uncommonly encountered. Moreover, examples of the form from La Graufesenque, Corbridge and elsewhere display graffiti specifying them to be mortaria (pers. comm. K.

Hartley 29.10.88). Bearing this evidence in mind it seems reasonable to suggest that the principal function and usage of these vessels was indeed for the trituration of foodstuffs.

7.1.3 Typology, Stamps and Dating.

In Britain the study of mortaria has long been understood to be a specialist matter (eg. Symonds 1983, 29), and, as is known, there is only one specialist, namely Kay Hartley. The Fulford and Huddleston report notes that the study of this class of vessel suffers from an accessibility problem (1991, 39). Whilst this is now *de facto* the case it is important to recognize that this situation arises as much from the manner in which Roman pottery has been approached historically and conceptually as from typological nuances. The act of defining mortaria study as a 'specialism' requiring, almost invariably, the attention of 'the specialist' has perhaps in a number of ways hindered the study of the class. This is not to deny that variations in form and fabric, and indeed the character and identity of stamps, make this a complicated class of vessel to approach.

(i) Fabrics and Sourcing.

A sizeable proportion of mortaria dating to the first century in Britain occur in fabrics which appear similar and are undiagnostic of their source. Difficulties therefore of differentiation and sourcing arise. This problem is particularly evident in the case of wall-sided mortaria belonging to the Cam. 191 genus, of the Claudian period, as well as the products of the two traditions characterized, largely on the basis of form, by Hartley and now generally referred to as Groups I and II (Hartley, K.F. 1977). Mortaria of these classes commonly occur in fabrics which appear qualitatively similar and often macroscopically identical. When, for instance, the fabrics of the wall-sided mortaria from Old Winteringham, SHU 7 (A), and Redcliff, NHU 17 (B) were compared by the current author they were found to be characteristically similar in appearance; (though close inspection reveals the fabrics to differ in detail the variations are no more than might occur through differing kiln temperatures and from the addition of varying amounts of quartz for tempering). Moreover the appearance of the fabrics is seemingly very close to that of examples viewed amongst other assemblages familiar to the author (eg. Leicester, LEI 13 (AA), London and Colchester). Whilst a single source for these early wall-sided mortars is not impossible it is perhaps improbable and cannot be assumed; indeed, it may simply be a function of the employment of similar clays at disparate locations and the intentions of potters to achieve a certain appearance for their wares. The mortaria of Hartley's Groups I and II are also illustrative of this difficulty. On the basis of a "subjective" assessment of the fabrics Hartley states that: "Group I probably used only one fabric ... in Group II three slightly differing fabrics can be distinguished ... One of the three is visually identical to that used by Group I ... and they tend to overlap in range" (1977, 11). In fact the fabrics, with one exception, cannot, when combined with the evidence of distribution, be located more specifically than the area of East Anglia, Kent, Sussex, Surrey and north-east France (Hartley, K.F. 1977, 11-2).

More positively, the fabric(s) of the complex of potteries south-east of Verulamium, which were an important source of mortaria in the later first century, are comparatively distinctive, familiar and identifiable. (Nonetheless, it may be mentioned, if only as a 'cautionary tale' that no less a scholar than Prof. Birley stated emphatically his belief that the products of the well attested workshop of Albinvs, customarily counter-stamped "LVGVD" were from Lyon (Birley 1948, 214); in fact they are now known, unequivocally, to originate from the Verulamium region).

Extensive petrological studies of mortaria have been undertaken (eg. Hartley, K.F. & Richards 1965) and continue (*cf.* Williams 1985).

(ii) Form.

From about A.D. 55 until the later Roman period the basic form of mortaria was fairly standardized (eg. Collingwood & Richmond 1969, Fig.78 b-g, Fig.79 a; Gillam 1968, Nos 237-271) hence to someone relatively unfamiliar with this class of vessel any one mortarium may seem very much like any other. This is, of course, a superficial impression for there are great variations in the detail of forms, particularly with regard to flanges and rims. As with other classes of artefact careful study has demonstrated many of these variations, and even nuances, of form to be significant, relating to chronology, or the tradition within which the potter was operating.

(iii) Stamps.

The stamping of mortaria to impress the potter's or potteries' name or trademark dates from c. A.D. 40. As the first century progressed stamping became more common place. Some workshops stamped only some of their output and then only once (eg. Hartley's Groups I & II (1977, 5-6)), whilst others stamped all of their product, and in some cases twice either side of the spout, or more (eg. mortaria from the Verulamium region (Dickinson & Hartley, K.F. 1971, 133)). This means that, other things being equal, the chances of recovering the stamp of a particular workshop are bias and hence that the quantitative use of stamps as an index of supply etc., can only proceed with appropriate calibration.

Stamps are clearly useful for purposes of grouping, dating and sourcing and their study is readily justified: they assist relatively close dating and distribution studies whilst providing some framework of 'reliability' to the field. It could, nonetheless, be suggested that in many cases this *information might be ascertainable from other typological attributes.*

7.1.4 Sources of Mortaria in Britain during the First Century A.D.: Introduction, with a consideration of the Potteries of Lesser Significance to the Research Area.

Whilst mortaria are known to have been present in the south-east of England in the earlier part of the first century A.D. (eg. Partridge 1981) within the study area no examples are recorded from deposits pre-dating c. A.D. 43 (though they do occur at the pre-conquest site of Redcliff, NHU 14 (A) and (B), on the north bank of the Humber, where they should be of Claudian date). However, following the conquest the pattern is transformed such that by the Flavian and Trajanic periods the presence of these vessels amongst assemblages, whether military or (too a lesser extent) native/civilian is far from uncommon. The main sources of supply to the region during the early period are considered in the subsequent sections of this chapter (7.2 to 7.5) whilst Appendices 7.1 to 7.4 record the incidence of 'sourced' finds of mortaria. The listings illustrate in an approximate manner the widening distribution of this vessel type through the later first century.

It is evident that potteries were manufacturing mortaria in Britain immediately following the conquest, and certainly by A.D. 50 (eg. Hartley, K.F. 1973). These were located in Kent, East Anglia and Colchester and were supplying their localities by the middle of the first century (Symonds 1983, 29). Hartley states that during the Claudio-Neronian period the supply of mortaria in Britain was apparently diverse, the work of a larger number of workshops, including smaller producers, than subsequently (1985, 93). Mortaria consumed at British sites during this early period derived from the continent, namely from Gaul, the Rhineland and even Italy (Hartley, K.F. 1973), others came from centres supplying regions, for example, Colchester (Going 1987, 108) or were items produced and consumed locally, for instance, perhaps the kilns at Eccles, Kent (Detsicas 1977, 25-8; Hartley, K.F. 1985, 92) and Sugar Loaf Court, London (Chadburn & Tyers 1984).

From the later Neronian period onwards industries whose wares were distributed widely were firmly established in Britain. These comprised the industry based at Colchester (Symonds 1983, 29-30; Swan 1984, 92) and the Brockley Hill-Radlett complex south-east of Verulamium, hereafter referred to as Verulamium region (Swan 1984, 97) which had been operative from an early date. By the Flavian period these were major sources, together with the two traditions characterized by Hartley, namely her (1977) Groups I and II the sources of which have yet to be identified with accuracy.

As regards the current study Verulamium region mortaria of first century date and mortaria of Groups I and II, which pre-date the second century, are well attested within the research region. The distribution of these products is discussed below (sections 7.3 to 7.5). Some other types of mortaria found in Britain during the early Roman period may be considered briefly here.

(i) Military Potteries.

There is much evidence to demonstrate that mortaria were produced, alongside other wares, at or near a number of military sites dating to the first century. The producers were either military potters or potters working principally for the army (eg. Darling 1977; Hurst 1985, 87). This was the case at, for example, the fortresses at Colchester (pers. comm. Robin Symonds 1988), Inchtuthil (Darling 1985, 332), Exeter (Hartley, K.F. 1979b, 198) and Longthorpe (Hartley, K.F. 1987, 128).

The study area is no exception to this pattern. At Lincoln local kilns were evidently producing pottery consumed principally by the garrison including mortaria; 67% of the first century mortaria from East Bight 1964-6 and Temperance Place 1969, LIN (K) and (L) respectively, were locally produced (Darling 1984, 71). At York there is strong evidence to suggest that mortaria were being made at or near the site of the fortress during the Flavian period, with vessels occurring in Gillam's Forms 237 and 238 (Dickinson & Hartley K.F. 1971, 134 & 140; Perrin 1977, 101). In addition Kay Hartley has suggested that mortaria from the early military levels at Castleford, WYK 1, indicate vessels likely to be of either local manufacture or which perhaps derive from kilns in the vicinity of Doncaster or Templebrough (pers. comm. P. Rush 15.6.88).

It is clear that local kilns were supplying sizeable proportions of the mortaria consumed at some early military sites. These potteries seem to have been orientated solely to supplying one or perhaps two or three adjacent military sites, as at Longthorpe (Hartley, K.F. 1987, 128). This was the limit of their significance.

(ii) Colchester.

Colchester, as a centre of mortaria production during the first century, was evidently of regional rather than provincial importance (pers. comm. K. Hartley 29.10.88; Note 7.2). Within the study region finds of mortars certain to be Colchester products are very rare and this is consonant with the impression that their distribution lay mainly within East Anglia; hence they are not considered in detail here. Appropriately one of the few sites at which Colchester mortaria are said to occur is Great Casterton, LEI 10, on the south-east fringe of the research area and geographically one of the closest sites to Colchester of all those considered in this study. At Great Casterton Todd records that the mortaria recovered from deposits associated with the early military occupation, dated to the Claudian-Neronian period, were Colchester products, whilst those from the later military phase, dated c. A.D. 70-80, were vessels from the Verulamium region (Todd 1968, 42; no numbers are given and this material has not been examined by the current author; see Gazetteer entry, especially for references to dating). This pattern is consistent with the sustained rise of the Verulamium industry through the later first century (Hartley, K.F. 1973, 42), an attendant aspect of which was the migration of potters producing mortaria at Colchester, such as G. Attivs Marinvs, to the Verulamium region during this period (Swan 1984, 98).

(iii) The Atisii Potters.

Another important industry of the post-invasion to Flavian period, the products of which are found in Britain, was that of the Atisii (Hartley, K.F. 1973, 40). The workshops were evidently located in Gaul, perhaps at Lyon. To the current author's knowledge their products are absent from the study area; as Hartley's 1973 map demonstrates the distribution of these vessels in Britain is principally across the south of the country (1973, Fig.3).

(iv) Lincoln.

Lincoln became an important regional source supplying mortaria to the East Midlands through much of the Roman period (Hartley, K.F. 1973, Fig.8). As noted production began here during the Legionary period though it was not until the very end of the first century that Lincoln mortaria occur away from the production site in any number; that is after the Legionary garrison had departed and it had received its status as a *colonia*). Since this *floruit* occurs at the end of the period under review here the distribution is not considered in detail.

The mortaria in question include items bearing the stamp of Vitalis (I) (JRS Vol. XXVII, 1937, 233-4). This potter, or workshop, is not firmly dated but rim typology and stratified finds suggest production spanning c. A.D. 90-115 (Hartley, K.F. 1976, 122). Birley and Hartley have documented the find-sites of mortaria bearing these stamps (Birley 1948, 220; Hartley, K.F. 1976, 122). The distribution is wide, extending across the Midlands, and north into southern Scotland. Roman military sites predominate amongst the recorded incidence though it is unclear at present whether this is actually a function of the nature of research. Vitalis stamped mortaria are, however, known from a number of native/civilian assemblages, for instance at both Lincoln and Leicester, where these vessels will have post-dated any Roman military presence, and Winterton, SHU 11 (A), (Hartley, K.F. 1976, 122).

The distribution of these Lincoln products is further confirmation that during the early Roman period the output of a select number of mortaria potteries was traded in quantity over wide distances. The period of activity of the Vitalis workshop overlaps with the start of the large scale production of mortaria at Mancetter-Hartshill. This latter industry rapidly grew from the early second century to become the main source of mortars used in the Midlands and the north of Britain through the second century until the late fourth century (Hartley, K.F. 1973, 42).

In the following sections the distributions of some specific types of first century mortaria in the study area are examined.

7.2 THE DISTRIBUTION OF EARLY WALL-SIDED MORTARIA *cf.* CAM. FORM 191.

Examples of early wall-sided mortaria of the basic class Cam. 191 (Hawkes & Hull 1947, 253-4) are documented from five, or possibly six, find-sites in the study area (Appendix 7.1; Figure 7.1). This form, which typically occurs in yellowish-buff fabrics, is a familiar find amongst assemblages of Claudian date for it is the standard mortar form of the period (Hartley, K.F. 1987, 128). The form was probably produced at a number of locations in Britain immediately following the conquest and is certainly known to have been made along the Rhine where it is common. Vessels from British sites probably include mortars manufactured in the Rhineland, though this is yet to be proven. In Britain the form is known from the kiln sites at Eccles (Detsicas 1977), Corfe Mullen (Calkin 1935), and appears to have been produced at Longthorpe (Hartley, K.F. 1987, 128) from where a number of examples are known (Wilson, M.G. 1974, 111, Fig.56 No.146; Hartley, K.F. 1987, 128, Fig.35 Nos 5 & 6); it may also have been produced at Colchester (Hartley 1985, 92).

The date range of this form type is firmly established, extending from the Augustan period (*cf.* Hartley, K.F. 1981, 196) through to around the end of the reign of Claudius. Hartley suggests that the form was passing out of fashion by c. A.D. 50-55 since examples are rare on sites of Neronian foundation, for example The Lunt and Usk (a note in Detsicas 1977, 28; Hartley, K.F. 1976, 117; 1981, 196; 1987, 128). It may be that some items are early Neronian. Pre-invasion arrivals of the form are known from Skeleton Green (Partridge 1981; Hartley 1981) but the large majority of examples in Britain will be of Claudian date. That this is likely to be the case with the vessels recorded from the research area is indicated by contextual evidence. Hartley has suggested a tripartite chronology based upon rim forms (1985, 923). However, study is complicated by the variety of rim form detail and in practice even after further research it may prove difficult to date individual forms (*cf.* Hartley, K.F.

1987, 128). Consideration of the specific forms of examples from the study area, particularly their bead rims, suggests that they are typologically late in the sequence.

The distribution of early wall-sided mortaria in the study area (Figure 7.1) displays a southern bias which is consistent with the dating of the class. Four of the six sites at which it is recorded have yielded Claudian assemblages. Four vessels were represented amongst the Jewry Wall assemblage, LEI 13 (AA) (Kenyon 1948, 75), though the so-called early pits at this site appear to have produced no examples (*cf.* Jarvis 1986; unpublished listings by P. Jarvis & V. Rigby)).

Great Casterton, LEI 10, has produced evidence of at least two examples. One of these was recovered from the site of the fort (Todd 1968, 47, Fig.16 No.3). The other was recovered from a pit in the area of the later Roman town which may then have been occupied by a vicus or military annex (Corder 1961, 41, Fig.14 No.20) and was associated with pre-Flavian and early Flavian pottery. Presumably both items relate to the Claudian occupation. It is possible that these vessels were produced at Longthorpe (see above), though this is not readily suggested by the fabric description of the vessel published by Corder when compared to that of the Longthorpe examples.

One vessel is known from the unpublished East Bight excavations of 1980-1 at Lincoln, LIN 17 (V), (pers. exam. 30.11.88). This item is most satisfactorily understood as arriving with the early military occupation at the site during the early 60s, if not the 50s (see Gazetteer entry). Another Lincolnshire find was associated with other Roman material on the fen-edge near Tumby, south-east of Tattershall and Coningsby, in the 1960s. This is perhaps a vessel of Cam. 191 form for it is described as being: "a bead rim mortarium" (Whitwell & Wilson 1968, 27). This site may have been on or near the coast in the mid-first century A.D.

Finally, that examples of these mortars have been forthcoming from the two contemporary Humberside sites at Old Winteringham, SHU 7 (A) and Redcliff, NHU 17 (A) and (B) is consistent with the fact that both sites have yielded extensive Claudian assemblages. At least three vessels were recovered at Old Winteringham during the work of 1964-5 (Hartley, K.F. 1976, 117, Fig.54 Nos 1 & 2; & pers. exam. of a third example from context 'aa'). Significantly two of the most important early groups, dated as Claudio-Neronian and Neronian, both contained mortaria of this form only (groups 'aa' and 'ab', see Table 7.1). Finally, Redcliff, the most northerly recorded find-site of the type in Britain, has produced more documented examples than any other site in the region. A wall-sided mortarium is published from work conducted in the 1930s (Corder *et al.* 1939, 242-3, Fig.2 No.26) whilst fieldwork in the late 1980s, NHU 17 (B), yielded sherds from five or more such mortaria (these occur in two fabric types).

Although only five or six find-sites are recorded for this form it is of some interest that the distribution suggests that even during the period immediately following the conquest of the south-east of Britain mortaria were forming part of civilian/native assemblages in this area, as evidenced at Redcliff, and possibly Tumby, Leicester and Great Casterton (if the find from the area of the later town is not directly associated with the military presence). This general pattern is mirrored in the incidence of other classes of first century mortaria.

7.3 THE DISTRIBUTION OF MORTARIA OF HARTLEY'S (1977) GROUP I.

Mortaria of Hartley's (1977) Groups I and II are two of the principal types of mortaria found in Britain during the Neronian-Flavian period. The Groups are characterized essentially by means of their distinctive rim forms which indicate two separate traditions. Hartley states that: "In classifying these potters in groups it is not intended to imply that all in each group worked as a single unit, but only that they worked in a common tradition in the same region and at much the same time" (1977, 5).

Mortaria of Group I are known to the current author from seven sites within the study area (Appendix 7.2). Within the study area the recorded find-sites are fairly evenly distributed across the southern part of the region (Figure 7.2) with the most northerly examples coming from York. The geography of this distribution is consistent with the dating of the group (see below, this section) and reflects the general pattern for Britain as a whole, which displays a strong southern bias (Hartley, K.F. 1977, Fig.2.2).

The rims of mortaria of Group I display a thick flange which is sharply hooked (Hartley, K.F. 1977, Fig.2.1 No.1). The fabrics of this Group appear to be consistent, though whether this indicates a common clay source is not certain. The nature of the clay employed, as with Group II, is such that if the Groups had worked in Britain this would have had to have been in East Anglia, Kent or Surrey-Sussex (Hartley, K.F. 1977, 11); alternatively, if the two Groups had their manufactories on the continent, the distribution of stamped finds indicates that this is most likely to have been in north-east Gaul. Hartley favours a Kentish source, perhaps in the vicinity of Richbrough, though she intimates that these other possible localities cannot be ruled out on the basis of our current knowledge (1977, 11-3). Hartley dates her Group I to the period c. A.D. 55-85 stating that examples of the rim type are: "always Neronian to mid Flavian where ... dated" (1977, 10).

As noted above the find-sites of Group I mortaria within the study area are consistent with this dating (Appendix 7.2). The types of site at which examples occur are of interest. Two stamps of Q. Valerivs Se-- are known from the fort site at Broxtowe, NOTT 6 (Hartley, K.F. 1960a; pers. exam. 15.11.89) whilst the finds from Lincoln, LIN 17 (K), and York, NYK 28 (Q) must also be associated with the Roman army. Finds of Group I mortaria of Q. Valerivs Se-- are also recorded from the military sites at The Lunt and Corbridge (Hartley, K.F. 1977, 6) both just outside the region, whilst two mortaria similar in form to those of Group I were recovered from the Flavian military site at Corbridge, Red House, though: "both differ slightly in fabric" from standard Group I products (Hartley, K.F. 1979a, 51-3, Fig.18 Nos 81 & 82). However, a stamped item is also known from the native/civilian site at Old Sleaford, LIN 26, with another recorded from the area of the civil settlement at Doncaster, SYK 1, though admittedly the occurrence of this item here could be explained by the nearby presence of the army.

7.4 THE DISTRIBUTION OF MORTARIA OF HARTLEY'S (1977) GROUP II.

Mortaria of Hartley's (1977) Group II are well documented from across Britain (Hartley, K.F. 1977, Fig.2.2) being one of the principal classes of the later first century. Mortaria of this type appear to have been distributed as widely as Verulamium region products, and on a comparable scale (*cf.* Hartley, K.F. 1973, 41). Within the study area fourteen find-sites are known to the current author (Appendix 7.3; Figure 7.3). The recorded distribution is not even for apart from three find-sites in Leicestershire the incidence is focused upon Yorkshire and Humberside.

Vessels produced by Group II potters typically display a wide, fairly level flange and invariably a well executed spout; this is Gillam's Form 238 (Dickinson & Hartley, K.F. 1971, 133; Hartley, K.F. 1977, Fig.2.1 No.2). Other varieties are known to have been produced by Group II potters; these are perhaps their early work. The fabrics associated with Group II and their likely origin have been considered (7.1.3 (i) & 7.3). To this it may be added that the most widely attested potter of Group II, on the basis of the evidence of stamps, Q. Valerivs Veranivs, is known to have worked in the vicinity of Bavai in north-east Gaul, subsequently moving elsewhere in Gallia Belgica or to Britain (Hartley, K.F. 1976, 117; 1977, 9).

Hartley dates the Group to c. A.D. 65-100 (1977, 10-1). Consistent with this dating Gillam's Form 238 is established as essentially Flavian. In addition the find-sites, as well as the provenances of stratified finds, within the study area demonstrate the late Neronian-Flavian currency of the class. Group II vessels are, for example, represented amongst the pottery from the Flavian fort at Hayton, NHU 14 (A), and early levels at York, specifically NYK 28 (Q); in addition, it may be noted that a stamped form 238 of the Group II potter *Cacvmatti* was forthcoming from the mid Flavian supply base at Corbridge, Red House (Hartley, K.F. 1979a, 51, Figs 18 & 19 No.79).

As with the distribution of Group I the majority of find-sites of Group II have military associations with some examples also recorded from native/civilian assemblages (see Appendix 7.3). The vessel represented at Winterton, SHU 11, unequivocally derives from the latter; however, it is less clear whether the stamped item of Litvgenvs II, for instance, from the site of the civilian settlement outside the fort at Doncaster and, indeed, the Old Winteringham and Leicester finds occur where they do independent of the Roman military. Whatever the explanation of these finds it is clear that the products of the Group II potters are strongly represented at fort sites in the north, a pattern further emphasized by Hartley's national distribution map of 1977 (1977, Fig.2.2). The latter demonstrates that *mortaria* of *Group II* occur widely across southern Britain with a considerable number of examples recorded from non-military sites (for further discussion, see below 7.6).

7.5 THE DISTRIBUTION OF MORTARIA FROM THE VERULAMIUM REGION.

Mortaria from the Verulamium region are recorded from 17 sites within the study area (Appendix 7.4; Figure 7.4; Note 7.3). This comparatively high number is commensurate with the status of the industry during the later first century as probably the most important source of these bowls in Britain. It is noteworthy that of the four classes considered in detail here, the industry which endured the longest (ie. the Verulamium region industry) has the 'thickest' recorded distribution in the region. Hartley has stated that the bulk of first century mortaria in the north of Britain came from these potteries (1973, 42); however, this remains to be demonstrated quantitatively. It should be borne in mind when considering this incidence that the frequency of stamping (see 7.1.3 (iii)) and a distinctive fabric render mortaria from the Verulamium region more readily identifiable than perhaps some items belonging to Groups I and II.

As Figure 7.4 shows the distribution is geographically even. This reflects the chronology of the Verulamium potteries which, unlike the other classes reviewed here, extends from the mid first century into the second century. The distribution seems more even in social terms for sites of varying status are represented. Verulamium region products are well attested from Legionary contexts at York and are also recorded from the fortress at Lincoln (for references here and below see Appendix 7.4 and Gazetteer). They have also been recorded from fort sites across the region, from Great Casterton, LEI 10, to Ebchester, DUR 6; a Verulamium mortarium dated c. A.D. 70-100 was recovered at Corbridge, Red House (Hartley, K.F. 1979a, 53, Fig.18 No.83). Further, Verulamium items are recorded from a number of rural native/civilian sites of minor status: Easton, LIN 9, Tumby, Lincolnshire (Whitwell & Wilson 1969, 106), Red Hill, Ratcliffe-on-Soar, NOTT 29 and Dunston's Clump, NOTT 1 (though this item could be second century). It may not be insignificant that these sites are located in the southern part of the region and the earliest part to be incorporated into the Empire. Whether there is a distinction here between the area south of the Humber-Trent and the area to the north is a question requiring more research. A number of mortaria more or less contemporary with these finds are in fact known from several sites in East Yorkshire (see below 7.7).

7.6 SOME ASPECTS OF THE DISTRIBUTIONS OF FIRST CENTURY MORTARIA.

It is useful that these four classes of mortaria have overlapping chronologies: c. A.D. 43-55, c. A.D. 55-85, c. A.D. 65-100 and c. A.D. 49 onward, respectively. Their distributions appear to demonstrate consistent patterns. As dated distributions they reflect the chronology of the Roman conquest/incorporation for the incidence of mortaria appears to extend northwards with time. The distributions also seem to confirm the impression that, at least in the immediate decades following the conquest, mortaria are essentially associated with Roman or Romanized communities (though this may be a function of research input (*cf.* 5.2.3 (ii)). The recorded incidences of these mortaria north of the Humber appear to indicate a close connection with the presence of the Roman army. However, this latter impression may be misleading or require qualification (see 7.7), though it is noteworthy that the native site at Stanwick, which was comparatively so well supplied with samian, Gallo-Belgic wares and amphorae, has produced sherds from only one certain first century vessel (Wheeler 1954, 36, Fig.11 No.24), with only later Roman mortaria coming from the recent work. The distributions also show that mortaria rarely occur beyond the limits of the Empire in Britain (see also Hartley, K.F. 1977, Fig.2.2).

The fact that some examples of each of the four classes considered here have been recovered from native/civilian assemblages, albeit few in number, demonstrates that the distribution of these vessels is unlikely to have been rigidly restricted to military supply networks. Nonetheless in the initial period at least the military networks appear to have been the main mechanism of distribution. That the distributions follow a pattern of 'large majority of finds from military sites but consistently some finds from amongst native/civilian assemblages' mirrors the situation *vis-à-vis* most classes of amphorae within the region (*cf.* Chapter 6). Whether the not infrequent occurrence of mortaria at non-military sites during the first century relates to the presence of Romans, or Romanized natives ('pull factors'), or is a function of a glut of these vessels spilling over into the native economy ('passive circulation') or being traded into these economies by merchants and pedlars ('push factors') remains opaque and is a matter for interpretation. Two important conclusions can though be drawn. First, that mortaria occur with some regularity amongst native/civilian assemblages, even from quite low status sites, from an early date indicates strongly a receptiveness amongst these communities to the vessel type (and one that is witnessed elsewhere (eg. Booth 1991)). Second, the presence of mortaria at native sites is indicative that these sites were tied in, however loosely with wider networks, even at a time of potentially considerable social and economic dislocation.

Hartley has stated that Verulamium district mortaria were distributed to the East Midlands and further north by road, whereas the products of the Groups I and II potters were likely to be conveyed by sea (1966, 63; 1977, 12-3; Dickinson & Hartley 1971, 133), which would mean, in the case of the study area, up the east coast. This cannot be proven but she points to the nature of the distributions as suggestive, for instance, the incidence of the work stamped Sollvs, of the Verulamium district which is spread northwards through central Britain (pers. comm. 29.10.88). She suggests that if the potteries of Group II and those of the Verulamium region were operating in competition the latter were likely to be at a disadvantage in the north of Britain due to transport cost. Hartley has contended that this may explain why Verulamium region mortaria are apparently less well represented at York, NYK 28, Bainbridge, NYK 2, and Ilkley, WYK 3 (Note 7.4), than those of Group II (1966, 63; Dickinson & Hartley, K.F. 1971, 133). Further data are required to explore this possibility.

7.7 EARLY MORTARIA AT SOME NON-MILITARY SITES WITHIN THE STUDY REGION (with particular attention to the area between the Tees Lowlands and the Humber).

Appendix 7.5 lists the incidence of early mortaria, (these items are essentially of first century date, though in a few instances possibly early second century) at native sites within the region. The list runs to sixteen sites and at first sight this may be considered to seriously under-represent the actual incidence. Nonetheless, although the figure seems modest it must be viewed with some respect since it is the product of a systematic study of the material and literature search. The list would undoubtedly be longer if the type of site in question here had received a degree of attention proportional to that expended upon the larger and military sites. In addition it may be observed that if mortaria dating to the early second century were included the list would expand considerably. As it stands the list is sufficiently long to confirm that mortaria were reaching native sites with some regularity by the late first century. The fact that normally only one or two vessels are represented per site is perhaps not surprising for even amongst assemblages from larger and more Romanized centres these vessels are comparatively rare (*cf.* section 7.9). It might be noted that four of the find-sites are ones which later develop to become villas (Winterton, Norton Disney, Rudston and Langton) which is a comparatively high figure. It is unclear whether the early presence of mortaria is indicative of an early receptivity to Romanization in these cases since this association might be a function of the fact that villa sites have received an attention by excavators which is disproportionate to their frequency relative to other rural sites.

Focusing upon the area from the Tees lowlands to the Humber an interesting observation may be made. The provisional data suggests that whilst mortaria of first century date occur at several native sites in the eastern part of the historic county of Yorkshire they are virtually absent from similar sites in Cleveland and the Tees lowlands. In the latter area a number of sites occupied during the period which have produced assemblages amongst which early mortaria might reasonably be anticipated to occur, have in fact not produced any such vessels of an early date. The pattern is particularly conspicuous because both areas were absorbed into the Empire at the same time; this difference correlates with other distributions which mark East Yorkshire out from the rest of the North-east (*cf.* 5.2.5).

At both Thorpe Thewles, CLV 4, and Catcote, CLV 1, for instance, despite the presence of first century fine wares mortaria of this date are absent. All examples at Thorpe Thewles are second century whilst the sizeable sample of mortars from Catcote comprises only items of post-first century date. No examples were present amongst the pottery from Ingleby Barwick, CLV 2, though here the excavated pottery sample is small. Roxby, NYK 20, on the northern fringe of the North York Moors is another site of the period from which early mortaria are absent. Further south enclosure 'A' at Levisham Moor produced a mortarium rim (Hayes 1983, 41, Fig.20 No.37) but typologically this item has a broad date range, possibly *c.* A.D. 80-150. Two sites from the area have produced sherds from typologically first century vessels. Stanwick, NYK 23, is one of these, but here only one vessel is certainly of early date (see above 7.6). The other site is Pale End, Kildale, NYK 10, from where a rim sherd resembling those of Hartley's (1977) Group I has been recovered (Hayes 1966, 694, Fig.3 No.19).

In contrast early mortaria are documented from a number of native/civilian sites in East Yorkshire. Redcliff, one of these, has already been mentioned. The other find-sites are all small scale rural enclosure sites. At Hasholme Hall, NHU 13 (A), a mortar of Gillam form 237 was recovered (Hicks & Wilson 1975, 52) dating to c. A.D. 60-90; from the early enclosure at Langton, NYK 11, a rim of similar date was recovered (Corder & Kirk 1932, 31, Fig. 7 No.11); at Rudston, NHU 19, K. Hartley identifies one item as potentially Flavian (1980, 39); the excavations conducted by Brewster at Newham's Pit, Staxton, NYK 24, produced sherds from three early mortaria, of which, one resembles Gillam's Form 238, typologically Flavian, another is similar but displays a more hooked rim profile and may be Flavian or Trajanic, whilst the third item is stamped 'LEGV[' and for which Birley suggested a mid/late Flavian to Trajanic date (Brewster 1957, 215, Fig.12 Nos 13, 14, & 12 respectively; Birley 1957, 222). Finally, mortaria probably of Trajanic date have been recovered from the site at Skipwith, NYK 22, though here the proximity of York may be significant. All of these sites have produced other items of first century, or at least 'early', Roman material culture.

A more accurate picture of the distribution of early mortaria in this area, that is of both presence and absence during this period, will emerge with the publication of work undertaken in the 1970s and 80s at Brantingham, NHU 2, Welton Wold, NHU 23, North Cave, NHU 15, Naburn, NYK 15, and Wetwang Slack, NHU 25, which are awaited, and, perhaps, a re-examination of the material from Elmswell, NHU 8.

The explanation of the contrast between the distributions in these two areas may be cultural. Eastern Yorkshire is traditionally identified with the Parisi and these find-sites would fit within the area which is conventionally ascribed to the tribe. It is curious that the distribution pattern at these East Yorkshire sites, of widespread but 'thin' presence at native sites, parallels the pattern observed with the distribution of decorated SGSW in East Yorkshire (see 5.2.5). That East Yorkshire appears distinctive in this respect ties in with

Evans' analysis which identified the existence of a specific ceramic identity here during the later Roman period (Evans, J. 1988a).

At a regional level a more reliable picture as to the incidence of early mortaria amongst non-military assemblages may be forthcoming with the appearance of reports upon excavations at rural settlements (eg. Humberstone Farm, Humberstone, LEI 12, and Scalford Brook, Melton Mowbray, LEI 19), roadside settlements (eg. Sapperton, LIN 30; Hibaldstow, SHU 4) and small towns (eg. Medbourne, LEI 18).

7.8 EARLY MORTARIA AT MILITARY SITES.

It is established from the above sections and from Appendix 7.6 that early (ie. first century) mortaria are well represented at Roman military sites in the study area. The sources of the mortaria recovered at these sites are often, indeed probably normally, diverse, as, for example, the sample from Hayton, NHU 14 (A) (Johnson 1978, 96), occupied for a relatively short period (Johnson 1978, 77), adequately demonstrates. This may indicate that supply was, at least for some units or for some periods, piecemeal or sporadic, or even that a competitive market existed, but that supply was not centrally organized. Further evidence suggesting a lack of central organization is the fact that the Legionary sites at Longthorpe, Lincoln and York have all produced evidence of the production of mortaria in local 'military' kilns (*cf.* 7.1.4 (i)); moreover, the products of these kilns are apparently not distributed away from their production site (eg. Hartley, K.F. 1987, 128). An important factor to be borne in mind though when considering that diverse sources are represented amongst samples is that as mortaria were apparently used for food preparation they may be analogous to a mess tin and the property of an individual. Hence they may have been carefully curated and transported by their users rather than by traders.

The form identified as Gillam 237, dated c. A.D. 60-90 (Gillam 1968) is often said to be closely associated with the Roman military. A superficial survey shows that recorded find-sites are largely consistent with this suggestion. By 1971 Hartley had documented at least seven vessels of this form from York (Dickinson & Hartley, K.F. 1971, 140) and further examples are now also known (Note 7.5). The form occurs at Hayton, NHU 14 (A), (Johnson

1978, 96, Fig.25, Nos 63 & 64) and Brough, NHU 3 (A), (Corder & Romans 1937, Fig.12 No.57). However, an example of the form was recovered from the indigenous settlement at Hasholme Hall, NHU 13, (*cf.* section 7.7).

The possible existence of an association requires further definition but is an interesting prospect for it may be indicative of supply arrangements. It raises the possibility that a particular workshop(s) perhaps located in the north was supplying the army, with perhaps few vessels entering the civilian market. Alternatively an association might be explained if disparate potters followed a shared 'template'. Another area which would benefit our understanding of supply arrangements is an assessment of the degree of similarity between mortaria assemblages from garrisons and those from their *canabae* or *vicus*. Doncaster, SYK 1, appears to be a good candidate for such an enquiry; Great Casterton, LEI 10, may be another.

7.9 THE QUANTITATIVE EVIDENCE.

7.9.1 Mortaria as a Component of Assemblages and Groups.

Table 7.1, which lists the absolute quantities of mortaria present amongst groups forming the quantitative sample, shows that examples of the class occur with regularity. The sample comprises groups from 19 assemblages from 12 sites; of these mortaria are represented amongst 14 assemblages from 8 sites and in 42% of the groups. However, this wide representation should not obscure the fact that mortaria are absent from a number of groups amongst which one might intuitively expect them to be present. It may be the case that these vessels are actually rarer than is generally appreciated.

The fact that no sherds of mortaria were present amongst the groups from Ancaster, LIN 1 (D), Dragonby, SHU 1 (C), and Binchester, DUR 1 (C) is noteworthy. The Ancaster groups, as noted above, are lacking in Roman imports and Romanized pottery (*cf.* Tables 5.1 & 6.1) hence the absence of mortaria is consistent with the general pattern. The Dragonby groups, contained no mortaria either, despite including some SGSW, Gallo-Belgic pottery and early amphorae. Bearing in mind the size of the sample (4121 sherds) this absence must be considered significant though there is evidence that mortaria were being manufactured at

Dragonby during the Neronian-early Flavian period (May 1966a). What accounts for the absence of mortaria from the sample from Binchester is uncertain. Sherds belonging to vessels of this class may have been selected out of the assemblage prior to quantification by the current author, however, the author was advised that this was not the case (pers. comm. Louisa Gidney, March 1990). It should also be borne in mind that the three Binchester groups (comprising 760 sherds) included no sherds of amphorae either. Stanwick comes close to inclusion amongst this group of site assemblages lacking mortaria. Only Wheeler's site A has produced sherds of mortaria datable unequivocally to the first century (Wheeler 1954, 36, Fig.11 No.24; Note 7.6).

Table 7.1 demonstrates that when present mortaria occur essentially in modest quantity. Amongst some groups sherds of mortaria present weigh considerable amounts: 1.88kg in the case of the sample from Legionary levels at East Bight, Lincoln, 1964-6, LIN 17 (K); 1.36kg came from later first century Legionary levels at Blake St, York, NYK 28 (Q); whilst twelve other groups contained around 200g of mortaria or more. However, as might be predicted, given the thick walled and robust nature of these vessels, such quantities by weight in many cases correspond to only a very small number of sherds. A scan of Table 7.1 showing the absolute quantities present by count, and indeed, when RE is the measure, indicate that mortaria are present amongst groups in modest quantity: only three of the 62 groups contain more than 8 sherds of mortaria; the highest RE total is 0.60, this being from the aforementioned York group; the mean RE figure for groups amongst which the class is present is 0.13.

The pattern is further clarified by Table 7.2 which lists the 'percentage of group' figures. When weight is the measure mortaria comprise more than 10% of their groups in just four instances. In these the percentages are in fact high: 35.7%, 20%, 19.9% and 18%. However, examination reveals this to be a function of the presence of a few large (or, more accurately, heavy) sherds and/or relatively small group weight totals. Bearing in mind that mortaria sherds are often 'chunky' it is surprising that in the majority of cases in which mortaria are present they constitute less than 5% of group totals by weight (*cf.* Figure 7.~~8~~6).

The 'percentage of group' figures when sherd count is the measure further confirm the comparative infrequency of the type. Mortaria comprise more than 3% of a group in only three instances; in 21 instances it forms less than three percent (*cf.* Figure 7.6). In one, apparently anomalous, case mortaria comprise 32.81% of a group, this being amongst the pottery from phase 2 at Bath Lane, Leicester, 1968, LEI 13 (AW). This group also produced the highest percentage when weight and RE are the measures: 35.69% and 32.84% respectively. It is noted in the excavation report that the sherds from this group: "are probably all from the same well-worn vessel ... The fragments appear to be the result of some deliberate process ... Their [sub-cubic] size and shape suggest the manufacture of tesserae" (Clay & Mellor 1985, 6; *cf.* Pollard in Clay & Mellor 1985, 47; in the opinion of the current author, who has examined the material, this description is a reasonable one). This material cannot, therefore, be considered a normal rubbish deposit of the sort preferred for comparative analysis (*cf.* section 2.4). Similar sherds, apparently from the same vessel, occur in phases 3 and 4.

In Table 7.3 the groups are ranked on the basis of the 'percentage of group' figures when weight is the measure. These figures, together with those when sherd count is the measure are plotted in Figure 7.6. Table 7.3 clarifies the impression gained from Tables 7.1 and 7.2 that mortaria occur with the greatest relative frequency amongst assemblages which are from Roman military sites or from other sites displaying early signs of Romanization. There are three instances in which groups from the same site assemblage appear to coalesce: the three groups from Bath Lane, Leicester, 1968, LEI 13 (AW), occupy half of the top six positions in this ranking; the three groups from the excavations at St Nicholas St, Leicester, 1965-6, LEI 13 (AS), cluster; and the two Stanwick groups included in the ranking, namely from Wheeler's sites A and F, lie adjacent in the ranking.

These data reveal a further aspect of interest. Tables 7.1 and 7.2 include data for first century groups from four assemblages from Leicester. A comparison of the four shows a pattern of inconsistency of presence. Mortaria are comparatively well represented amongst groups from St Nicholas St 1965-6, (AS) and Bath Lane 1968, (AW) but absent from the St Nicholas Circle 1969 (AZ) material, whilst also being absent from the first three phases at

Blackfriars (BE). This implies that as great a degree of variability of presence may exist between assemblages from the same site as between groups/assemblages from different sites. This is a matter of considerable importance, though in this case variation seems most likely to be a function of the rarity of these items (ie. the more common a type is, the less 'random' variation will effect results). (It may also be remarked of these Leicester assemblages that mortaria are absent from phase one groups, which are essentially pre-Flavian, at all four sites. Some mortaria from the Jewry Wall site, LEI 13 (AA), however, should be of pre-Flavian date as noted above (Section 7.2).

Quantitative evidence for assemblages of contemporary date from outside the study area seems, generally, consistent with the pattern established here. Mortaria, for instance, comprised only 1.3%, by weight, of the pottery recovered from deposits believed to be of pre-Boudiccan date excavated at 25-6 Lime St, City of London, 1983; by EVE mortaria amounted to 5% of the group total (Chadburn & Tyers 1984). Figures from early stratigraphy at Chelmsford are also consonant with the pattern identified in the study area (Going 1987, Table 10). At Kingsholm mortaria present amongst the contents of four pre-Flavian pits associated with the Roman military occupation (which produced 716 sherds of pottery weighing 18.3kg) amounted to only 0.76% of the group by weight, and 0.56% by count (Hurst 1985, Table 7, *cf.* "Phase 3.1").

To summarize, it is apparent from the quantitative evidence that mortaria are generally a minor constituent of groups (*cf.* Section 7.1.1); this is graphically illustrated by Figure 7.6. However, there is a tendency for this class of vessel to comprise slightly larger proportions of group composition at Roman military and other Romanizing sites; this reflects a tendency noted in the evidence of the specific distributions (*cf.* Sections 7.2 to 7.6).

Form a methodological point of view it is noteworthy that when the quantities of mortaria present are expressed as 'percentage component of group figures' measurement by weight produces, invariably, a higher figure than does count. Figure 7.6 demonstrates this. The pattern is clearly a function of the fact that being thick walled mortaria tend to break into to thick sherds and thus, generally result in a comparatively high average sherd weight. It is of interest that, as might be predicted, Figure 6.24, which plots the same type of data in the case of amphorae displays a broadly similar pattern. The fact that in a number of instances in the case of amphorae, percentages by count exceed or approach percentages by weight is explained by the fact that some amphorae forms and/or fabrics can actually give rise to small, comparatively light sherds; the more consistent plot in the case of mortaria (Figure 7.6) indicates that this is highly unusual with this class of bowls.

7.9.2 The Composition of Mortaria Assemblages from Certain Sites.

A number of sites within the region have produced sufficient amounts of typologically first century mortaria and/or mortaria from stratified first century deposits to enable an assessment of the sources of supply. However, relevant quantitative information has rarely been published. A case in point is the assemblage from the area of the so-called civilian settlement at Doncaster, SYK 1; the 'site' report (Buckland & Magilton 1986) includes a lengthy report by Kay Hartley on the comparatively large sample of mortaria recovered, but, alas, no proper quantitative information (Note 7.7). (By contrast Darling's quantification of the mortaria assemblage from Inchtuthil is exemplary (1985, 331, Table XXIII)). Unfortunately the assemblages examined and quantified by the present author generally contained only modest amounts of the vessel type and hence are not useful for this analysis. The number of sites/assemblages for which this compositional analysis is possible is consequently severely restricted and this in turn inhibits the scope for comparison.

From within the study area there are only three assemblages which have produced something approaching a reasonable number of sherds of mortaria to make analysis worthwhile and for which quantitative information is available. These are the assemblage from 9 Blake St York, NYK 28 (Q), phases 1 and 2, and the typologically first century mortaria from Old Winteringham, SHU 7 (A) and East Bight 1964-6/Temperance Place 1969, on the line of the Legionary defenses at Lincoln, LIN 17 (K) and (L), the material from these two sites being combined in publication (Darling 1984, 71). The contemporary group from Inchtuthil can be used for comparative purposes. Significantly three of these four assemblages come from Legionary fortresses whilst the remaining sample is from Old Winteringham which may have been, the site of a Roman military installation of the conquest period. Clearly any patterning evidenced amongst these groups might not relate to that at other types of site.

The quantities present are meagre and consequently no firm conclusions can be drawn; the York sample comprises just 17 sherds (1663g) and the Old Winteringham sample is an estimated 15 vessels. However, two identifiable aspects of the samples, namely the range of sources represented and the fact that there is some consistency between constituent proportions, are of interest and suggest that despite the problem of sample size the evidence of this material may be a pointer to more general patterns.

The York sample, spanning the period c. A.D. 70-100, includes vessels of Hartley's (1977) Groups I and II from Gaul or south-eastern England, as well as Verulamium region and local (Eboracum ware) products (Monaghan forthcoming). The Old Winteringham sample, dating to c. A.D. 45-100 comprises products of Gaul and/or the south-east of England, including examples of Groups I and II, a vessel from the Verulamium region, as well as two regional products, that is from York and Lincoln (Hartley, K.F. 1976, 116). The same pattern of a range of sources of supply is evident amongst the first century deposits at Lincoln: East Bight 1964-6/Temperance Place 1969 and East Bight 1980-1 yielded mortaria from similar sources: Gaul and/or south-east England, the Verulamium region, as well as locally manufactured items (Darling 1984, 71; pers. exam.). At Inchtuthil the mortaria derive from the Verulamium region, from Gaul and the Rhineland, and a local source(s). All four assemblages display a diversity of sources with the main industries of the period consistently present; however, present too are local products.

Darling states of the first century mortaria assemblage from East Bight 1964-6/Temperance Place that 67% was locally made (1984, 71; it is not recorded which type of measure was employed). This percentage accords well with the sample from Inchtuthil where vessels produced from a seemingly local clay source (Darling 1985, 323) account for 59.22% of the mortaria present when weight is the measure, 62.12% by sherd count (1985, 331, Table 23). At 9 Blake St York, local mortaria form 24.83% of the component by weight, 23.53% by count. Finally it may be noted that Verulamium region mortaria constitute a consistently small proportion of these groups. Amongst the York sample they account for 13.10% by weight and 11.76% by count (Table 7.4); at Inchtuthil the equivalent figures are 13.39% and 9.09% (Table 7.4); in addition only one of the fifteen first century mortaria from

Old Winteringham recorded by Hartley was from the Verulamium region (1976, 116). It is to the detriment of Romano-British studies generally that so little quantitative information on the sources of mortaria at sites has been published.

7.10 CONCLUDING COMMENTS.

Despite limitations of data availability for the distribution of mortaria in the east of England during the first century A.D. a number of important observations can be advanced on the basis of the evidence to hand. Mortaria are widely spread across the region though they normally form less than 7% of assemblages by weight, and less than 5% by count. Amongst some assemblages they are absent or form tiny percentages. Evaluating this pattern though it is important to recall that these samples represent 'death assemblages' which should be differentiated from 'life assemblages' (*cf.* Orton 1989). This distinction is important for it cannot be assumed that archaeologically retrieved pottery assemblages are representative at a 1:1 level of the proportions of pottery in use at a given time or time-span. This is particularly pertinent with regard to mortaria which are both robust and which may have been subject to an exceptional degree of curation and repair. Mortaria might be expected to have had a longer 'life-span' than other classes of vessel. Hence their frequency amongst archaeological assemblages cannot necessarily be taken as a direct index of their relative importance in the ceramic repertoire.

The data show that in the area examined here mortaria occur with greater relative frequency at fort sites and sites otherwise associated with a comparatively high degree of early Romanization. Nonetheless they are not an uncommon find at minor settlement sites and farmsteads, though they appear to arrive at these sites during the later part of the century. This tallies with Pollard's observation of the distribution of mortaria in Kent that they: "were generally adopted by the turn of the century" (1988a, 68) and apparently: "adopted at all levels of society (as represented by settlement hierarchy) by the end of Trajan's reign" (1988a, 66). Booth's study of Warwickshire assemblages (1991) produced consistent conclusions.

In the broad trends outlined here the incidence of mortaria parallels that of SGSW in that both classes are spatially widespread, form small percentages of groups, are distributed widely in social terms and appear at 'native' sites around the same time. That there is continuity between the distributions of two classes of pottery which are manifestly Roman demonstrates a broad receptivity to Roman ceramic forms.

CHAPTER EIGHT

'BELGIC' POTTERY, TRANSITIONAL POTTERY, IMITATIONS AND ROMANIZATION: THE TRANSFORMATION AND TRANSLATION OF CERAMICS IN THE FIRST CENTURY A. D.

"The group of vessels identified in the catalogue as 'transitional' has not been included in the previous discussion because it is impossible to determine whether it is 'native' Iron Age or Roman, i.e. specifically pre- or post-Conquest" (Rollo 1988, 118).

"A simple division into 'Belgic' and 'Romano-British' wares cannot be imposed on the pottery of the first century A.D. in Leicester" (Pollard forthcoming).

8.1 INTRODUCTION.

In the course of this chapter aspects of three ceramic categories are examined. These categories are 'Belgic' pottery, Transitional pottery and imitations of imported fine ware forms; their definition as categories is outlined in 8.2. Although these categories are distinct they comprise elements in a sequence of change apparent in the pottery of the first century A.D. within the study area. Whilst they should not be understood as characterizing self-contained steps in a linear development they do follow a chronological order, albeit with considerable overlap. There is typological and technological linkage too. The categories constitute responses to broad developments in the nature of ceramic production, function and, indeed, in the social role of pottery. They may be regarded as indices of cultural change through the first century A.D. (Note 8.1).

The examination of these categories is placed at this stage in the current thesis for several related reasons. Though the 'Belgic' pottery phase largely precedes the arrival of the types reviewed in Chapters 5 to 7 both the Transitional wares and imitations dealt with here are broadly contemporary with the classes examined in those chapters. Indigenous pottery from the study area, which may be categorized as Transitional, makes its debut in the early first century A.D. and hence pre-dates the advent of Roman imports in quantity and the invasion of A.D. 43. However, evidently Transitional pottery endures till the end of the century even at comparatively Romanized centres such as Leicester (Pollard forthcoming) and

Lincoln (Darling 1988a, 33-6). Similarly imitations of imports from the continent span the century. Hence from a chronological perspective the placement of this examination at this point is appropriate. Moreover, since these categories represent changing expressions which are to some degree sequential to examine them under one heading contextualizes them and enables their assessment as parts of a broad process.

One of the clearest patterns is that whilst both 'Belgic' and Transitional pottery is represented amongst almost every assemblage dating to the middle two quarters of the first century A.D. in the southern half of the study area, examples are rare north of the Trent and Humber, particularly so beyond East Yorkshire. This reflects the entrenched differences of ceramic tradition and material culture between these areas which had endured through the Iron Age (*cf.* Chapter 4). This theme is discussed further below (*cf.* 8.4.1 (iii) & 8.4.2 (ii)).

Whilst these three categories are well attested in the study area none has been the subject of specific research, whether concerning typology, distribution or synthesis. Comprehension of this material is hindered by the lack of published excavation reports upon assemblages of the region. This problem is particularly acute in the East Midlands (*cf.* Darling 1988a, 32) from where a number of important groups have been recovered (eg. Burrough Hill, LEI 4 (C), Rampton, NOTT 28 (A), Colsterworth, LIN 7 (A) and Saltersford, LIN 29 (A), to say nothing of some larger samples) but which have yet to be published.

The three ceramic classes examined in this chapter represent marked changes in material culture. In this chapter their incidence is examined for the light this may shed upon culture and change. Much of the attention of this chapter will be upon aspects of typology, hence there is some contrast here with the forgoing chapters which have focused upon distribution analysis and variations between the composition of groups.

8.2 THE CATEGORIES DEFINED.

8.2.1 'Belgic' Pottery.

'Belgic' pottery is the distinctive generally wheel-thrown and comparatively elaborate pottery characteristic of the La Tène III of the south and east of England, in particular Kent, Essex and Hertfordshire. It typically displays well executed formal features such as cordons, corrugations, constrictions, carinations and other sharp angles, high levels of burnishing, combing, rouletting, and/or other decoration; footrings or pedestalled bases also commonly occur. Profiles may be angular and/or curvaceous. The production of these features was often facilitated by execution on the wheel which was a contemporaneous introduction (*cf.* 1.6.1). Two late Iron Age cemeteries at Aylesford and Swarling, in Kent (Evans 1890; Bushe-Fox 1925) have traditionally been regarded as the type-sites of this pottery; Aylesford-Swarling pottery is synonymous with 'Belgic' pottery (*cf.* Cunliffe 1991, 130-3).

The term 'Belgic' to describe this class of pottery is an unfortunate consequence of the historiography of Iron Age studies in Britain. This pottery was erroneously identified as belonging to Belgic peoples who were thought to have invaded and settled in southern Britain during the later Iron Age; consequently it was labelled 'Belgic'. Whilst the thesis of large scale Belgic invasions is now thought to lack credulity the label has remained adhered to this style of pottery (*cf.* Cunliffe 1991, 4-9; Elsdon & May 1987, 67-8; Pollard 1988a, 29-30; Thompson 1982, 1-3). It remains in usage today by tacit understanding, ostensibly as a convenient label to identify this specific style of pottery (eg. Marney 1989) in so far as the term is associated with the style. Pollard, for instance, follows Thompson (1982, 5) in stating that the term is employed: "in the sense of a distinctive class of pottery without political, economic or historical implications" (1988a, 30). However, its retention is unsatisfactory since not only does its employment in pottery texts continually require explanations to be rehearsed but, moreover, it remains a highly meaning-charged term which is inaccurate.

Cunliffe, not uniquely, suggests that: "the word Belgic is best avoided" (1991, 130). The current author agrees in principal with this suggestion, however, for the area under review here there is no commonly accepted alternative label. Aylesford-Swarling, for instance, is inappropriate for geographic and other reasons, whilst "Late La Tène" is valid but rather nebulous. Additionally pottery from the study area displaying attributes associated with this class has been and continues to be referred to as 'Belgic' by those who report it (eg. Pickering 1935, 54; *cf.* Baker 1960, 33; Brown & Simpson 1968, 61; Ponsford 1968, 41; Wilson, C. M. 1972, 6-7; Clamp 1985, 43; Evans, J. 1988a; Darling 1988a, 35; Didsbury 1989, 25; Knight 1991, 130; Liddle 1991; Pollard forthcoming; also TLAHS Vol. XLVII, 1971-2, 73; TLAHS Vol. LX, 1986, 93).

'Belgic' pottery typically occurs in fabrics tempered with grog either exclusively or in association with other tempers (Thompson 1982). This phenomenon is evident in material from beyond the south-eastern core of the 'Belgic' pottery distribution, for instance, from Walton, Milton Keynes (Marney 1989, 7), Leicester (Pollard forthcoming) and Frisby, LEI 8. Thompson contends that grog was 'preferred' as against other possible tempers for 'Belgic' forms (1982, 20). However, as her study makes clear 'Belgic' forms not infrequently occur in other than grog tempered fabrics (1982, Map 2); indeed in the case of the East Midlands this association is far less marked. Fully detailed study of this material may well reveal sub-regional variations across the Midlands. Of potential significance is Marney's observation of pottery from Cotton Valley, Milton Keynes, that, in the case of this group, fabric type appears to relate to form and perhaps function: "with the shell-gritted wares being exclusively used for cooking-pots and those in 'Belgic' grogged ware being used for the table and for storage" (1989, 9; *cf.* 1.6.1 (iv)). A similar division exists in the composition of a group of pottery dated to the first half of the first century A.D. from Piddington, Northants; the group is reported to comprise two fabric types, namely calcite gritted/shell tempered: " used mainly for cooking pots and other utilitarian purposes" and: "grogged ware ... mainly reserved for fine wares such as cordoned urns, carinated beakers and platters" (Friendship-Taylor & Friendship-Taylor 1989, 9). This patterning is not inconsistent with what Thompson (1982) states though it is an area to which she pays little attention. The existence of a form/fabric division in relation to 'Belgic' pottery is considered below (8.4.1 (i)).

The correspondence of the formal features of British 'Belgic' pottery with those present on vessels of the mid-later first century B.C. - early-mid first century A.D. in northern Gaul points to a continental influence. It would be unwise though to presume that the Continent was *the* source of influence. Definitive statements regarding the origins of these developments in the pottery of southern Britain await further typological and chronological researches (*cf.* Thompson 1982, 26; Pollard 1988a, 30). In its core area of Kent, Essex and

Hertfordshire 'Belgic' pottery was apparently established at least in parts in, if not by, the final quarter of the first century B.C. Its debut in the East Midlands must have post-dated this.

There are some unresolved problems regarding the definition of pottery as 'Belgic'. This arises from a lack of clarity concerning which attribute(s) are diagnostic of the class. The central criteria for ascription must be form. The formal attributes listed above are typical characteristics, however, in practice difficulties of categorization emerge with vessels that display only one or two such attributes and where these have not been executed emphatically. Difficulties may lie in store if the broad-brush approach followed by Thompson is adhered to since this appears to result in the inclusion of many types lacking the formal attributes listed above (eg. the majority of items in her C1 to C5 range) which are those conventionally associated with the category (eg. Cunliffe 1991, 133). Thompson's agenda was to produce a typology of forms of the LPRIA in the south-east of England; the problem that follows from this is that her corpus includes forms which would not normally be defined as 'Belgic'. Similarly there is a lack of diagnostic 'tightness' regarding fabric. Thompson states that: "Fabric is at least as important as form" (1982, 4) and that grog tempering is a key characteristic (1982, 4) of this pottery. Grog tempering must be a defining attribute in her understanding since it is stated to be the determinant of her study area (1982, 27) and has primacy in her title. Moreover, for her the term 'Belgic' pottery: "is used to describe grog-tempered pottery of the forms included in the type series and found in a circumscribed area of south-east England" (1982, 5). Yet as her work demonstrates there is a mismatch between the distribution of late Iron Age grog tempered pottery and pottery with 'Belgic' formal attributes; whilst there is overlap the two are far from synonymous in the south-east of England and less so further north in the East Midlands.

To avoid similar confusions the definition of 'Belgic' pottery followed here is dependent on the occurrence of the formal features noted above. Fabric is regarded as important, but secondary. This is consistent with the approach of Jackson, Pollard, Rollo and others, who report the pottery of the East Midlands.

8.2.2 Transitional Pottery.

Pottery types considered in the preceding chapters are classes which are uncontroversially distinguished and understood as being of Iron Age tradition (Chapter 4) or essentially Roman (Chapters 5-7). These classes are typologically discrete. However, this is not so in the case of a range of pottery of the first century A.D. which cannot readily be classified as belonging to either of these categories. This material has been variously described: as being of "romanizing character" (eg. Hawkes & Hull 1947, 256-7), or as 'Transitional' (eg. Rollo 1988, 118; Perrin 1988, 122; Pollard forthcoming). Further, the categorization of pottery as either 'Belgic' or Transitional may not be possible since in form and fabric the former grades into the latter.

The term Transitional distinguishes vessels the characteristics of which appear to lie between Iron Age/late La Tène tradition expressions and Roman forms and fabrics. The definition of pottery as Transitional arises from the nature of its attributes, namely fabric, form, finishing, decoration, method of manufacture, and so forth, and whether these, in association, are such that items in question cannot be classified as belonging to either the Iron Age or Roman categories because their characteristics are a combination of, or lie between, those of Iron Age and Roman pottery as conventionally defined (eg. Perrin 1988, 122). In their publication of the Camulodunum assemblage, for instance, Hawkes and Hull frequently describe fabrics as 'Romanizing' (eg. the Form 260b jar and their beaker Form 108 which is said to be: "made in increasingly romanizing native brown ware" (1947, 237)). What is implied in these cases is that vessels previously produced in relatively soft, perhaps grog tempered and unoxidized dark fabrics, which result from a comparatively low firing temperature (ie. attributes frequently associated with late Iron Age fabrics) are replaced by wares which are generally harder, more predominantly quartz tempered, grey, or oxidized and evidently fired to a higher temperature (these being attributes typically associated with the fabrics of Roman vessels; consider Todd 1970a, 22). Likewise some Camulodunum forms are described as Romanized versions of native/indigenous forms, as with No.205 (Hawkes & Hull 1947, 258). Many assemblages of the period under study here, particularly from the East

Midlands, contain pottery which may be designated as Transitional (eg. Leicester (Pollard forthcoming), Saltersford, LIN 29, and Flawford, NOTT 15).

From the perspective of typology and chronology Transitional pottery should not be understood as 'intermediate' between Iron Age and Roman pottery. Whilst it relates to both it appears to have been a relatively autonomous development and in some manifestations demonstrates an independent dynamic. It overlaps with the currency of pottery types which are normally classified as Iron Age (including 'Belgic' pottery) and Roman. Changes in ware and form which produced features that are seen as attributes of Transitional pottery were under-way by the LPRIA in the south of the study area in common with developments elsewhere in south-east England (*cf.* Cunliffe 1991, 79-93; Thompson 1982); they did not begin or cease with the Claudian invasion. As Hawkes and Hull note: "this process ... was merely hastened, not engendered, by the Roman conquest" (1947, 257).

8.2.3 Imitations of Roman Fine Ware Types.

This category comprises vessels apparently produced and consumed at the local and regional level which, seemingly, were endeavours to copy imported Roman types. In this chapter only one category of vessels identifiable as imitations is examined in detail, namely imitations of beakers, especially those analogous to the Cam. 113 (Note 8.2).

In many cases imitations carefully reproduce the formal and decorative elements of originals though often, as Hawkes and Hull (1947, 221) demonstrate in the case of Gallo-Belgic platters, copies may be very loose or stylized interpretations. Imitations therefore display great variation. In the case of copies of samian ware formal features, which are rarely mixed in the output of this highly standardized industry, are seen combined in imitations. Decorated samian forms are apparently disproportionately represented amongst imitations (eg. Marsh 1978); this might be interpreted as further indication that decorated samian vessels were more prized than were plain forms (*cf.* 5.2.1). Although it is Roman forms which were copied imitation vessels occur in a wide range of fabrics, from characteristically Iron Age tradition wares to hard fired, quartzy 'Roman' fabrics. Hence in the process of pottery Romanization these items form an important body of material. The exception appears to be copies of samian forms which occur almost exclusively in Romanized fabrics.

Vessels imitating early samian and Gallo-Belgic forms do not appear in the study region much before c. A.D. 40, with the possible exception of sites such as Leicester, LEI 13, Dragonby, SHU 1, and Old Sleaford, LIN 26. Impressionistic evidence and the limited amount of stratigraphic evidence available indicate that beakers were the earliest forms copied, with imitations of Gallo-Belgic platters and samian appearing in the Claudian period, becoming more frequent in the Neronian and Flavian periods. The latter evidently continued later than the beaker copies being represented amongst late first and early second century groups.

8.3 TRANSITIONAL POTTERY & TYPOLOGY: THEORETICAL ISSUES & PRACTICE.

Those dealing with the pottery of this period have often struggled to establish the date and cultural identity of material. It has evidently been regarded an imperative to identify this material as either Iron Age or Roman. In reporting pottery from Longthorpe, for instance, Wild records a: "problem [which] concerns the finer wheel-turned vessels whose date, whether Roman or pre-Conquest, cannot yet be confidently decided ... Pryor is inclined to accept as of the Iron Age wheel-made vessels which I feel are possibly Roman at Longthorpe" (1987, 114). Whilst it might seem desirable that this pottery be divisible into a dichotomy the existence of an amount of material which defies ascription to either class should not be conceived of as a 'failing' of the typological approach, nor, indeed, negatively. It does though indicate the limitations of the typological method. The existence of Transitional pottery may be seen as a challenge to typological epistemology because through typology archaeologists have come to associate particular forms with particular traditions or cultures, and this is now, of course, a vital tenet of archaeological practice; we define form as: "culturally laden" (eg. Okun 1989, 47). Yet if this association cannot be made unequivocally then the *raison d'être* of the typological approach is in doubt.

That a requirement to neatly pigeon-hole material, pervades our thought is indicative of the often far from flexible conceptualizations behind approaches to the period. In particular it seems likely that in the study of the social and economic development of Britain in the first century A.D. too much significance has been ascribed to the events of A.D. 43. In consequence that date has been reified, influencing our approach to the material of the period. It is pertinent to observe the existence of an interesting juxtaposition here between David Clarke's recognition that: "the nature of the archaeological record has imposed itself upon archaeological concepts" (1973, 14) and this apparent imperative towards categorization as either Iron Age or Roman which arises from our conceptualizations of the period. The latter suggests that Clarke's maxim may in some cases be reversed.

Whilst Transitional pottery might defy tight cultural and chronological attributions its existence may be viewed positively as a point of access from which to examine the changing patterns of production and consumption of ceramics during the period. It is an aim of this chapter to elucidate some aspects of these changes.

A subsidiary point to note is that whilst from our perspective in the 1990s the existence of Transitional pottery might be perceived as a coherent developmental stage within a continuum such a conceptualization is questionable. The problem lies in the fact that such reasoning may be too heavily informed by the fact that the results of the working out of the changes in ceramics are known. In particular, there may be a tendency to 'read back' from this known outcome and to see the whole process of pottery change as one of linear continuity (*cf.* Hill 1989, 18-9, where it is argued that this has occurred with our view of Iron Age society generally). However, neither the changes in the nature of the pottery nor their outcome was determined; the archaeological evidence indicates that they arose out of local and piecemeal expressions in the context of choice. That a substantial proportion of the pottery demonstrates similar changed characteristics is explained not by the play of structural phenomena *per se* but by the existence of a relatively high degree of social integration, shared technical and cultural information and common definitions.

8.4 CHANGES IN FORM.

8.4.1 'Belgic' Forms in the Study Area.

(i) Introduction.

Pottery which has been referred to as 'Belgic' by a range of reporters has been widely recovered in the East Midlands (*cf.* 8.2.1). Reference by the current author to published and archive drawings, and to the sherds, suggests that reporters have made consistent and reliable identifications in that this pottery displays characteristics associated with 'Belgic' pottery. The qualification is that, there exists no clear typological division between 'Belgic' and Transitional pottery (*cf.* 8.2.2; eg. two wide-mouthed jars from Whitwell, LEI 26 (A), published by Todd (1981b, 28-9, Fig.14 Nos 15 & 38) cannot be easily categorized). Other vessels may more confidently be separated and defined as 'Belgic' or Transitional.

In the East Midlands vessels displaying 'Belgic' characteristics are predominantly bowls and jars. The LPRIA pottery at Dragonby includes a wide range of vessel forms and sub-forms with 'Belgic' features such as beakers and pedestalled vessels. A similar contemporary formal range occurs at Leicester and possibly Old Sleaford. However, these assemblages appear, from the current state of knowledge of the pottery of the region to be exceptional. Generally it is only bowls and jars which demonstrate cordons, constrictions and so forth, typical of 'Belgic' pottery. In the context of the groups amongst which they appear these items can be described as 'fine ware' (*cf.* Pollard forthcoming); they usually occur in finer fabrics and are more carefully finished than other contemporary items. The evidence suggests that during the first half of the first century in the East Midlands, whilst the forms of some bowls and jars were altering, being wheel-made and with elaborate features, a large proportion of the pottery remained unchanged (eg. storage and cooking jars). Hence there appears to be a division in the changes which relates to form and function. It is relevant to note that most 'Belgic' formal features would be difficult to execute without the use of a wheel and many vessels of the LPRIA even in the East Midlands were hand-built.

Reference to corpora for the south-east of Britain (eg. Thompson 1982; Birchall 1965; Hawkes & Hull 1947) shows that 'Belgic' formal attributes occur on a relatively wide range of vessel types from that region. Changes in pottery forms may generally have been restricted in the East Midlands to a circumscribed range of forms. It is possible to interpret this phenomenon with regard to the consumption of the pottery and to suggest that the bowls and jars were elaborated since they were the forms most frequently in the social domain. However, this does not explain the rarity of, for instance, pedestalled bases and beakers with 'Belgic' features. Systematic survey of the material needs to be undertaken to clarify the East Midlands pattern. Impressions may to some degree be a function of the archaeological visibility of the bowls and jars or assemblage size, for most of the relevant collections from the region are not large so the chances of encountering a wider range of 'Belgic' style forms is diminished.

(ii) The Distribution of 'Belgic' Forms.

Attempts to determine the distribution of vessels of 'Belgic' form are complicated by the fact that the class is not tightly defined but rather a style with imprecise boundaries. Appendix 8.1 lists sites and assemblages from which pottery described as 'Belgic' has been recovered; 17 assemblages are documented from 14 sites. To these can be added a further 11 assemblages from 10 sites (Appendix 8.2) which have yielded items classifiable as 'Belgic' on the criteria stated (8.2.1). When these sites are plotted (Figure 8.1) an emphatic pattern is revealed: vessels of this category occur only in the East Midlands and East Yorkshire. Across this area this pottery is evidently quite common and evenly spread.

A number of Nottinghamshire sites have produced small quantities of stylistically 'Belgic' pottery. These include the Trentside sites at Gamston, NOTT 16 (A), where: "occasional sherds deriving from wheel-made vessels of ... 'Belgic' type" (Knight 1991, 130) were forthcoming and Rampton, NOTT 28 (A), which yielded hand-produced 'Belgic' forms (Ponsford 1968; May 1968). The style though is generally scarce in Nottinghamshire which is explained by the fact that the county lies on the fringe of the distribution.

Six sites in North Humberside have produced pottery which may be classified as possessing 'Belgic' characteristics (*cf.* 8.4.1 (iii) & Appendices 8.1-2) and these represent the most northerly find-sites of this pottery. This appears to indicate some linkage between East Yorkshire and the rest of the east of England to the south. However, in all cases the quantities present are very small with no site, to date, producing sherds from more than half a dozen vessels (*cf.* 8.4.1 (iii)). Some degree of parallel may be drawn between this distribution and those for TN, TR and the Cam. 113 (Figures 5.25, 5.35, & 5.44) all of which are likewise relatively common in the East Midlands, occur sporadically in East Yorkshire but are rare further north and west.

The distribution appears remarkably even in terms of the type of site from which stylistically 'Belgic' pottery is documented, it being recovered from the large late Iron Age centres at Dragonby and Leicester; at Medbourne, LEI 18 and Saltersford, LIN 29, which develop into minor Roman settlements; at Winterton, SHU 11, and Brantingham, NHU 2, where Iron Age farmsteads are replaced by villas; and sites of apparently modest status in the LPRIA such as Rampton, NOTT 28, and Colsterworth, LIN 7, which (respectively) do and don't continue into the Roman period. It is clear from Elsdon and May's report (1987) that a very large amount of stylistically 'Belgic' pottery was recovered during the excavations at Dragonby, whilst in the case of Leicester Pollard (forthcoming) states: "Pottery of 'Belgic' style was found in abundance on several ... sites". Quantitative study might reveal differences in the frequency of this pottery at these various types of site.

Both of these patterns, namely that of the geography of the distribution and its 'socially even' nature are closely parallelled in the recorded incidence of typologically Iron Age pottery produced using a wheel (Appendix 8.3; Figure 8.2). As Figure 8.2 shows this material occurs regularly amongst assemblages from a variety of types of sites across the East Midlands and East Yorkshire, though it is absent from the remainder of Yorkshire (with the exception of a vessel from Stanwick, NYK 23) and further north. In addition wheel-produced, typologically late Iron Age pottery is not recorded from Derbyshire. This match is perhaps not surprising for two reasons. It is consistent with other patterns evident in the material record of the region (*cf.* Chapter 4), which may relate to political and cultural differences (*cf.* 1.3 (iii)). Second, the match is not surprising since the production of 'Belgic' formal features is associated with execution on the wheel. The frequency of stylistically 'Belgic' vessels which were hand-made though confirms that 'Belgic' vessels are not simply a subset of wheel-produced pottery of the period. Hand-produced examples are known from Rudston, NHU 19 (Rigby 1980, 91, Fig.58 No.366), Rampton (Ponsford 1968, 41), Winterton, SHU 11 (pers. exam. June 1991); the vessel from Risby, NHU 18, has a hand-made body and a wheel finished rim (pers. exam.). It may be that hand-made vessels are more common at the fringes of the distribution, but this is a matter for investigation.

(iii) Case Study: The Distribution of Bowls and Jars *cf.* Cam. Form 229.

One of the characteristics of 'Belgic' pottery is the fluid nature of the style and its relative lack of standardization. Hence whilst it is possible to discern basic form classes, subclasses and "form groups" (*cf.* Thompson 1982) specific form types do not appear to have been carefully replicated and certainly not to the degree that they were during the Roman period. In this section, however, an attempt is made to examine the incidence of one particular form group in the study area, namely the bowls and wide mouthed jars, frequently carinated, with corrugated shoulders, equating to the Cam. type 229 (Hawkes & Hull 1947, 262-3, Pls 76 & 78; Note 8.3). The sub-categories, specified A-D, cover the range of variation within the class. This group was selected for study since it is typologically relatively well defined.

In the Camulodunum report Hawkes and Hull outline the Aylesford-Swarling pedigree of the form group noting that: "on our site [it] appears in deposits of all periods ... and always in thick 'soapy' ware of pure native fabric" (1947, 262-3). The form group has pre-Camulodunum antecedents (Note 8.4) and was long lived (*cf.* Niblett 1985, 48; *cf.* Thompson 1982, 118, 127 & 133). It apparently spans the 'Belgic' ceramic phase in the south-east of England and elsewhere.

Within the research area vessels *cf.* Cam. 229 are recorded from 18 sites (Appendix 8.4). As figure 8.3 demonstrates, the distribution is markedly 'eastern' being concentrated within the area of Lincolnshire and Humberside where 16 of the find-sites occur. The concentration of the find-sites is suggestive of what Cunliffe terms 'style-zones' (1991, 60-1). The finds from North Humberside require special comment. Though examples are recorded from five sites none has produced more than a few examples and 'Belgic' style vessels are otherwise rare in the area rendering these items conspicuous. Whether they are local products or are arrivals from south of the Humber is not yet clear. Their greatest significance lies perhaps in the fact that together with other artefactual evidence (eg. Corieltauvian coinage (May 1992a)) they demonstrate a degree of cultural contact between East Yorkshire and the East Midlands which the rest of Yorkshire and Derbyshire evidently lack.

All of the find-sites are ones known to have been occupied during the LPRIA and/or to have produced pottery of Iron Age tradition. Whilst the form group is found at sites generally thought to be of high status (eg. Old Sleaford, LIN 26, and Dragonby, SHU 1) it has been recovered from sites of modest status, for instance, Tattershall Thorpe, LIN 34, Winterton, SHU 11, and Bursea House, NHU 4. Hence there do not seem to have been social restrictions on the circulation of this pottery.

In the majority of cases it is not documented in reports whether these vessels are hand or wheel-made. This may arise from the difficulty of establishing this since the standard of hand-forming was high. In terms of finishing and firing these vessels conform with the normal pattern for 'Belgic' pottery being almost invariably well burnished and unoxidized. Fabrics differ, though they remain essentially of Iron Age tradition (the transition in fabrics witnessed in the Cam. 209-217 range (*cf.* 8.4.2 (ii) is not evident). The most common temper appears to have been calcite, as exemplified by vessels from Dragonby, whilst examples from Tattershall Thorpe, LIN 34 (A), and Holme Pierrepont, NOTT 20 (D), are quartz grain tempered; two items from Fonaby have quartz and calcite (Elsdon 1981); whilst north of the Humber grog, crushed chalk and quartz are represented.

As regards the dating of the 229 form group in the region the evidence indicates a late Iron Age to mid first century date (c. A.D 1 to A.D. 60). When the form group makes its debut in the region is uncertain. Variants of the form occur fairly early in the so-called key sequence at Dragonby (Elsdon & May 1987, esp. Chart 1) but it is unclear whether these seemingly precocious items are exceptional in the region. The problem is that there is little evidence to tie late Iron Age pottery types in the region to any chronology prior to the arrival of imported pottery. More is known about the latter part of their currency. At Redcliff, NHU 17 (B), and Tattershall Thorpe, LIN 34 (A), (Chowne *et al.* 1986, 183 Fig.9 No.39) stratified examples of the form have been recovered from contexts containing Roman pottery of mid first century A.D. date. It appears that the type-life of the form group extends to the initial conquest period though not beyond.

(iv) The Date of 'Belgic' forms in the Study Area.

The dating of 'Belgic' style pottery in the region is problematic. The dating of its debut relies upon relative dating evidence. In chapter 4 (4.2.3) evidence of an overlap between the Ancaster-Breedon tradition and the debut of 'Belgic' style pottery was noted. The likelihood is that this indicates that Ancaster-Breedon ware continued to a relatively late date (ie. into the first century A.D.) rather than 'Belgic' pottery appearing particularly early. As with the 229s considered above, 'Belgic' style pottery generally can be dated by association with Gallo-Belgic and other dated imported pottery (eg. Elsdon 1989, 39-40). However, even at sites where the latter items are present from a comparatively early date, such as Silchester and Leicester, it appears that the 'Belgic' horizon actually precedes the imported wares (*cf.* Timby 1985; *cf.* Pollard forthcoming). This is also the case at Dragonby (eg. Elsdon & May 1987, esp. 44-6), Old Sleaford, LIN 26 (C), where stratified groups from 1984-5 demonstrate this phenomenon, and probably Ancaster, LIN 1 (D), (pers. exam. of stratified groups).

On the available evidence it seems that the great majority of 'Belgic' style pottery in the region dates to the first half of the first century A.D. (*cf.* 4.2.3 & Cunliffe 1991 for some radio-carbon dates). The consensus view of course is that it is largely pre-Claudian (eg. Brown & Simpson 1968, 61) and this seems a sensible conclusion. At some locations, such as Dragonby and Leicester, it may have appeared earlier than elsewhere, perhaps by the close of the first century B.C. There seems little doubt that by the time of the Claudian invasion 'Belgic' style pottery was firmly established in the East Midlands. The style developed with time; later 'Belgic' vessels tend to have less pronounced angles and less cordons, grooves and other features.

8.4.2 Transitional Forms in the Study Area.

(i) Introduction and Discussion.

As outlined above (8.2.2) a considerable amount of the first century pottery from the region under discussion appears to be transitional between Iron Age/La Tène types and Roman types. There are fine gradations of change in form and fabric and they are consequently often difficult to characterise. Pottery was Romanizing in the sense that attributes altered to resemble the normative characteristics of Roman pottery. There was nothing determined about this process nor was its outcome inevitable: developments occurred within the context of alternatives. That pottery became more Roman has implications for our understanding of LPRIA society and its receptiveness to the Roman phenomenon.

Vessels which seem neither Iron Age nor Roman have been recovered in large quantity from across the study area. Some types from Whitwell, LEI 26 (A), serve as examples (Todd 1981b, 28, Fig.14 Nos 1, 2, 6, 15, 17, 19, 23, 31, 38, 40). Two clear trends may be noted: Transitional vessels tend to be pre-Flavian (since by the mid Flavian period indigenous pottery is generally more identifiably 'Roman' (eg. Pollard forthcoming)) and they are far more numerous in the southern half of the study region consistent with the greater frequency of pottery at native/civilian sites in this area.

The transformation of forms was not simply a one-way shift towards the production of more obviously Roman forms. Iron Age derived beaker and bowl forms, for instance, came to be produced in 'Romanized' fabric. In some cases it is possible to suggest the evolution of particular forms or form groups. Hawkes and Hull endeavour to chart the lineages of their Camulodunum forms; in the case of their form 108 beaker they state that it is: "romanized out of the La Tène tradition" (1947, 237). The case study (8.4.2 (ii)) examines the typological progression of a particular form group.

In the East Midlands Transitional forms typically mirror basic types of the late Iron Age: beakers, necked bowls and carinated bowls, however, new forms appear, such as platters, dishes and various beaker forms, which though they occur in fabrics derived from indigenous traditions copy forms which have continental associations. At the coarser end of the form spectrum (eg. storage and other jars) production remained more conservative though changes did occur, as for instance, with the jars of Dragonby form 20E (Elsdon & May 1987), a fairly long-lived form. These vessels occur at numerous sites in the study area (see Gazetteer) and it seems that quartz may have displaced calcite tempering with time.

Ideally trends in forms should be monitored by quantitative analysis (*cf.* Pollard forthcoming). Okun employs a simple two category division when examining the changing formal constitution of assemblages from the upper Rhine during the Iron Age-Roman transition, noting a shift from 'tall' to 'wide' vessels with time (1989, Chart 2). However, conducting this analysis is not straight forward. A large sample of rim sherds is prerequisite but what most frustrates analysis is that with 'Belgic' and Transitional pottery even rim/shoulder sherds cannot be taken as necessarily diagnostic of form. Hawkes and Hull stress that the nature of this pottery confounds attempts to re-construct profiles or suggest: "figures of incidence"; they report that to these ends: "Mere rims, plain body fragments and bases are seldom of use, and the more distinctive cordoned shoulders are often by themselves indecisive, for many closely related form groups borrow features freely from each other, or rather display a range of kindred features in common" (1947, 257).

Two fundamental points about this process may be stressed. First, in this transformation the repertoire of basic forms widened. Secondly the phenomenon of Transitional pottery could only exist because the late Iron Age pottery of the East Midlands was typologically comparatively close to many Roman forms. It is easy to over-look this but it is brought home when it is realized that a direct Transition in pottery form from say Ancaster-Breedon ware to Roman pottery is hardly conceivable (Note 8.5). A conclusion which follows is that the ceramics of at least some regions the in LPRIA had more in common with Roman pottery than they did with earlier Iron Age expressions and that a greater degree of continuity is exhibited in the Iron Age-Roman transition than in the changes during the Iron Age. It is clear *how* this transformation of forms was possible; the necessary means, namely the technical apparatus and practical skill was already extant in the LPRIA. Why this process occurred is a matter for interpretation, though it can be seen as a consistent element within a wider process of acculturation.

(ii) Case Study: The Distribution of Bowls of the Cam. Form Range 209-217.

This range of forms (Hawkes & Hull 1947, 258-9) spans the early and middle decades of the first century A.D. The forms are comparatively well standardized and relate closely to each other as a group in terms of their formal characteristics. However, the fabrics in which this range occurs shift from being characteristically Iron Age in tradition to more 'Roman'; similarly the form range is expressive of the transition with forms incorporating La Tène/'Belgic' features of Aylesford-Swarling pedigree but with forms 209-211 more obviously La Tène derived, and forms 213-7 suggestive of Roman forms. Vessels of late first and second century A.D. date may be identified as related to this group.

The group is comprised of bowls with distinct carinations above which walls are concave with girth and other cordons. Rims tend to be simple and continue the curve of the vessel wall. Bodies below the angle of carination are usually plain, ending in a flat plain base, or occasionally, as with the form 209, a rounded base; the pedestal base of form 210 is exceptional. Small versions of forms 212-5 occur and may more appropriately be described as cups. Forms 216 and 217 have less angular carinations above which walls tend to be straight and angular with a near everted rim. The fact that these forms are relatively complicated and that they are regular in profile indicates that in most cases they must be wheel-made. Forms 209-11 evidently have a comparatively early start date, pre-dating the occupation at Camulodunum, and can be identified amongst the Swarling assemblage (*cf.* Hawkes & Hull 1947, 258-9; Niblett 1985, 48). With the exception of forms 209-210 which are probably essentially pre-conquest, the currency of the range continued well into the mid first century A.D. (*cf.* Niblett 1985, 48; Darling 1988b, 47) but no longer.

Within the study area four assemblages have produced examples of the early form 209, these being from the East Midlands sites of High Cross, Lincoln, Ancaster and Dragonby (Appendix 8.5; Figure 8.4). The latter two sites are known to have pre-conquest horizons, whilst the early status of High Cross, LEI 11, is uncertain, (see Gazetteer). Both the examples from Dragonby and High Cross have rounded bases which is likely to indicate a comparatively early date (Dragonby has produced other examples (Elsdon & May 1987, 19)). The Dragonby vessel was stratified in a deposit evidently pre-dating the arrival of Roman imports at the site and it is in a fabric tempered with grog and calcite. Todd dates the Ancaster vessel as pre-conquest (1981a, 52) and it is calcite tempered. The vessel from Lincoln comes from 181-3 High St, LIN 17 (O) which is associated with pre-Roman occupation dating approximately to the mid first century A.D. This item occurs in a fabric sparsely tempered with calcite which Darling defines: "an Iron Age fabric type" (1988a, Fig.5 No.8).

Only one certain example of the pedestalled bowl form 210 is documented from the study area, this being from Saltersford (Appendix 8.6; Figure 8.5). This form is only distinguishable from form 211 when there is evidence of a pedestal base, for otherwise it is in all respects identical to Cam. 211; hence some items classified as 211 might be from 210. Saltersford has produced a group of late Iron Age/Transitional items and it seems probable that other examples of Form 210 are present amongst the sundry pedestal sherds and 210/211 form body sherds represented.

Bowls of Cam form 211 are recorded from thirteen assemblages from the study area (Appendix 8.7; Figure 8.6) all of which lie south of the Trent and Humber. Each of these find-sites has attested LPRIA and/or Claudian occupation, with the exception of Ferriby Sluice, SHU 2, where activity is not closely dated. The incidence shows that find-sites include native/civilian centres but that the type also occurs in Claudian-Neronian military assemblages, as at East Bridgford, NOTT 10 (B) and Great Casterton, LEI 10 (B).

These vessels are more commonly unoxidized but some, such as examples from Great Casterton and Ferriby Sluice are oxidized, which is itself indicative of a comparatively late currency for the form. Many of the published items lack a description of their fabric beyond that of colour (eg. Clamp 1985, 51). Details of fabric type are available for only twelve of these bowls, a sample size from which no firm impressions may be drawn. It may be noted, however, that a range of different tempers are evident in different vessels.

Form 212 defines a bowl, or in its smaller version a cup, form again carinated but usually with a marked constriction between carination and rim, and with a thickened lip to the rim suggestive of beading (Hawkes & Hull 1947, 259). This particular form is pivotal since it includes versions which though only slightly different in formal detail can appear characteristically more Iron Age than Roman, as with the 212a (1947, 259, Pl. 75; Hawkes & Hull note an example of the 212a in "Romanized ware" from the area of the fortress and *Colonia* at Colchester), or vice versa as in the 212c. Within the study area examples of the form are recorded from seven assemblages (Appendix 8.8; Figure 8.7). Five find-sites lie within the East Midlands, two in North Humberside. The presence of the form in this latter area may relate to the chronology of the form. However, this geography of distribution mirrors that of the Cam. 229 (*cf.* 8.4.1 (iii)). All seven finds could relate to native/civilian occupation (though in three instances this is uncertain; see Note 8.6).

The differing fabrics in which these vessels from the study area occur seem consistent with their form typology and provenances. The vessel from Denton, LIN 8 (A), for instance, which is approximately Cam. 212a is apparently tempered with calcite which seems appropriate. The Frisby vessel, LEI 8 (A), is also 212a but is tempered with quartz and (?) grog. Conversely the vessel from Thorpe, NOTT 32 (F), which is 212c, is quartz tempered, whilst the bowl from Brough, NHU 3 (A), which may be comparatively late is evidently in a Romanized fabric, described as: "hard, pale grey" (Corder 1934, 15). The vessels from Dragonby and Garton display mixed tempering. Calcite is present in the fabrics of the items from the latter two sites but they too may be said to be Romanizing.

Only one example of Cam. form 213 is known from the study area, this item came from the so-called 'Claudian well' at East Bridgford, NOTT 10 (A) (Appendix 8.9; Figure 8.8).

Five assemblages from three sites have yielded examples of the bowl Cam. 214 (Appendix 8.10; Figure 8.9). As with Cam. 212 the style of the form seems transitional. Again the find-sites are restricted to the East Midlands, these being Leicester, Ancaster and Dragonby. Only one example each is recorded from the latter two sites, both vessels being calcite tempered and both coming from mid first century layers (pers. exam. January 1989; Elsdon & May 1987, Fig.18 No.1579 respectively). One of the vessels from Leicester, LEI 13 (BE), comes from the pre-Conquest phase 1 at that site and has mixed tempering; another, from (AS), comes from a pre-Flavian deposit and is quartz tempered. The bowl from (AZ) displays "mixed" tempering. A bowl rim from the Jewry Wall site, LEI 13 (AA), could also be of this form (Kenyon 1948, 86, Fig.21 No.3).

Forms 215 and 216 also occur in the study area in small quantity (Appendices 8.11 & 8.12; Figures 8.10 & 8.11). Their distribution is again an East Midlands one. Hawkes and Hull record that at Camulodunum their 216 occurs in: "native ware, but more are romanizing, and two grey Roman" (1947, 259).

Appendix 8.13 lists the incidence of forms approximating to the Cam. range 209-217 which cannot be assigned to a specific category; in most cases this is because the forms of the vessels in question traverse these categories. Items from twelve assemblages are listed. Again the distribution shows a distinct East Midlands bias with two find-sites in East Yorkshire, namely Barmston and Redcliff, both of which, perhaps significantly, lie on its coastal margins. An examination of the find-provenances reveals that by far the majority come from native/civilian contexts and, indeed, none has necessarily to be related to the presence of the Roman army.

The incidence for the whole range, 209-217, is summarized in Appendix 8.14 (Figure 8.13). This emphasizes the clear East Midland concentration of find-sites within the study area, many of which have yielded multiple finds, with the distribution extending to East Yorkshire. The overall distribution can be compared with that for the Cam. 229 (*cf.* 8.4.1 (iii); Figure 8.3); in both cases the incidence in East Yorkshire seems 'marginal'. Parallel also exists between Figure 8.13 and the distribution of the so-called decorated jar continuum of the East Midlands plotted by Cunliffe (1991, Fig.4.10) which he dates to c. 100 B.C. It may be noted that vessels of the form group 209-217 are virtually absent from assemblages from west of the region, though to the south, in Northamptonshire, Cambridgeshire and Buckinghamshire they are fairly common amongst groups of the period (eg. Friendship-Taylor & Friendship-Taylor 1989, 9, Fig.5 No.6; Jackson & Dix 1988, 89, Fig.39 No.145; Marney 1989, 9, Fig.5 No.6).

The overall incidence also lays plain the fact that these types occur mainly amongst native/civilian assemblages, or, as in the cases of the East Bridgford, NOTT 10 (A) and (B), and Lincoln, LIN 17 (W), are from groups which although associated with Roman military occupation contain a large proportion of indigenous Iron Age pottery (*cf.* Oswald F. 1923, 124; Darling 1988b). It seems valid to conclude that these types were essentially produced by and for the native population. This being the case it is all the more significant that in terms of both form and fabric this range appears to Romanize. Fabrics become harder and there is a shift away from calcite and grog tempering to the use of quartz grains, consistent with wider changes in fabric composition. Similarly the later forms of the group are less stylistically La Tène. The changes clearly span the conquest period as the provenance of finds from the region verifies. That examples of the series are rare (? residual) after the Neronian period is telling. After this date they are apparently replaced by more unequivocally Roman bowls. Several bowl types produced in the East Midlands or its vicinity during the early Roman period may be successors to the group. One such case is a vessel type probably produced in the Kiln 3 at Dragonby, dated as Flavian-Trajanic (Rigby & Stead 1976, 136 Fig.64 No.1). A group of bowls from Elmswell, NHU 8 (A), identified by Corder as: "derived from the mid 1st century Belgic biconical bowls" (1940, 41, Fig.9 Nos 6-15) appear to be later expressions of the tradition and date, on typological grounds, from the late first century till well into the Roman period. Also of mid Roman date are the vessels of Form E from the Antonine kiln at Roxby (Rigby & Stead 1976, 139-40, Fig.66 Nos 29-32) which too may be related. Cordoned and carinated bowls, which were recovered amongst groups dated as early to mid second century, from excavations in Normangate field, Castor, in 1962-3 display a similarity to the range, particularly to Cam. 212 (Perrin & Webster 1990, 47, Fig.7 Nos 87 & 88, Fig.10 No.146). These items occur in Lower Nene Valley Grey Ware.

(iii) Summary.

The changes in the ceramics of the period which are defined here as 'transitional' are subtle and not easily studied; they cannot be readily quantified. One approach is to examine trends in fabric composition (*cf.* 8.5). Transitional pottery has been considered problematic *vis-à-vis* dating. However, there is only a problem in this respect if the material is approached with the imperative of determining what is Iron Age and what is Roman, since the material defies such division. If a different perspective is adopted, for instance a moyenne durée view (*cf.* Bintliff 1991b, 7) and one focusing upon the wider process of Iron Age-Roman transition Transitional pottery ceases to be a problem.

8.5 CHANGES IN FABRIC.

(i) Introduction.

Changes took place in the nature of pottery fabrics during the period under study, principally in the south of the region. As with form the changes were not a straight forward shift of a 'from-to' nature. Rather there were variations of change and continuity, related, not least, to form, and consequently, what may be monitored are general chronological trends. These changes took place within, and were associated with, a wider context of ceramic transformation (*cf.* 1.6).

(ii) Qualitative Survey.

During the first century A.D. the composition of potting fabrics in the south and east of England was altering. As noted in 8.2.2 Hawkes and Hull identified this process at Camulodunum and recognized it as pre-dating the Claudian invasion (see also, Pollard

1988a, 56). Similar changes are observable in pottery from the study area. In the southern part of the region a movement occurred away from tempering with calcite, grog and organic matter, corresponding with a rise in sand or quartz grain tempering. All sherds from Iron Age tradition vessels at Whitwell, LEI 26 (A), for instance, apparently occur only in calcite and grog tempered fabrics (Todd 1981b, 23) but this monopoly is broken by the early Roman period at Whitwell as the group from the early Roman enclosure ditch demonstrates (de Bethune 1981, 26-8). However, surprisingly little data concerned with the fabrics of this period in the region, qualitative or quantitative, has been published. Darling's analysis of the pottery from 181-3 High St, Lincoln (1988a) is an exception (though it does not present data useful to this discussion). In this section the evidence from several sites in the area is considered. Prior to this some qualifications regarding the suggested general trend are sounded.

Tempering with sand/quartz was not an introduction of the LPRIA; it is well documented in earlier pottery from the region. A coil built vessel from Oakham, LEI 22 (A), for instance, believed to be of middle Iron Age date, occurs in a "sandy quartz" fabric (Pollard 1990b). The presence of quartz grain tempering in itself is not an index of date, its relative frequency amongst groups, however, may be. Second, although calcite, grog and other inclusions decline in popularity overall, specific traditional tempers remained in use for particular vessel types. In Leicestershire, for example, grog contained to be used during the Roman period for tempering large storage jars (Note 8.7). At Leicester itself a range of jar forms continued to be produced with calcite tempering till the mid second century (Pollard forthcoming). Similarly at Lincoln calcite remained in use as a temper for 'cooking pots' (Darling 1988a, 36). Fabric composition seems to have varied with form (*cf.* 8.2.1) and there was greater continuity in the case of the coarser wares than with the finer and table items. There appear to be cross-cutting variations too arising from regional and sub-regional traditions.

The transformation often took the form not of a straight forward shift but passed through a stage of mixing tempers. Sherds from two typologically Transitional wheel-thrown jars from Fonaby, for instance, have: "profuse sand and fine crushed calcite filler" (Elsdon 1981, 102, Fig.32 Nos 5 & 6). Platter forms imitating Gallo-Belgic prototypes, from Dragonby, SHU 1 (C), and Old Winteringham, SHU 7 (A) also display combination (pers. exam.), as does typologically late Iron Age and Transitional pottery at many other sites such as Dunston's Clump, NOTT 1, and Tattershall Thorpe, LIN 34, where vessels are found tempered with both calcite and quartz or grog and quartz.

(iii) The Quantitative Evidence.

Groups from Ancaster, LIN 1 (D), quantified by the present author demonstrate the trend away from calcite to quartz tempering and contribute something towards the understanding of the chronology of the process. Excavations in the 1960s encountered two parallel ditches interpreted as the defenses of a conquest period fort (see Gazetteer entry for details and references; also Chapter 9). The ditches cut a number of pits and gullies containing exclusively late Iron Age and Transitional pottery. Attributed to the same horizon were a number of other features not cut by the ditches but containing like finds (see Note 8.8) and interpreted by the excavators as being of late Iron Age/mid first century A.D date. Amongst the pottery from features cut by the ditches calcite tempered wares, both coarse and fine, dominate as Tables 8.1 and 8.2 demonstrate. Of the pottery from AL, a pit, calcite tempered ware comprises 96.56% of the group by weight and in the case of AP, another pit, the figure is 88.63%; (the percentages by count and RE are similar). From the gullies AI and AG, which were not cut by the ditches, 97.80% (by weight) of the pottery was calcite packed. Of particular interest is the fact that the earliest fills of the fort ditches also yielded only typologically Iron Age and Transitional pottery (*cf.* Chapter 9). Although the overall quantities of pottery recovered are small calcite tempering continues to predominate accounting for 85.63% of the pottery (by weight) from the earliest fills of the southern of the two fort ditches (SFD LF in Tables 8.1 & 8.2). It is only in the subsequent middle and later fills that significant changes occur. The sherdage from the middle filling of the south ditch (Claudian-Neronian) produced only a 75.31% total for calcite tempered fabrics by weight. In the upper filling, later in date, but probably still Claudian-Neronian, this had declined to 44.01%. The percentages by sherd count mirror those by weight (*cf.* Table 8.2). This pattern suggests that at Ancaster at least the decline in calcite tempering occurs after the conquest and is not sudden but takes place over several decades. There is perhaps some consistency here with the pattern observed in the chronology of samian distribution in the region (*cf.* 5.2), which seems to have been comparatively sparse till the late Neronian and Flavian periods (*cf.* Chapter 9).

Further relevant information can be extracted from this Ancaster data. Tables 8.3 and 8.4 record the incidence of typologically late Iron Age and Transitional pottery tempered with quartz grains from these same contexts. The figures show that pottery of this type does occur in the pre-fort deposits, although it only registers in those cases when the sample size is large (ie. in AL, AP and AI & AG) and then only amounts to small or very small component percentages. However, the data for the south fort ditch show that the absolute quantities of this quartz tempered pottery increases through the fill sequence (Table 8.3) as does its relative frequency (Table 8.4). This shift in the balance of the relative frequency of these two temper types is expressed in Figure 8.14. It should be stressed, however, that whilst this rise in popularity of quartz tempering can be linked with Romanization (*cf.* 1.6.1 (ii) & 3.7)) at Ancaster the forms in this particular category, the surface treatments and decoration, relate more to Iron Age and Transitional expressions. In other words this category excludes unequivocally Roman types in quartz tempered fabrics.

The pattern identifiable within the samples from Ancaster cannot be assumed to be representative of a regional norm; data from other assemblages is required. However, these Ancaster groups, particularly those from the fort ditch, suggest that pottery production and supply in the region, even to a fort site, may have been slow to change and re-orientate. It may be significant that the fort was, (presumably) that of an auxiliary unit, though we need to know more about the nature of pottery supply to auxiliary installations compared to Legionary establishments generally.

The quantified sample from Old Sleaford, though producing some fluctuating percentages can be interpreted as consistent with the Ancaster sample. Old Sleaford lies only 9.5km east of Ancaster and it too has produced a large amount of evidence of LPRIA and subsequent Roman occupation. The excavations of 1984-5, LIN 26 (C) isolated four concentrations of stratified deposits (Units 1, 2, 4 & 9) all evidently dating from the LPRIA and probably continuing into the early post-conquest period. The deposits in question come from earth-fast features, principally gullies and ditches. The pottery from these was quantified by the author (Note 8.9). Tables 8.1 and 8.2 show that again calcite tempered wares from late Iron Age and Transitional forms are dominant. Within the nine groups examined here this pottery never comprises less than 71% by weight or RE; the majority of the percentages are in the 80s and 90s. Tables 8.3 and 8.4 demonstrate that contemporary styles in quartz tempered fabrics are a regular but small group component. A closer look at the percentage totals (Tables 8.2 & 8.4) reveals that the neat pattern observed in the Ancaster data is not replicated. Focusing on the percentages by weight, in the case of Unit 1, 99.09% of pottery in the earliest four contexts (45, 130, 157, 207) is calcite tempered; this falls to 91.05% for four subsequent contexts (87, 104, 141, 142) but rises to 96.13% in the latest group (contexts 44, 49, 84). In the case of Unit 2 a percentage of 81.71% for the earliest contexts (210, 212) rises to 94.76% for the middle four contexts (203, 211, 216, 223) and then drops to 72.40% amongst the latest group (254, 255). In the case of Unit four there is a rise in the frequency of these wares between the earlier and the later groups.

When the relevant percentages for quartz grain tempered wares are examined (Table 8.4) none of these units shows a rise in the frequency of this type of pottery with time. This inconsistency cannot be explained by sample size since the groups are comparatively large (eg. Table 8.1). Two observations may be off-set against this apparent fluctuation in the percentage figures. First, when the percentages for calcite tempered wares by RE measurement are consulted (Table 8.2) it is clear that in both Units 1 and 2 there is a sequential decline in the frequency of this pottery with time. This is significant because since the groups are comparatively large, RE should be the most reliable guide to the relative frequency of vessels in different fabrics. Second, in Units 1 and 2 the percentages by weight both show a net decline in calcite tempering with time between that for the earliest contexts and that for the latest. However, as manifest in Table 8.4, there is no corresponding rise in the frequency of quartz tempered Iron Age tradition/Transitional pottery. On the contrary any decline in the calcite tempered component seems to be explained by the modest but increasing frequency of Roman imports or fully Romanized vessels represented in the sequence (*cf.* Chapter 9).

Whilst several parallels can be drawn with the Ancaster samples the trend identified in the case of the latter site is not evidenced in these groups from Old Sleaford. A strong possibility is that most of the groups predate any marked movement towards quartz tempering since (if Ancaster is to be taken as a bench-mark) the process did not become marked until the Claudian-Neronian period, by or during which time many of the Old Sleaford groups were closed. In addition the evidence to date from Old Sleaford points to something of a lacuna in occupation from around the mid first century into the later half of the century (for example, only 1 SGSW form is documented from the site *(cf.* Figure 5.1 and Gazetteer entry; Note 8.10)). It remains entirely possible, however, that despite the geographical (? and social) proximity of these two central Lincolnshire sites, their middle first century A.D. ceramics, and in particular, trends in tempering, did not follow parallel courses.

In the case of Dragonby eight groups from three features spanning the LPRIA and conquest period have been taken as a sample. As Tables 8.1 and 8.2 demonstrate wares tempered with calcite comprise virtually the entire content of the four layers from ditch 2086 with no fall-off in their percentage totals through the sequence and a similar pattern is evident in the three fill layers of ditch 1666. Amongst the pottery from the penannular gully 317 (late Neronian-early Flavian) calcite tempered fabrics account for 82.99% by weight and 84.03% by RE. However, these comparatively low percentages are not due to any marked rise in quartz tempering amongst Iron Age and Transitional pottery; rather it is due to the presence of a range of Roman pottery. This pattern at Dragonby might be explained if the indigenous potters remained conservative in their tempering. However, Romanized pottery production is known from Dragonby dating from the late first century (as evidenced by Kilns 3 and 4 and their products (Rigby & Stead 1976, 136-9; May 1966)). Explanation may lie in the fact that the introduction of quartz tempering appears to have varied across the formal spectrum; Elsdon observes that: "The general trend in fine wares is for the shell filler to become less profuse and smaller with time and to gradually disappear in favour of sand filler as the pots become romanized" (Elsdon & May 1987, 25). Hence in this respect Dragonby conforms to the pattern encountered elsewhere in the East Midlands: fabric change closely relates to form. That this development is not apparent in the quantified samples is probably explained by the fact that calcite was customarily used as a filler alongside quartz grains and sole or predominant use of the latter is a comparatively late development. Moreover, the forms for which quartz tempered fabrics were used in the middle decades of the first century A.D. at Dragonby are ones which are most accurately described as Roman or Romanized, anyway, (ie. platters, beakers and jars).

On the basis of the samples examined above it emerges that the shift away from calcite tempering was a relatively late development in the East Midlands and may not have been marked before the middle of the century. It may be that trends are more discernible over a longer time-span.

Analysis of the pottery from Dunston's Clump, NOTT 1 (A), by fabric reveals clearly the changes in fabric type at this site when the figures for the LPRIA and early Roman pottery groups are set alongside those for subsequent phases (Figures 8.15 - 8.17). Leary suggests, on the basis of the pottery, an occupation of 150-200 years and this is apparently a timescale of sufficient duration to identify changes even at rural sites of modest status such as this one. Figure 8.15 demonstrates the dramatic decline in the frequency of two customarily brown and moderately quartz tempered fabrics associated with vessels of Iron Age tradition (Leary 1988, 43). Amongst the pottery from Phases 1 and 2 at the main area of excavation (Enclosure 2) dated, respectively, as c. late first century B.C. to mid first century A.D. and mid first century A.D. to early second century, this fabric category comprised around 60% or more of the samples by sherd count (the only measure for which data is published by Leary (1988)). However, amongst the two subsequent groups which possibly extend to the early third century, the category comprises only c. 8% and c. 12% some or all of which could, of course, represent residual items. In the sample from Enclosures 1 and 3, dated as 1st to 3rd century A.D., it forms only 14%.

A similar demise is witnessed in the case of Leary's calcite and quartz tempered fabric (Figure 8.16). Although forming 40% of the Phase 1 group at Enclosure 2 it appears as only a minor constituent in succeeding groups. Corresponding with the decline of these two fabric categories is the rise in relative frequency of quartz tempered grey ware (Figure 8.17) which can be identified as culturally Roman. Absent from Enclosure 2 during its initial phase it forms 14% of the Phase 2 group, increasing in frequency exponentially in the succeeding phases. It also accounts for three quarters of the group from Enclosures 1 and 3. Hence a long term perspective on the Dunston's Clump assemblage demonstrates the sequential replacement of fabrics associated with Iron Age tradition vessels by wares which are Roman or Romanized.

In his study of Kentish pottery Pollard suggests that the LPRIA may have been a period of experimentation in fabric composition and observes that: "a wide variety of fabrics was produced" (1988a, 56). This phenomenon may explain why some assemblages of the period from the present region, such as those from Tattershall Thorpe, LIN 34, and Redcliff, NHU 17, display a diversity of fabric types.

The assemblage from the 1979-80 excavations at Tattershall Thorpe included 50 diagnostic sherds which were published (Chowne *et al.* 1986, Figs 8 & 9). Although the group is small it is nonetheless of regional import since it constitutes one of the few published bodies of material of this date from Lincolnshire. Amongst the 50 published items, 47 typologically late Iron Age/Transitional vessels are represented (*cf.* Chowne *et al.* 1986, 183); for 43 of these inclusion types are identified. A diversity of fabrics are present (at least 7; ~~Table~~ FIGURE 8.18), whether this represents experimentation though is unclear since the range may be explained by other factors such as differing sources of supply; alternatively tempering may have been decided by pragmatic criteria. To gain a clearer picture as to whether this diversity within the Tattershall Thorpe pottery reflects a state of flux in production during this key period a larger sample would be required from a somewhat longer sequence.

8.6 IMITATIONS OF BUTT BEAKERS *cf.* CAM. FORM 113.

The imported butt beaker type Cam. 113 and its distribution within the study area were examined above (5.3.5). It was established that this was a comparatively familiar first century pottery find in the region and that its distribution appeared to have some structure. The form, with its cordons, rouletted decoration and complicated rim is one that was evidently frequently copied by indigenous potters in southern Britain and the south Midlands, as, for instance, in the case of three vessels from Piddington (Friendship-Taylor & Friendship-Taylor

1989, 10, Nos 22-4). A considerable number of imitations have been recorded from the region examined here (Appendix 8.15). In common with other expressions of ceramic 'copying' and 'imitation' problems of definition - or rather recognition of a vessel as a copy - arise when examples are particularly devolved or 'loose' representations of a prototype. It should be acknowledged that categorization of an item as a copy is a subjective decision and especially so at the margins. Imitations of the Cam. 113 form vary greatly in fabric, wall thickness, decoration, etc., and can appear coarse rather than fine; some examples though are close copies. For the purposes of this study the key criteria for attribution to this category relate to profile, rim form, cordoning and decoration. On these grounds it has been possible to identify imitations of butt beakers, approximating to the form amongst 24 assemblages from 15 sites. Since it is a fair assumption that examples are less likely to be recognized and reported than are *bona fide* examples of the 113 it follows that the recorded incidence is more likely to under-represent the actual distribution than is the case with Appendix 5.52 which catalogues the known incidence of the 113.

The 15 find-sites of these imitations are plotted in Figure 8.19. It is immediately apparent that the distribution is an East Midlands one, with the main focus being Lincolnshire and South Humberside. It is probably no co-incidence that this distribution is similar to that of 'Belgic' types (eg. Figure 8.3) and the Transitional types (eg. Figure 8.13) examined in the earlier sections of this chapter. It is this region which, as has been consistently observed, is the most ceramically 'developed' part of the study area in the first century A.D. As demonstrated above it was the most receptive to changes of style and was the area most capable of producing copies in terms of technical ability. In other words the region appears to have possessed a consciousness of ceramics at variance to the regions to the west and north, across the Humber and Trent.

The type of site from which imitations are recorded is of interest. All are sites known to have mid first century A.D. occupation, or at which this is suspected. In this context an example from Brough, NHU 3 (B) (pers. exam. 22.2.89), is not necessarily a surprising find since there is evidence of pre-Flavian, pre-military, occupation at this site, as well as an example of a certain Cam. 113 vessel. It was observed above (5.3.5) that the incidence of genuine Cam. 113 did not suggest the type to be closely associated with the Roman military, indeed, possibly the contrary. Sites known as nucleated centres of the LPRIA are well represented amongst the list of find-sites of imitations, and finds are also documented from a number of other native or civilian sites the social status of which is not known, though probably modest, such as the enclosure site at Bracebridge Heath, LIN 4. Several sites which are known to have phases of Roman military occupation occur on the list. Amongst these perhaps only the finds from the fort site at Great Casterton, LIN 10 (B), might be firmly associated with Roman garrisoning.

The distribution deviates from that of genuine Cam. 113 examples in so far as instances of the latter are known from several North Yorkshire and Cleveland sites. However, the absence of copies from this region is not surprising since the number of genuine examples of Cam. 113 there is small, and secondly, this was an area with, evidently, an entrenched and limited ceramic consciousness.

As regards the date of these imitations there is no reason, on the basis of the recorded distribution, to suggest that they are other than contemporary with the form which they attempt to replicate (ie. essentially of the period c. A.D. 40-65). This may mean that several examples could be pre-conquest in date, such as examples from the Jewry Wall, Leicester, LEI 13 (AA). Examples of butt beaker copies, specifically of Cam. form 113 and Cam. 115 or 116 (Clamp 1985, 51, Fig.32 No.34, Fig.31 No.5) were present amongst the pottery from Phase 1 at the Blackfriars site Leicester, (BE), believed by its excavator to represent pre-conquest occupation (Clay 1985, 23). Other vessels from Leicester may be of a similar early date. (No examples were present amongst the groups of the pre-conquest horizon at Ancaster, LIN 1 (D), examined by the author though sherds from copies of Gallo-Belgic butt beakers were documented from this site (pers. exam.)). As regards the terminal date of these imitative vessels it is telling that the list of find-sites (Appendix 8.15) includes no sites of Flavian foundation.

Examples from within the study area occur in a wide variety of fabrics. Quartz, calcite and grog are the most common temper inclusions, either separately or in combination (details of particular fabrics are included under Gazetteer entries). This is significant since it strongly suggests the probability of diverse production. Hence the extensive distribution is not accounted for as being the out-put of one or two supply centres, rather copies of this form type appear to have been a 'local' or comparatively local phenomenon which, it can be reasoned, implies a 'culture' of copying, an impetus, whether communicated or not, which was shared.

Quantitative data on the incidence of imitations is presented in Tables 8.5 and 8.6 where it is set alongside that of examples of genuine Cam. 113 beakers. Six assemblages are represented from four sites, these being the only instances in the study area to date of both original forms and copies occurring together in quantity (minus Redcliff). Table 8.5 lists the recorded incidence in terms of absolute quantities; in the cases of Old Sleaford, LIN 26 (B) and (C), Dragonby, SHU 1 (C), and Old Winteringham, SHU 7 (A), amalgamated totals for the incidence of these types per assemblage are presented, but for the two Leicester samples, from (AW) and (BE) the figures relate to the sum totals for the first four phases. Only small quantities were forthcoming from the Bath Lane site, Leicester, LEI 13 (AW) and the 1984-5 excavations at Old Sleaford, LIN 26 (C). The latter is included in this listing despite the modest amounts of these types present, to highlight the contrast with the sample from LIN 26 (B); this is further evidence that this 1984-5 work sampled a qualitatively different part of the Old Sleaford complex to that of Margaret Jones' work, LIN 26 (B), (*cf.* Chapter 9).

One of the most striking aspects of Table 8.5 is that copies and genuine examples of the form occur in quantity together. It appears that there may be a relational dimension here and this is something which may be looked for in assemblages excavated in the future, or in material from sites outside the region, in order to establish whether this is the norm. It is not surprising, of course, that copies are common at those sites where the prototype is strongly represented, however, there is no reason why this should necessarily be the case. Finally, prior to turning to the percentage data, it is worth noting that though perhaps these absolute numbers are small the basic form was very thin walled and that vessels were comparatively light. In addition the RE data shows that the sherdage represents quantities which, though modest, are not tiny.

In Table 8.6 the data of Table 8.5 has been converted into relative percentages for the four sites for which comparatively large samples exist. Both the imitations and the genuine sherds per assemblage have been treated as a single unit and their composition of this established as a percentage (in other words the figures of Table 8.5 have been calibrated). The figures suggest that, generally, genuine Cam. 113 are more common than their imitations; they out number copies at Old Winteringham by a ratio of 7:3 by weight, at Dragonby the figure is 3:2, whereas at Old Sleaford, LIN 26 (B), copies are just out numbered. The sample from Blackfriars, Leicester, LEI 13 (BE), is at variance with this pattern when weight is the measure but dominates by the other two measures. Indeed, the greater frequency of the Cam. 113 is confirmed by the RE figures. There is a difficulty here though since, as noted above, examples of genuine Cam. 113 may be recognized with greater ease than imitative vessels and hence there may be some skewing of data. Sizeable samples are required from other sites in the region before more may be extracted with confidence from Tables 8.5 and 8.6.

Finally, there remains the question as to why the Cam. form 113 was copied. Other butt beaker forms were copied, for instance, as evidenced by a vessel from Flawford, NOTT 15, which replicates the form of Cam. 119, combined with decoration more typical of Cam. 116 (pers. exam.), but they were seemingly copied far less frequently. To suggest reasons is to speculate. There may have been social or economic imperatives which engendered copying. It may be that these imports were copied because it was thought necessary to 're-interpret' or re-make, in a parochial and familiar manner, an alien import, and by doing so legitimate the consumption of both the copy and the copied. Alternatively their manufacture may have been a response to local demand, the number of imports being inadequate. Whatever, from an archaeological perspective the local imitation of Gallo-Belgic butt beakers should be seen as part of a wider whole: an element and expression of the process by which the pottery of the first century A.D. in the East Midlands at least became Roman.

CHAPTER NINE

THE COMPOSITION OF ASSEMBLAGES: COMPARATIVE ANALYSIS AND SYNTHESIS.

"Much of the value of pottery sequences will depend on the proportions of different wares in different levels, and the need to study total assemblages on a numerical basis cannot be escaped." (Hodson 1964, 138-9).

9.1 INTRODUCTION.

In preceding chapters trends have been identified in the incidence of specific pottery types. The focus of this chapter is upon the overall composition of groups and assemblages with the aim of isolating and characterizing broad patterns amongst the pottery of the period. The perspective is chronological and comparative and it draws principally upon the quantitative data. The analysis examines the evidence of 81 quantified groups from 20 assemblages recovered at twelve different sites within the research area (Note 9.1). These 81 groups have been sorted chronologically on the basis of their dates as designated by their excavators; these dates have been assessed by the current author with reference to the pottery and in each case appear reasonable. Most groups fit discretely into one of six main periods: pre-Claudian, Claudian, Neronian, (later) Neronian-early Flavian, Flavian and late Flavian to Trajanic. The analysis proceeds by examining contemporary groups in temporal sequence. Of necessity fabrics and types represented have been amalgamated into ten basic categories which are employed throughout this chapter. The composition of the 81 groups in terms of absolute quantities is listed in Table 9.1 in site order, whilst the composition in respect of relative frequency is recorded in Table 9.2 (note that sherds of amphorae have been excluded from the computations of Table 9.2 since their inclusion occasionally engenders erratic distortions (*cf.* Section 2.3; Pollard 1990a, 77; amphorae as a group component are considered in Chapter 6).

In this examination three aspects are considered to be of primary interest. The composition of groups through time is monitored, in particular for evidence of change and

'Romanization'. Secondly groups from similar types of sites are compared in order to gauge the degree of similarity or variation between them. Intra-site comparisons are, where possible, made, comparing groups from different areas of the same site. As stated above (Chapter 1) the evidence of the different groups and sites is approached with the *working* hypothesis that the status and identity of a site *may* be reflected in the composition of its pottery.

9.2 GROUPS OF PRE A.D. 43 DATE.

Fourteen groups from five sites are of pre-Claudian date, these coming from across the study area. Twelve of these groups date fairly certainly to the period of c. A.D. 1-40. One, at Dragonby, SHU 1 (C), Feature 2100 Layer E, is dated to the late first century B.C. whilst the earliest phase at Stanwick, NYK 23 (B), phase 1, may cover the latter two centuries B.C. (though this has yet to be firmly established). The relative frequency of different pottery categories amongst these groups is documented in Table 9.3 (absolute quantities being recorded in Table 9.1). Reference to Table 9.3 demonstrates that all groups are dominated by pottery of the Iron Age/Transitional category.

The frequency by weight data of Table 9.3 has been employed to produce Figure 9.1. The percentage figures for the Iron Age/Transitional category have been excluded from this figure since, from Table 9.3 their dominance is established; Figure 9.1 therefore displays the figures for all other categories (ie. Roman and Gallo-Roman) in histogram form. Figure 9.1 shows that Roman pottery (*cf.* Note 1.7) is absent from almost half of the groups in the sample whilst at seven of the remaining eight groups it comprises only small or tiny fractions of groups, less than 3% by weight. The phase 1 group from Blackfriars St, Leicester, LEI 13 (BE), is the only exception.

Considering the groups with Roman pottery a number of significant points emerge. Firstly the category most frequently represented, albeit by meagre amounts, is that of Roman unoxidized wares. This may seem somewhat surprising since the Roman types most closely associated with pre-Claudian groups in Britain are Gallo-Belgic and other fine wares, flagons and other oxidized wares, plus amphorae (eg. Hawkes & Hull 1947; Partridge 1981; Stead &

Rigby 1989). Yet, as Figure 9.1 shows, amongst this wide sample these 'exotic' types are, with the exception of the Leicester group, almost entirely absent. No doubt the incidence of these types has been given prominence in reports whilst the occurrence of coarse ware items will have occasioned less attention. However, unoxidized Roman coarse wares generally constitute the second most frequent category (after Iron Age and Transitional pottery) present amongst groups throughout the first century (as will be established below). Although the number of sherds of this category present amongst these pre-Claudian groups is very small the presence is sufficient to engender the question as to whether our assumptions as to what Roman pottery may be normally expected to occur in LPRIA deposits require adjustment; alternatively some suspicion may exist that these sherds are intrusive (*cf.* 2.2) in these groups.

The groups forming this sample can be briefly examined. Neither of the two pre-Claudian groups from Ancaster, LIN 1 (D), produced any Roman pottery; this is despite the fact that they are believed to date to the latest years of the Iron Age (May 1966b). The group identified as Group 1 comprises the pottery from a number of features cut by two parallel ditches interpreted as belonging to a conquest period fort (May 1967; Wilson, D.R. 1967; Barley *et al.* 1968); Group 2 is constituted by the pottery from several other early features which were not cut by the fort ditches but were believed to pre-date the fort and to be contemporary with Group 1. Since sample sizes are quite large and derive from 17 contexts in the case of Group 1 and 8 contexts in the case of Group 2 this data should be reliable.

Four groups excavated during the work at Old Sleaford in 1984-5, LIN 26 (C), are present amongst this pre-Claudian sample. One contained no sherds of Roman pottery, whilst amongst the three others it was present in very modest quantities. This virtual absence, reflected in the assemblage as a whole, is surprising given that Gallo-Belgic and other early imported pottery was recovered in quantity during earlier work, LIN 26 (B), undertaken nearby. Since the two assemblages must be broadly contemporary the absence of early imports amongst (C) suggests that the two excavations sampled differing functional or status areas, and, indeed, this appears to be so (Note 9.2).

Five groups from Dragonby are included in the sample. Three of these derive from the fill sequence of a substantial ditch, Feature 2100. Neither of the earliest two fill layers (E & D) of this feature, quantified by the current author contained Roman pottery; this was despite the fact that they yielded collectively 410 sherds and date to the LPRIA (Elsdon & May 1987, 10, Diagram 2). Layer C however, dated as immediately pre-conquest, contained eight Roman sherds amongst a group of 320. Two other Dragonby groups, again from ditch fills, Feature 1666 Layer C and Feature 2086 Layer 5, also contain Roman sherds. Significantly the two sherds of Roman pottery amongst the latter group derive from a Cam. 51c bowl of micaceous 'Terra Nigra' fabric, a type which is pre-conquest in origin (eg. *cf.* Elsdon & Rigby 1987, 64; Clamp 1985, 49; Rigby 1985, 78; Stead & Rigby 1986, 231) and likely to be from Central Gaul. This evidence would support a claim that Dragonby is the most northerly British site at which imports from the Empire were demonstrably arriving before A.D. 43.

The phase 2 group from Stanwick, NYK 23 (B), which is believed to be entirely pre-Claudian, contained only 1 sherd of Roman pottery; this may be intrusive.

Figure 9.1 shows one sample amongst the groups of this period which diverges markedly from the general pattern, namely the phase 1 group from Blackfriars St, Leicester, LEI 13 (BE); this is the only group from Leicester of this pre-Claudian phase. Amongst this material pottery of Roman type constitutes almost 10% by weight. This is no accident of sample size since the group weighs 11.4kg. (and is the largest sample amongst these 14 groups). Significant also is the range of imported material present, for all of the Roman categories are represented with the exception of mortaria. The existence of a comparatively high percentage of Roman pottery amongst an early group at Leicester is consonant with other evidence indicating this site to be a high status centre of the LPRIA. Compared to other sites within the present study area Leicester occupies a southerly location relatively close to centres in the south-east at which similar wares of pre-Claudian date are well-attested; the range and 'richness' of its early and mid first century finds assemblage is exceptional within the study area as the Gazetteer entry amply demonstrates. That Leicester was a high status site during the LPRIA is implicit in the fact that it became the civitas capital of the Corieltauvi (*cf.* May 1984), since such a pattern of continuity is now recognized to be a normal pattern (*cf.* Millett 1990, 74-5). Whether it was the/a capital of the Corieltauvi is a matter of speculation (*cf.* Fitzpatrick forthcoming). However, this evidence, plus the fact that Leicester was apparently also the site of a mint during this period (*cf.* Clay & Mellor 1985) mark it as an exceptional site.

Under this discussion of the pre-Claudian groups three groups which are dated as LPRIA to Claudian may be considered (see Table 9.4 and Figure 9.2). One of these groups is from Leicester, specifically phase 1 at Bath Lane, LEI 13 (AW). Amongst this group the relative frequency of Roman pottery is less than in the Blackfriars phase 1 group, the comparative figures being 3.13% to 9.78% by weight, 12.66% to 38.32% by RE. Hence there seems to be a disparity here between these groups even though they are from the same site and of fairly similar date-range; this is not observed in the pottery report upon these two sites (Clamp 1985). However, it seems significant that if the 14 groups dated as pre-A.D. 43 are added to the 3 pre A.D. 43 to Claudian groups the phase 1 group from Bath Lane actually has the second highest relative frequency of Roman pottery behind phase 1 at Blackfriars. The existence of intra-site variations are to be anticipated at extensive sites and this difference at Leicester may be explained by the position of the two excavations (which lie 70m apart) within the area of the settlement.

The two other groups of pre A.D. 43 to Claudian date appearing in Table 9.4 and Figure 9.2 are both from Old Sleaford, LIN 26 (C). Regarding these, two observations may be made. Firstly, both contain a greater range of Roman types than are present amongst the four pre-Claudian groups from the site (*cf.* Table 9.3 & Figure 9.1) though the amounts present are very modest. This may reflect the fact that their date range extends into the post-invasion period. Second, despite this, in terms of relative frequency these two groups are consistent with the four pre-A.D. 43 groups in that the Roman components amount to only a tiny fraction of group composition.

To conclude this section, some general points may be stressed. The analysis reveals a clear picture which enables the normal pattern amongst these early groups to be identified; the results appear to validate the methodology (Note 9.3). The most salient aspect of these groups is that they all derive from sites identified as oppida, or at least high status major nucleated settlements of the LPRIA (*cf.* May 1984; Haselgrove 1984b; Darvill 1987, 173-5; Millett 1990, Fig.6; Cunliffe 1991, 175-8). One might have anticipated early Roman imports (ie. pre-Claudian) to be relatively frequent at these east of England oppida sites, yet, this is demonstrably not the case. With the exception of one group the presence of imported 'exotic' pottery from the Roman continent is meagre. It should be added that sherds of amphorae too (excluded from Figures 9.1 & 9.2) are equally rare (*cf.* Chapter 6, esp. Section 6.4). The obvious comparison for this group must be the contemporary groups from the southern British oppida such as Verulamium, Camulodunum, Bagendon, Braughing, Silchester, etc. At these sites pre-Claudian imports evidently account for sizeable proportions of groups; at Silchester, for instance, groups of equivalent date to those considered above appear to have been much richer in imports (eg. Fulford 1984, 128-35; pers. comm. Jane Timby, March 1989; Note 9.4).

It might be contended that distance (ie. from the Continent) was a factor, however, this is likely to have been less significant than control of access to imports, which appears at this time to have been dominated by the tribes of south-east England, especially the Trinovantes (*cf.* Haselgrove, 1982a; 1984a). The presence of at least some pre-Claudian imports at these eastern England sites suggests that their comparative absence did not arise from an aversion to Roman material culture. Rather what the quantitative data presented here appears to indicate is that sites in the east of England commonly had a comparatively limited access to Continental imports. This pattern may have a tribal (ie. political) dimension for it implies that the tribes of the region were relatively unsuccessful in acquiring commodities from the Roman world prior to the invasion period.

9.3 THE CLAUDIAN GROUPS.

Fifteen groups quantified by the current author are of Claudian date. The relative frequency of the different pottery categories amongst these groups is documented in Table 9.5 and the figures when weight is the measure are plotted in Figure 9.3. Again the data reveal a very distinct pattern: 8 groups from five sites contain only small proportions of Roman pottery and display continuity with the pre-Claudian groups. Seven groups, however, are highly conspicuous in having a Roman component amounting to 20% or more of the group total (when weight is the measure). All of these groups are from Redcliff, NHU 17 (B). Moreover there is a wide gap between the Redcliff groups and the group with the next highest percentage.

Of the non-Redcliff groups the one with the highest proportion of Roman pottery (by weight) is the only group from Leicester amongst the sample, this being the phase 2 pottery from Blackfriars St. Hence the indication of a comparatively more Romanized assemblage at Leicester, emergent in the groups discussed above (section 9.2) is maintained. However, Iron Age and Transitional pottery still accounts for 93.25% by weight and 89.52% by count of this group.

Three groups of Claudian date contained only Iron Age/Transitional pottery. One of these is that from the lower filling of the southern fort ditch at Ancaster, LIN 1 (D), (specified as Group 3, SFD, lower fill in Tables 9.1, 9.2 & 9.5 and in Figure 9.3). This group must be post-conquest and is presumably Claudian rather than Neronian since the foundation of the fort is believed to date to the early conquest period (*cf.* Webster 1970, 184; Todd 1981a, 4). In fact the whole fill sequence, as quantified by the current author, contained only a small Roman element (*cf.* Figure 9.8 & discussion 9.5). A contemporary group from Thorpe, NOTT 32 (F), recovered from an apparent sleeper-beam trench under-lying the rampart of the later fortlet, is similar in that it too contains mid first century Transitional types (eg. vessels of Cam. form 211-216 range; a neckless round-shouldered globular vessel with a bead rim approximating to Cam. form 255b) but no fully Romanized or imported pottery (see Gazetteer). Unfortunately the nature of this early occupation excavated during Wacher's trial work remains unclear for trenching was of limited extent and the results have still to be published in detail. The third group dated as Claudian but containing no Roman pottery comes from Dragonby, SHU 1 (C), being a ditch fill layer, Feature 2086 Layer 4 (see Elsdon & May 1987, 10). Three other Dragonby ditch fill groups dated as Claudian contain small proportions of Roman pottery (*cf.* Figure 9.3), but in none does this constitute more than 5% by weight (Table 9.5). The remaining group is the phase 3 material from the 1980s work at

Stanwick, NYK 23 (B). The dating of this group as Claudian is not firmly established but seems likely since it is the earliest horizon to contain early Roman imports, the range of which at Stanwick include TR and SGSW items which are more likely Claudian than otherwise. Amongst this Stanwick group though the Roman element forms less than 3% by weight and less than 13% by count or RE.

As stated the Redcliff groups are profoundly different from these other contemporary groups. Since some of these Redcliff groups also contained considerable amounts of amphorae (*cf.* Table 9.1) both Table 9.5 and Figure 9.3 actually under-represent the extent of their Romanized character. The data show SGSW to be rare amongst these Redcliff groups (*cf.* Figure 5.59) but that Gallo-Belgic wares were strongly represented. Indeed when RE is the measure the Gallo-Belgic category is the largest component element amongst four of the seven Redcliff groups, and second largest in two of the remaining three. It should not be overlooked, however, that both Roman fine wares and coarse wares are strongly represented.

The Redcliff groups apart - and they are clearly exceptional - the sample shows that assemblages in the study region did not change significantly immediately following the conquest of A.D. 43. Indeed there is continuity of the pre-Claudian pattern such that (Redcliff excepted) it can be fairly stated that (amongst these groups) the conquest is ceramically invisible; this finding echoes Pollard's observation that: "The Claudian conquest of southern and eastern Britain in A.D. 43-7 ... is difficult to recognize in the ceramic record (1988a, 32). There is considerable evidence that this pattern continues beyond the Claudian period and that many assemblages were slow to change. It would seem then on this evidence that pre-existing arrangements were not smashed by the military advent of Rome and that there was no sudden flood of importation.

The obvious question is why are the Redcliff groups different. A factor of possible relevance is that the site may well only date from the early Claudian period, and hence there will have been no earlier accumulation of Iron Age or Transitional wares at the site which could become incorporated into Claudian deposits as a residual element. This may have occurred, for instance, at Dragonby. The dating of the Redcliff groups as Claudian seems reliable (activity may have continued into the Neronian period but there is no material evidence from the first three phases which is necessarily post-Claudian). Indeed the pottery from the first three phases cannot be distinguished chronologically. The excavations of 1986-9, NHU 17 (B), encountered a sequence of activity amongst which the earliest *horizon* included pottery types typical of the Claudian conquest period. May's assessment of the Iron Age coinage attributed to the foreshore, below the site, has led him to suggest that activity at the site is likely to pre-date the Claudian invasion (pers. comm. March 1988), though he is more equivocal in his most recent statement (1992a, 101). However, such a phase was not identified in the course of the 1986-9 work. Additionally Hartley's study of sigillata from the site, recovered prior to the mid 1970s, concluded that contrary to earlier dating (*cf.* Corder & Pryce 1938; 1939) none of the material examined was necessarily pre-Claudian (Hartley, B.R. 1976).

It has been suggested that Redcliff was a 'port of trade' or a 'gateway community' (eg. Darvill 1987, 175; Creighton 1990; Cunliffe 1991, 194), and thus analogous to other (slightly earlier) sites such as Hengistbury Head (eg. Cunliffe 1987) and Skeleton Green (Partridge 1981). Such a definition seems consistent with the site evidence. Few examples of the types of imported material recovered at Redcliff (eg. Gallo-Belgic pottery, early amphorae, Claudian-Neronian brooches, and so forth), however, are documented from elsewhere in the hinterland of the site. Hence there is scant evidence that the site performed a re-distributive function, and this is, of course, also true of Hengistbury (Cunliffe 1987, Fig.III. 233-6; *cf.* Millett 1990, 30). Rigby (pers. comm.), Cunliffe and others have suggested that, in Cunliffe's words: "It is possible that this was the way by which commodities entered barbarian territory *en route* to Stanwick" (1991, 194). From a close examination of the two assemblages, however, it is evident that the Stanwick material is very unlikely to be a 'sub-set' or a 'selection' of the Redcliff material, or vice versa, the two assemblages are very different (*cf.* discussion under 9.5).

The contrast between the Redcliff groups and those from Dragonby, a site also located in the Humber region, is marked. It is not simply the case that there are more imports at Redcliff, rather there are qualitative differences too; for instance, the typology of the Iron

Age/Transitional pottery at the two sites is dissimilar. The inference must be that the two sites, though spatially close and occupied at the same time, were connected to different exchange networks (or the same networks differently). The existence of contrast is perhaps not surprising given that Dragonby was, by the mid first century A.D., a long settled site with well established ceramic traditions, whereas Redcliff may have come into being as a consequence of new conditions and exchange possibilities following the Roman invasion (*cf.* 9.9).

9.4 THE NERONIAN GROUPS.

Of the 81 groups in the sample, six are Neronian (those dated Claudian-Neronian are dealt with in the following section). The relative frequency figures for these six groups are documented in Table 9.6, and the figures when weight is the measure are plotted in Figure 9.4. These data reveal that four of the groups continue to be dominated by Iron Age and Transitional types. Three of the latter are from Dragonby, each being from fill deposits in separate ditches. This evidence suggests a continued pattern in pottery consumption at Dragonby with two of the groups having proportions of Roman pottery of less than 2% (by weight). However, amongst the Layer A group from ditch 1666 the Roman component amounts to 8.96%, a higher percentage than for any other earlier or contemporary Dragonby group, with a range of Roman types represented. This may be seen as an indicator of a gradual Romanization of the Dragonby pottery, a trend evident in its later first century groups.

Amongst these six Neronian groups is one from Leicester, this being the phase 3 group at Blackfriars St. This group is apparently no more 'Roman' than the phase 2 group from this site. Two other groups from Leicester may be appended to the discussion, at this juncture, these being two groups dated as pre-conquest to Neronian and from the vicinity of the later Forum (Table 9.7 & Figure 9.5). Together these three Leicester groups display some common features, which they share with the phase 1 and 2 groups from Blackfriars St, namely the presence of a considerable variety of Roman types amongst groups dominated by Iron Age and Transitional types. Hence there is a pattern of continuity here. The status and 'identity' of Leicester during this transitional period is uncertain and has occasioned speculation (eg. Wacher 1976; Hebditch & Mellor 1973, 36-7; Liddle 1982; Clay & Mellor 1985, 32-5). No sudden changes are identifiable from these pottery samples. Of particular interest is the question of a Roman military presence at Leicester. The general consensus seems to be that there was such an installation at Leicester and that it is only a matter of time before confirmation in the form of structural evidence is forthcoming. The samples from Leicester examined here come from the area usually suggested to be associated with the location of the fort (*cf.* Clay & Mellor 1985, 32; see Gazetteer). Whether such a status might be identifiable from pottery samples alone is questionable. Darling's papers (1977 & 1981) have shown that military assemblages of the period vary considerably in composition, evidently the result of particular circumstances (1981, 407). More work in this field needs to be undertaken, especially quantitative analysis. However, although there are trends in groups from military sites (as highlighted in this thesis) there are no standard patterns at provincial or regional levels. Further comparatively few stratified Claudian-Neronian horizons at military sites in the East Midlands are available for comparison.

Amongst the six Neronian groups of Table 9.6 and Figure 9.4 there is one certain military group, that from the rampart at Lincoln, LIN 17 (K). The Leicester groups do not compare favourably with this contemporary Legionary sample. Nor indeed are they in any way comparable to the Neronian sample from Old Winteringham, SHU 7 (A) Group AB, another site at which a Roman military presence has been suggested (see below for discussion of Old Winteringham). The proportion of Roman pottery amongst these three Leicester groups, when weight is the measure is, in all cases, less than 14%; whilst in the case of the Lincoln sample it is over 64% and at Old Winteringham, over 70%. This disparity is interesting; it does not rule out a military presence at Leicester and may be highlighting a Legionary-auxiliary distinction (ie. represent an auxiliary occupation at Leicester). That the pottery supply to auxiliary units differed from that of the Legions as a general rule during this period has been contended (eg. by Webster 1973, 4; Darling 1977). The lack of Roman pottery amongst the three Claudian to Neronian samples from the Ancaster fort ditch (*cf.* Sections 9.3 & 9.5), which presumably are the product of auxiliary occupation supports this argument. However, that this was the case has yet to be clearly demonstrated by a systematic quantitative survey.

Finally, considering the two Lincoln and Old Winteringham groups dated as Neronian, both were evidently well supplied with Roman pottery at this time, though Figure 9.4 demonstrates that this Roman element is constituted differently at the two sites.

9.5 GROUPS DATED AS CLAUDIAN - NERONIAN.

Nine groups, from six assemblages fall into a Claudian-Neronian category. These groups derive from deposits that were accumulating through the Claudian and Neronian periods and which cannot be separated out into either period. These groups may generally be conceived of as later in date than the Claudian groups (*cf.* Section 9.3) since they evidently include some material which is typologically later than what is normally present amongst Claudian groups. In addition several of these Claudian-Neronian groups come from stratigraphically later deposits than groups dated as Claudian. Hence in evaluating the relative frequency of types amongst these groups they might be considered to be later in emphasis than the Claudian groups but similarly one might expect them to be less Romanized than some of the unequivocally Neronian groups. In fact when the relative frequency data are examined (Table 9.8) this intuitive expectation is confirmed, with the frequency of Roman pottery amongst these groups in general being intermediate between that for the Claudian and Neronian groups. Comparison between figures 9.3, 9.4 and 9.6 demonstrates this.

Two of the groups come from the southern fort ditch at Ancaster, being samples from the middle and upper fillings (specified in Table 9.8 and Figures 9.6 & 9.7 as 'Group 3 SFD'). As regards the dating of these ditch fills it is unlikely that a military presence at Ancaster will have continued beyond the early Flavian period judging from the general deployment of the military at this time (*cf.* Breeze & Dobson 1985). Additionally, the excavators note of the pottery from the ditch that: "Apart from a few obvious intrusions [excluded from the quantification here] none of the pottery need be as late as the early Flavian period" (Barley *et al.* 1968). Whereas the lowest fill (assigned a Claudian date and discussed under section 9.3) contained no Roman pottery the sample from the middle fill contained 4 typologically Roman sherds (both coarse and fine ware) in a group of 61. When weight is the index this Roman element amounts to less than 2% of the group and hence this group would not appear conspicuous were it placed amongst the groups dated as Claudian (*cf.* Figure 9.3). The group from the upper filling of this ditch is more Romanized than the preceding group by both weight and sherd count measurement. The range of Roman types present is also much wider. However, by weight the Roman element is still less than 12% of the group. Considering this Ancaster sample as a whole, analysis of the stratified sequence of first century deposits reveals a gradual Romanization of pottery, albeit within the context of groups that are all dominated by typologically Iron Age and Transitional ceramics. This is revealed graphically in Figure 9.8. Bearing in mind that the later three samples are associated with Roman military occupation the quantity, range and frequency of Roman material present is remarkably limited. In the absence of samples from elsewhere at this fort, in particular from occupation levels from its interior, conclusions must be provisional. However, the available evidence indicates that the supply to the fort was largely composed of pottery which was available locally (ie. from indigenous sources), a pattern which Darling has identified at some other military sites of the period (eg. 1981, 406). It may be that this pattern is not abnormal for a site of this type and date in the Midlands, though there is little comparative material available to check this.

Amongst the Claudian-Neronian groups is one from Old Sleaford, LIN 26 (C), comprising the pottery from the fills of a gully (Feature 256); chronologically these are the later layers of the so-called 'Unit 2' sequence excavated in the course of the 1984-5 work. A quick view of Figure 9.6 or Table 9.8 gives the impression of a comparatively Romanized group with Iron Age/Transitional pottery amounting to relatively low proportions of 72% by both weight and RE. However, as Table 9.1 reveals the presence of a large mortarium rim sherd amongst the group has a skewing effect with one sherd accounting for 25% of the group by weight. The group is of modest size, and when count is the measure the Roman element constitutes only 14%. Hence the group may be less Romanized than it at first appears and may have more in common with the slightly earlier groups from the site (examined above) and, indeed, with the 'normal pattern' at Ancaster, Leicester and Dragonby during the Claudian-Neronian period.

The Old Winteringham, SHU 7 (A), Group AA, dated as Claudian-Neronian constitutes an interesting body of pottery to compare with the Neronian group considered above (Section 9.4, Group AB). The two groups are successive fills of a substantial ditch. The slightly later group is more than twice as Roman in content than its predecessor by all three measures (eg. *cf.* Table 9.2). Comparison of the groups though reveals some continuities. Both, for instance, display a comparatively wide range of types, though the fine ware suite is limited. Amongst both, Roman coarse wares are predominantly oxidized. Considering this Claudian-Neronian group in the context of contemporary groups from other sites although its Roman content is dwarfed by the mean at Redcliff, otherwise, in terms of the range, quantity and frequency of this Roman element, it is well above the mean for other sites.

The remaining five Claudian-Neronian groups are all from Stanwick, two coming from Wheeler's excavations in Tofts field, NYK 23 (A), site F, one is from his site A, the remaining two are from the 1980s work, NYK 23 (B), phases 4 and 5, also in Tofts field (Note 9.5). Contrasted with other Claudian and Neronian groups these Stanwick samples are generally more Roman than are the samples from Ancaster, Dragonby, Leicester, Thorpe and Old Sleaford. Reference to the Redcliff samples shows that Roman pottery is more frequent amongst the latter and that the composition of the Roman component amongst the two sets of groups varies markedly both in terms of coarse and fine ware elements (eg. compare Figures 9.3 & 9.6). The coarse wares of the Roman suite are far more common at Redcliff. Similarly, Gallo-Belgic wares are by large degree the principal fine ware category at Redcliff, whilst at Stanwick samian and miscellaneous Roman fine ware types, are predominant with genuine Gallo-Belgic pottery registering in only very small proportion. It has been posited that the Roman material at Stanwick may represent diplomatic gifts (eg. this interpretation is restated by Jeremy Evans (Forthcoming B)). The prominence of amphorae and SGSW, including the occurrence of unusual forms such as Hermet 15 (Millett, No date) give this notion credence.

Amongst four of the five Stanwick groups Roman fine wares are more frequent than Roman coarse wares, even when weight is the measure. This evidence is closely consistent with the interpretation of Stanwick as a centre of high status. The deviant group in this respect is that from Wheeler's site A, NYK 23 (A), though relative to other groups Roman fine wares are well represented. The existence of a highly Romanized group from Wheeler's site A (Wheeler 1954, 9-13; Haselgrove, Lowther & Turnbull 1991, 54-8) where the rampart and ditch of the outer circuit of the defenses were sampled, indicates at least one other focus of occupation in addition to the Tofts (from which it is separated by a distance of 650m). It may be inferred that the Stanwick complex in common with other nucleated centres of the LPRIA in western Europe, was poly-focal and that the Tofts may have been one of a number of foci within, and possibly outside, the earthworks (albeit perhaps pre-eminent amongst these).

The samples from Wheeler's site F (1954, 7-9), NYK 23 (A), comprise the pottery from earth-fast features and the pottery from the over-lying soil horizon (*cf.* Wheeler 1954, 7); when post-Roman sherds are excluded from the latter it comprises of Iron Age tradition material and Roman pottery of essentially Claudian-Neronian date. Both of these groups contain a comparatively large Roman component, amongst which fine ware, and in particular the miscellaneous Roman fine ware category, forms the most common element (*cf.* Figure 9.6); (sherds allocated to this latter category mostly comprise items from butt beakers or similar vessels analogous to Gallo-Belgic forms, but occurring in a fine fabric of uncertain origin; many sherds depicted by Wheeler are examples of this category (1954, Pl. 24, left hand photo)). Amongst both of these site F groups this category forms the second most frequent type after Iron Age tradition pottery by all three measures (Table 9.8). Of some interest when comparing these two groups is the fact that the Roman element from the feature fills is comprised almost entirely of fine ware, whereas amongst the sample from the soil horizon, in addition to the sustained high frequency of Roman fine ware, Roman coarse wares are also strongly represented. Indeed amongst the latter group (ie. the covering soil horizon) Roman pottery forms a greater proportion of the sample than is the case with the group from the features. A parallel pattern is displayed by the material from the 1980s area in the Tofts, NYK 23 (B). Amongst the pottery from the overlying soil horizons in this area, including the modern turf layer and rig and furrow contexts, first century Roman pottery is more frequent than it is from the undisturbed stratified contexts. Set against the mean percentages for Roman pottery from all post phase 2 contexts in the 1980s area, the percentages for Roman pottery from the overlying soil horizons are all higher, the positive residuals being 4.04% when weight is the measure, 8.53% by count and 26.98 by RE. Three possible explanations for this phenomenon may be postulated. First, that the actual proportion of Iron Age tradition pottery once present in the overlying soil horizon has been denuded because sherds of this type occur in fabrics which are less robust than Roman fabrics (*cf.* Swain 1988; Haselgrove *et al.* 1988, 40). Second, the pattern may be a function of supply and chronology, which is plausible if it is assumed that the soil horizon represents deposits which are later than those filling the features. In this scenario the pattern can be seen as resulting from a shift in the balance of pottery supply and consumption at the site, consistent with the Romanization of other assemblages in the region and evident in this chapter. The third possibility is that the difference may (in part) be a function of the fact that pottery present in the covering soil horizon is likely to be derived from positive horizontal stratigraphy, in other words, types of contexts likely to be associated with different discard/depositional regimes and histories than those of cut features (*cf.* Crowther 1983; Haselgrove 1985, Fig. 1.3).

The groups of phases 4 and 5 from the 1980s area excavation at Stanwick (which lay c. 150m west of site F) contrast with those from sites A and F groups. The former appear less Roman by this data. However, this masks two important variations. What is not manifest amongst the relative frequency data of Table 9.8 and Figure 9.6, from which figures for amphorae are excluded, is that phases 4 and 5 of the 1980s work both yielded richer groups of amphorae sherds than did sites A and F (*cf.* Tables 6.1 & 6.2). Secondly, as displayed by Table 9.8 and Figure 9.6 SGSW is the principal Roman pottery type amongst the phase 4 and 5 groups when either weight or count is the measure. If amphorae and SGSW are taken to be indices of site identity and status this evidence suggests that the 1980s trench sampled an area of different 'identity' and, perhaps, of higher status than did site F. This is consonant with the interpretation of the enclosure partially investigated in the work of the 1980s as being a focal residential compound (*cf.* Haselgrove *et al.* 1990; Note 9.6).

The relevant percentages when RE is the measure are listed in Table 9.8 and are plotted in Figure 9.7. As discussed above (*cf.* 2.3) quantification by this method is desirable, though it can produce erratic results if groups are not large (close study of Figure 9.7 with Tables 9.1 & 9.8 reveals some incidences of this). However, the main point emergent from this data is that by RE measurement Roman vessels form a significantly higher proportion of their groups than is implied by the weight data (eg. compare Figures 9.6 & 9.7). This measure further highlights the importance (ie. frequency) of Roman fine wares amongst the Stanwick groups.

9.6 GROUPS DATED AS (LATER) NERONIAN TO EARLY FLAVIAN.

Eleven groups from four sites are dated to this period (Table 9.9 & Figure 9.9). In the case of one group, that of phase 1 from the 1962 excavations at Harvey Lane, Leicester, LEI 13 (AN), only RE data is available since this group was not quantified by the present author (see Note 9.1). The immediate impression from Figure 9.9 is that by this stage groups have become more strongly Roman. However, closer inspection reveals that there are marked differences between assemblages and, further, that if the Lincoln, groups are subtracted from this sample the remaining five groups (from three sites) each still include large proportions of Iron Age and Transitional pottery (not less than 41%, when weight is the measure, in any group). Whilst it is clear from these groups that a general Romanization of pottery was taking place variations are pertinent.

There are three Leicester groups of this period. Comparison between them is complicated by the fact that only RE data is available for one of these. The RE figures for this Harvey Lane group are fairly consistent with those of the contemporary Bath Lane, phase 2 group, LEI 13 (AW), (*cf.* Table 9.9) though the data for this Bath Lane group are skewed by the presence of a large proportion of a mortarium which is evidently not normal rubbish (Clay & Mellor 1985, 6).

Viewing these three Leicester groups against the groups of earlier date from Leicester it is apparent that the later groups contain much higher proportions of Roman pottery and that this rise is a general chronological trend at Leicester through the first century (*cf.* Figure 9.12 & Section 9.7). These data also reveal Leicester to be well supplied with SGSW during this period; though the proportions in themselves seem modest, comparatively they are sizable. As Table 9.9 shows SGSW is the third most common category (by RE) amongst the Harvey Lane group where it accounts for 12.57% of the sample. Likewise in the phase 2 group from St Nicholas St 1965-6, LEI 13 (AS), it is the second most common category by both weight and count; whilst amongst the phase 2 group at Bath Lane it is also well represented (the relative frequency figures here being depressed by the presence of the extraordinary deposit of mortarium sherds). Hence there is a consistent pattern witnessed between these three locations. The contemporary groups from Lincoln and Old Winteringham have little or no SGSW, and, curiously, this pottery is almost absent from the later groups from Leicester (*cf.* Table 9.10). This pattern within the late Neronian to early Flavian groups at Leicester may represent an unusual episode of supply.

The five groups from Lincoln amongst this late Neronian-early Flavian sample derive from three excavations. All five groups are associated with the Legionary occupation. They display a consistent pattern in that though typologically Iron Age and Transitional pottery is present groups are mainly constituted by Roman wares. This seems likely to be a reflection of the identity of the site as a fortress (with a high concentration of 'Roman' consumers), with circumstantial evidence that potters working in a Roman tradition were present in the vicinity soon after, or at the time of, the site's foundation (*cf.* Darling 1981). It seems possible that access to large scale indigenous sources of pottery supply may have been limited, especially if no sizable Iron Age occupation had preceded the fortress at this locality (see Gazetteer entry).

These Lincoln groups all contain a range of Roman types the proportions of which appear somewhat varied between groups. In part this may be explained by the fact that the groups are from diverse types of contexts: the group from LIN 17 (K) derives from a sequence of layers, that from LIN 17 (W) 1986 is a pit group, whilst Groups 1, 2/3 and 5 at LIN 17 (V) are associated with buildings of unidentified functions. Two aspects though are clear. Firstly, amongst four of the five groups oxidized coarse ware is more frequent than unoxidized. Secondly, fine wares are rare amongst these groups (as indeed they are with the Neronian group from East Bight, 1964-6, LIN 17 (K), considered above). The exception is a group from East Bight 1980-1, LIN 17 (V), group 1, where the presence of several fine ware fabrics contributes to frequency totals of 29% by weight and count and 43% by RE. The group derives from contexts associated with the construction (rather than the use of) a building set against the fortress rampart (Camidge 1981); ramparts and intervallums are often associated with food preparation (eg. Pitts & St. Joseph 1985, 195) and it is possible therefore that this high density of fine ware amongst this group may be explained by its find-spot within the fortress.

There are two groups amongst this (later) Neronian to early Flavian sample from Dragonby (Table 9.9). Within this period these groups are conspicuously the least Romanized (eg. Figure 9.9). The ditch group from feature 2086 (layer 2) contains only a tiny proportion of Roman pottery; it is possible that this group contains a high residual element or that it closed before the other Dragonby group, from feature 317, a penannular gully. The latter group contains a range of Roman/Romanized types and fabrics, amongst which are items likely to be products of the later first century kilns known at the site (*cf.* Gazetteer entry). These low Roman proportions are consonant with both the pattern of the earlier groups from Dragonby examined above (this chapter) and the comparative rarity of imported early Roman pottery at the site (eg. Section 5.3.6). That the pottery assemblage from this site was little Romanized for the thirty years following the conquest might be explained if the supply to Dragonby remained predominantly indigenous as a result of limited access to alternatives or the taste of the consumers. Significantly this pottery data is entirely consistent with Creighton's suggestion (1990), based on quantitative study of the brooch evidence from several Humberside sites, that the Dragonby settlement was in decline following the conquest of A.D. 43.

In Figure 9.13 a sample of 10 groups from Dragonby has been arranged in order of deposition as this is understood by the excavator and pottery reporter (Elsdon & May 1987, 7, 10, Diagrams 1 & 2). This figure demonstrates that despite the fact that Dragonby is frequently identified as an oppidum, or at least a major nucleated settlement of the LPRIA (eg. May 1984; Millett 1990, 24-5; Cunliffe 1991, 175-7), the presence of Roman imports and Romanized pottery amongst its early and mid first century A.D. pottery assemblage is very sparse. Small amounts of Roman/Romanized pottery are consistently present from a comparatively early stage, but their relative importance appears, by these data, to remain static during the period of the conquest. When weight is the measure of quantity only the latest group has a percentage for Iron Age/Transitional pottery of less than 91%. Evidently the cultural composition of the Dragonby groups does not alter until the late Neronian period (*cf.* 8.5 (iii)), and even then it is a comparatively small shift. Finally it is noteworthy that in the 317 group it is the coarser wares of the Roman suite (flagons, jars, etc.), not of the fine wares or amphora which are of increased frequency (Note 9.7). This picture might suggest that Dragonby's presumed status as an oppidum (or similar) should be reviewed.

Creighton (1990) has argued that Dragonby as a settlement of major significance was eclipsed following A.D. 43 by the growth of Old Winteringham. The quantitative pottery evidence presented here concords with this suggestion if the Romanization of a site's pottery assemblage (reflected in the percentages of Roman pottery amongst its groups) during this period is regarded as a reliable index of site status. Moreover, the pottery groups from Old Winteringham contain much higher percentages of Roman pottery than do those from Dragonby.

The final group of the later Neronian to early Flavian sample to be considered is appropriately from Old Winteringham. The group comprises pottery from early cut features and layers and is labelled as Group AX (Stead 1976, 306 & Fig. 12). The group evidently contains some typologically Claudian-Neronian pottery and presumably includes at least some deposits which are likely to have received pottery before the late Neronian-early Flavian period. Bearing this in mind it is consistent that this group has a higher proportion of Roman pottery than the Claudian-Neronian group from the site (*cf.* section 9.5), but a lower proportion (at least when weight is the measure) than the Neronian group (*cf.* section 9.4). This AX group from Old Winteringham is comparatively Romanized. In common with the other two samples from Old Winteringham (*cf.* Table 9.1 & 9.2) it includes a wide range of Roman types (*cf.* Table 9.9), but the proportions of Roman fine ware present are again rather modest.

The status and identity of Old Winteringham during the LPRIA and conquest period is uncertain. Our understanding of the early development of this important site may have been clearer had Stead's excavations not been abruptly terminated (1976, 4-6). Creighton, following Stead, has suggested, (especially on the basis of the brooch evidence) that the site which evolved during the conquest period and after occupied a: "virgin or near virgin" site (Creighton 1990; Stead 1976, 18). However, elsewhere in the current thesis it has emerged that aspects of the pottery assemblage from the site suggest that ceramically the site may be grouped with nucleated sites known to have been occupied prior to absorption into the Empire (eg. 5.3.6). A further indication of a possible pre-conquest origin emerges from the data discussed here. Although all three samples show a comparatively strong degree of Romanization it is none the less the case that Iron Age/Transitional pottery is also well represented (*cf.* Table 9.2); for instance when weight is the measure it is the most common category amongst all three Old Winteringham groups; by count it is the most common category in two of the three groups. This strong presence of Iron Age/Transitional pottery implies a pre-conquest origin for Old Winteringham since the quantitative analysis of this chapter shows this to be a feature common to such sites. Moreover, the pottery groups from sites at which excavation has revealed little or no stratigraphic evidence of occupation of pre-Claudian date, namely the fortress site at Lincoln and Redcliff, clearly contain comparatively small Iron Age and Transitional elements. Put succinctly, if Old Winteringham was a Roman foundation and established as a supply base (eg. Stead 1976, 18; Todd 1973a, 24 & 31) its pottery groups appear to contain more Iron Age/Transitional material than might be expected when the proportions formed by this pottery are compared with those for other sites in the region. It may be that Old Winteringham was not a Roman military installation; the character of its extant pottery assemblages suggests there is some possibility that it was a site analogous to Redcliff.

9.7 GROUPS DATED TO THE FLAVIAN PERIOD.

Two groups in the survey are dated as early Flavian (Table 9.10 & Figure 9.10) these being associated with two Roman military sites: period 1 at Blake St, York, NYK 28 (Q) and phase 1 at Binchester, DUR 1 (C). These data reveal some interesting areas of similarity and difference between the two groups. It is immediately apparent, for instance, that the groups are almost entirely constituted by Roman pottery. Iron Age/Transitional pottery is present but rare amongst the groups from York and absent from the Binchester sample (small amounts of this pottery occur in the Period 2 group from Blake St, and amongst the phase 1 or 2 and phase 2 groups from Binchester (*cf.* Tables 9.1 & 9.2)). This scarcity of Iron Age/Transitional pottery presumably results from the location of both of these sites in the northern half of the study area, a region known to be less developed ceramically and, indeed, in which pottery in the LPRIA is much less common than further south. Additionally both sites may be founded on previously unoccupied sites. Hence this pattern conforms to Darling's model regarding the nature of pottery supply to early military sites, specifically that this is likely to have been determined by site location and the availability in quantity of local supply from indigenous sources (1981, 406). When the Roman components from these two samples are compared the only area of similarity appears to be in the relative frequency of Rusticated jars. There are two marked areas of difference. The York group is dominated by oxidized pottery, amongst which locally produced Eboracum wares (eg. Perrin 1981, 58) are strongly represented, even at this early stage. However, amongst the Binchester phase 1 group unoxidized pottery is the most common category by all measures. Table 9.10 reveals that fine ware is more frequent amongst the York group. This might be taken as reflecting the Legionary identity of York (since it may be suspected that such sites are more likely to have received fine wares than were other types of site), however, it is possible that samian was removed from the Binchester groups prior to their quantification by the present author (*cf.* 5.2.8 (i)).

Table 9.11 documents the groups firmly dated as Flavian. There are seven of these, from seven different assemblages from five sites. The relative frequency data by weight is plotted in Figure 9.11. There are three groups from Leicester: phase 3 at Bath Lane, LEI 13 (AW), phase 2 at St Nicholas Circle LEI 13 (AZ), and phase 4 at Blackfriars St (BE). These

Leicester groups form a conspicuous set amongst the sample; they have markedly smaller proportions of Roman pottery than the other four groups. The St Nicholas Circle group has the lowest proportion of Roman pottery of these three Leicester samples and of all the Flavian samples. Iron Age/Transitional pottery accounts for 85% of this group by weight, 76% by count. This seems surprising for a group of this date from Leicester, a site otherwise identified as possessing a highly Romanized pottery assemblage (*cf.* Gazetteer entry for Leicester). Two observations concerning this material, however, may effect any evaluations. First, reference to the relative frequency figures for all of the first three phases at St Nicholas Circle, (AZ), (Table 9.2) reveals them to contain exceptionally high proportions of Iron Age/Transitional wares; by phase 3, dated as late Flavian to Trajanic, Roman pottery only accounts for 17% of the group by weight, and 31% by count. It is possible that the figures for this site have been skewed by the deposition of earlier (residual) material into later deposits (examination of other possibilities must await the publication of the final report (Clay forthcoming)). However, another factor affecting all of these Leicester samples is the likelihood that the method of categorization, whilst systematic, under-represents how Romanized these assemblages may be since items appearing in fairly Romanized or Romanizing forms will have been allocated to the Iron Age/Transitional category because they occur in a traditional or transitional fabric. (Clearly this is not ideal for the purposes here, but practicalities necessitate divisions such as this). Further, since many items quantified as Iron Age/Transitional *are* apparently locally produced Transitional vessels displaying Romanizing attributes these Leicester groups may actually represent a more fundamental, permeating, Romanization than is expressed in the other groups of this Flavian sample. The point is that the four non-Leicester groups derive from evidently military sites the pottery supply to each of which at this time seems to have been largely met by pots produced locally or regionally by potters working in established Roman/continental traditions, together with some imports. At Leicester, however, it seems that indigenous potters adapted their output to produce Romanizing/Romanized vessels from a comparatively early date (*cf.* Clamp 1985, 49; Pollard forthcoming). In part this may reflect the earlier incorporation of Leicester into the province.

A further aspect of these Leicester groups is the consistent prominence of unoxidized coarse ware amongst their Roman components (*cf.* Figure 9.11). By contrast the other four groups in this sample have much larger proportions of oxidized wares (of various types). This phenomenon clearly distinguishes these Leicester groups and points to the fact that the site is likely to have had qualitatively different sources of supply (*cf.* above) from the other sites in this sample.

The four non-Leicester groups amongst this sample come from East Bight, Lincoln, 1980-1, LIN 17 (V); the fort at Hayton, NHU 14 (A); Period 2 at Blake St, York, NYK 28 (Q), and deposits of phase 1 or 2 from the 1975-80 work at Binchester, DUR 1 (C). All come from the northern part of the study area; the latter three are associated with Roman military occupation, whilst the Lincoln group may be related to the Legionary occupation or, if not, is probably composed of material deriving from it. Careful examination of the groups suggests that there are significant areas of similarity between them. All are highly Romanized, possessing only small Iron Age/Transitional components. Additionally the percentages of oxidized Roman coarse wares present are comparable as is shown when the figures for flagons (which almost invariably occur in oxidized wares) are added to those of the general 'Roman coarse oxidized' category. Thirdly, Rusticated jars are a frequent element amongst the groups. Further, fine wares demonstrably form a very small fraction of these groups (independent of which measure is employed) and indeed samian is revealed to be rare amongst the groups from Lincoln and Hayton. Samian present amongst the Flavian group from Blake St, York, amounts to over 16% of the group by weight, 26.87% by count. These conspicuously high percentages are apparently explained by the fact that an abnormal deposit has been incorporated into contexts of this phase (*cf.* discussion under 5.2.8 (iii)). Consequently samian has been excluded from the analysis of this York sample and from Table 9.11 and Figure 9.11 since its inclusion would 'skew' the other figures (*cf.* 2.2 (F)). It may be a mute point whether material identified as 'exceptional' and as arising perhaps from an abnormal event, such as with this samian group, should be excluded or included in quantitative analysis. It should be recognized that the presence of unusual quantities, whatever the reason, is of archaeological interest and that their occurrence should be a matter for investigation. The question also arises as to whether there may exist a bias in the recognition of these exceptional deposits since they may be more readily identified in the case of samian and other speciality wares).

The consistency of these four samples seems unlikely to be explained by shared sources of supply. Rather, it is probable that similarities arise from the fact that the consumers were in all cases military, and perhaps related personnel, with particular definitions and expectations of what pottery they required and that these evaluations were shared with potters who were operating locally or regionally. (Detailed study would be required to substantiate this claim and this cannot be undertaken here; however, this seems a reasonable working hypothesis).

9.8 GROUPS DATED AS (LATE) FLAVIAN TO TRAJANIC.

Six groups within the current survey are dated as (late) Flavian to Trajanic. The composition of these groups by relative frequency is documented in Table 9.12 and the figures when weight is the index of measurement are plotted in Figure 9.14. The groups again display some significant similarities, with the exception of the group from St Nicholas Circle, LEI 13 (AZ). The latter group apart they each contain a high proportion of Roman pottery and a wide range of Roman types.

Consideration of the groups from Leicester is complicated by the fact that in the case of the pottery of phase 2A at Harvey Lane, LEI 13 (AN) only RE data are available. One aspect of these Leicester groups is the erratic frequency of samian within them. Samian is the most frequent class amongst the phase 2A group from Harvey Lane where it constitutes 38.91% by RE. This seems a high proportion by any comparison. However, when other groups from Leicester are considered, though the percentage is revealed to be relatively high, it is evidently not entirely anomalous. Samian, for instance, amongst the contemporary group from St Nicholas St, Leicester, LEI 13 (AS), is the second most common category by weight forming 18.59% of the group and the third most common by sherd count, accounting for 22% by this measure (Table 9.12). In addition when RE is the measure samian forms 15% of the Phase 4A group from St Nicholas St (AS), dated as Trajanic (Table 9.13) and 15% in the phase 3 group at Bath Lane, (AW), dated as Flavian, (Table 9.11). Yet amongst other groups of the late first century/early second century this ware forms only very small proportions. In the case of the phase 3 group from St Nicholas Circle, LEI 13 (AZ), dated as late Flavian to Trajanic, samian forms 1% by weight, 3% by count (Table 9.12), in the Trajanic phase 4 group from Bath Lane, LEI 13 (AW), samian formed less than 1% by all measures (Table 9.13), whilst the phase 4 group from Blackfriars St, LEI 13 (BE), of Flavian date, contained no samian (Table 9.11).

All of these groups derive from locations at or near to the centre of the later Roman town and all are of sufficient size for the results of quantitative analysis to be considered reliable (*cf.* Table 9.1). Hence this variability should not be a product of sample size or differing basic sample areas. Normally we would expect Roman pottery, and in particular samian ware, to be distributed in a non-random, structured manner. At present it is not possible to identify any regularity within this samian distribution at Leicester (though an examination of the ratios between particular samian form types might prove illuminating). An obvious response is to suggest that it must result from different functional and status areas within the town. This may be so, but what this evidence highlights is the fact that little is known about the calibrated spatial distribution of types of Roman pottery across major sites (or indeed of any artefact class). An important avenue for future enquiry must be to undertake such studies particularly in the case of specialist and diagnostic pottery types. Until the results of such work are available it will remain unclear whether this 'inconsistent' distribution at Leicester is a normal or abnormal phenomenon.

A number of other aspects of these Leicester groups warrant discussion. Table 9.12 reveals that the trend identified within the groups of Flavian date from Leicester for unoxidized Roman coarse wares to be more common than the oxidized Roman coarse pottery (*cf.* Section 9.7) evidently continued into the Trajanic period at this site. The pattern remains evident amongst the three groups from Leicester of Trajanic date (Table 9.13).

In terms of the Romanization of pottery consumption at Leicester amongst this turn of the first century sample the groups from St Nicholas St, LEI 13 (AS) phase 3, and St Nicholas Circle, (AZ) phase 3, contain higher proportions of Roman pottery than groups from earlier phases at these respective sites. This is most clearly seen in Table 9.2 where groups are listed per site and where the progressive (chronological) decline in the proportion of Iron Age/Transitional pottery amongst groups from these two localities is revealed.

Finally, in considering these Leicester groups it is notable that the phase 3 group from St Nicholas Circle (AZ) contains a very high proportion of Iron Age/Transitional wares. When viewed with contemporary groups, as in Figure 9.14, the group is conspicuous. The phase 2 group from this Leicester site displayed a similar pattern amongst the Flavian groups (*cf.* Section 9.7). One possible explanation is that the site lay close to an area producing vessels in traditional or transitional fabric(s). However, the Iron Age/Transitional material amongst these early groups from the site is not dominated by any one (or two) fabric types as might occur if a production site lay close by; rather a variety of traditional/Transitional fabrics are represented. It is possible that this arises from the presence of an abnormally large amount of residual pottery; alternatively it may reflect a specific functional area.

Two groups amongst this late Flavian to Trajanic sample are from Lincoln (Table 9.12) both being from the East Bight 1980-1 excavation, LIN 17 (V). Group 6 is from a pit, Group 7 from a layer; both should be post Legionary. The Iron Age/Transitional element amongst these groups is quite prominent despite their comparatively late date. Of special note here is the comparison with two earlier groups from Lincoln, namely that from the early levels at East Bight 1964-6, LIN 17 (K), and the pit group from The Lawn site, LIN 17 (W) (Table 9.2). The relative frequency data suggest Iron Age/Transitional pottery to be markedly more common (by weight and count) amongst these two later, post Legionary, groups from East Bight 1980-1 than amongst the aforementioned Legionary groups. This may imply that the supply of fully Romanized pottery to Lincoln was adversely effected by the redeployment of the Legionary garrison, since the movement of a large body of consumers may have disrupted extant marketing arrangements. Further samples of relevant date would be desirable to investigate this possibility.

The other group of late Flavian-Trajanic date is that of phase 2 from the 1975-80 work at Binchester, DUR 1 (C) (Table 9.12; Figure 9.14). The group is predominantly Roman in common with the other groups from the site examined here. The proportions of the different

Roman categories present closely mirror those of the Binchester group examined in the previous section (9.7; though Rusticated ware is more frequent). Figure 9.17 shows the composition of the earliest three groups from the 1975-80 work when weight is the measure. The contrast between these groups and those from Stanwick, NYK 23, (eg. Figure 9.15) which lies only c. 20km to the south (accepting that the latter are of slightly earlier date) is emphatic. In contrast to the groups from Binchester the samples from Stanwick, as discussed, are dominated by Iron Age tradition pottery, whilst within their Roman components fine wares and amphorae are markedly prominent (eg. Section 9.5).

9.9 CONCLUDING SUMMARY: GENERAL TRENDS AND OBSERVATIONS.

The quantitative analysis of the dated groups detailed and discussed in the course of this chapter has highlighted a number of important trends. Some of the salient points may be restated in summary form here as an appropriate conclusion to this thesis. Through this thesis the quantitative data have frequently revealed consistent and intelligible patterns, many of which correlate with other types of evidence. That this is so suggests the methodology to be useful and reliable.

The analysis shows that a progressive and unequivocal decline occurs in the frequency of Iron Age/Transitional pottery and there is, by the turn of the second century A.D. a seemingly universal Romanization of assemblages. This development tallies with trends observable in other types of material evidence suggestive of a broad social process.

It is clear that the earliest groups examined, all of which derive from sites commonly suggested to be oppida (or similar) and which are of LPRIA date, contain either no Roman pottery or only minute quantities. Hence if these sites were of high status during this period this ranking is not convincingly reflected in the presence of imported pottery. In fact within this region it is normal during this period for such pottery to be absent or represented only very infrequently. Further, if Romanization was underway before the conquest in this region then it is not manifest amongst these groups. This evidence does not, however, conflict with the model suggested by Haselgrove (1984a; 1987a) since in terms of the model this region is on the periphery of contact. Two other points are relevant. First, following his doctoral study of cross-channel contact in the LPRIA, which focused upon southern Britain, Fitzpatrick concludes that the quantity of Roman material culture entering LPRIA Britain was comparatively small, and smaller than its archaeological profile would suggest (1989a; 1989b). The impression from the current study area concurs with this. Further, Fitzpatrick is sceptical as to whether this material played an important role in social change in southern England in the LPRIA (1989a; 1989b). Whatever interpretation is preferred the possibility that the value of this material was enhanced by its rarity (eg. Haselgrove 1982a; Millett 1990, 98) might be borne in mind, especially when evaluating the present material.

The evidence assembled through this thesis consistently distinguishes Leicester as exceptional. It received unusually high quantities of imports in the pre-Claudian period and, for instance, no site in the region has more recorded SGSW, Gallo-Belgic or amphora types than Leicester. This pottery evidence accords with other indices of site status, such as the presence of coin flan tray fragments (Clay & Mellor 1985, 30 & 69-70). That the ceramic assemblage of the site is extraordinary seems apt given that the site developed into a civitas capital.

Amongst the Claudian and other early groups examined here the high proportions of Roman pottery within the groups from Redcliff (and indeed the character of this material) mark this site out as different. The locality of the site, on the boundary of two cultural and tribal entities, point to it being an example of an exchange centre located at tribal peripheries (perhaps a segregated traders enclave) where embedded social and other controls may be less rigid (*cf.* Hodder 1982a; Millett 1990, 165-74). It is possible that the enigmatic settlement at Old Winteringham constituted an analogous site on the opposite side of the Humber.

There is some evidence from within the region (eg. from Ancaster) to suggest that groups from (presumed) military sites of the Claudian-Neronian period might contain little Roman pottery. Hence if pottery were to comprise the only available evidence from these sites (eg. comparatively small samples from surface collection) they may not necessarily be recognised or identified as military. This is contrary to what is often supposed of these sites and gives weight to the suggestions of Greene (1977) and Darling (1977; 1981) that individual units made their own (? local) arrangements *vis-à-vis* pottery supply. Later, by the Flavian period, military sites from within the region (eg. from Hayton, York, Binchester and, seemingly, on the basis of qualitative survey, Malton, Brough, Castleford and Ebchester as well) appear to have more strongly Roman assemblages. However, this may not be a reflection of changed military organization (eg. more systematic arrangements for pottery supply) since it still concords with Darling's argument that military supply was determined by location and availability of local supply: all of these sites are in the northern half of the study area, where local indigenous pottery producers were unlikely to have been able (or perhaps even willing) to cater for the requirements of the Roman army; hence individual units will have had to produce their own vessels (*cf.* Greene 1977). This is consonant with the evidence from elsewhere in Britain at this time, including the presence of pottery kilns adjacent to forts (Greene 1977). (The question of a distinction between supply to auxiliary and Legionary units is an important one, though this has been considered above (*cf.* 9.4)).

At all sites through the second half of the first century A.D. a general trend towards more Romanized groups can be observed from the data but this seems to have been slower to occur at some sites (such as at Old Sleaford and Dragonby) than others. This quantitative evidence shows there was a not inconsiderable time lag following the conquest before this process became manifest. This pattern is mirrored by the evidence of the incidence of SGSW and mortaria examined above (*cf.* Chapters 5 & 7) where it was established from the dated material that at native/civilian sites Roman ceramic items become more frequent during the late Neronian-early Flavian period, that is, a generation after A.D. 43. At these sites there was no sudden change in the composition of groups and exchange networks do not appear to be smashed by the advent of Rome.

The evidence of the distributions of imports shows that these were not a function of geography (*cf.* Note 1.2). They closely relate to site type and status. One of the most emphatic aspects of the study is the differing character of supply to military and non-military sites. Military sites, for instance, tend to have a greater range of samian forms present than do civilian/native sites. Gallo-Belgic pottery in quantity and variety is a feature of indigenous sites whereas the distribution of Lyon ware is closely associated with the Roman military. There are also marked differences amongst other ceramic types, for example, in Chapter 6 evidence was presented showing that amphorae assemblages at military sites are dominated by olive oil amphorae, whilst at native/civilian sites wine amphorae are the more common. That difference exists between Roman military and non-military sites has often been recognized but has, to date, rarely been shown through quantitative data. The characterization of differences needs to be taken forward.

Across the region the large nucleated centres of the LPRIA and mid first century A.D. seem, consistently, to have attracted disproportionate quantities of Roman fine ware, amphorae, etc. That amongst the non-military sites these centres at no stage have a monopoly of these imports is indicated by the fact that examples occur with some regularity at other types of site, including those of apparently modest status. The character of the distributions suggests that (?) most sites were networked with wide distribution systems (*cf.* Millett 1990, 98-9) though the extent of access may have been limited.

Another pattern which emerges from these data is that phase groups regularly have more in common with groups of different date from the same site (or locality) than they do with contemporary groups from other sites. Various reasons may account, or partially account for this. Residuality may be a factor, however, the existence of this pattern implies that supply and marketing may have been largely organized and focused locally and slow to change. In isolating such site specific continuities it may be that something of the particular identity of a site and/or its supply connections has been highlighted.

This survey has shown by qualitative and quantitative means that pottery distributions of the first century A.D. are structured. It has been demonstrated that site type, status and identity appear to significantly determine the character of assemblages in this transitional period. There is too a strong regionality apparent in the incidence of many categories of pottery which evidently reflects enduring cultural differences. However, the data also show a general and emphatic trend towards the Romanization of ceramics consonant with wider social changes. The research has suggested many directions in which study may be advanced in the future. An important priority is for other synthetic studies to be conducted, similar to the current one, so that patterns may be contrasted and a broader understanding developed. The results of the present work suggest that this avenue will be rewarding.

NOTES TO CHAPTER ONE.

Note 1.1.

It does occur in contexts of Trajanic date, though in small quantity. The presence of this fabric in assemblages is a useful dating index.

Note 1.2.

No map(s) showing the physical geography of the study area is included in this thesis. The reasons for this are implicit from the content of section 1.3. It is the author's opinion that physical geography did not exert an over-determining influence upon culture and society during the period under review. To include such maps, discussion, etc. here would serve little purpose for the material is not examined against the background of the physical environment, rather, emphasis is given to the social, political and economic milieux of the distributions.

In the circumstances the author believes that to include maps and discussion of the 'physical environment' would, to a degree, be insincere and misplaced in a thesis with the above aims. Moreover, there would exist a danger of reproducing a traditional geographical introduction which, as Braudel notes: "one finds placed to such little effect at the beginning of so many volumes" (1980, 3). Further, the current author contends that environment is a social construct. Viewed from this perspective environment is, as Moreland has observed: "not an objective and determining force, as in the geohistorical *longue durée*, but an integral part of the *mentalite* of past human populations" (1989).

Note 1.3.

It is entirely possible that the southern fringe of the research area lay within the Catuvellaunian dominion (Branigan 1985, 26-30); the alternative possibility is that it lay within the territory of the Corieltauvi.

Note 1.4.

The author recognizes that this is a term which carries much conceptual 'baggage' and requires 'unpackaging', that is, examining critically.

Note 1.5.

It is curious that he concludes that these political changes are the result of external factors at the end of a review in which the long term dynamics of Iron Age society in Britain are prominently stressed.

Note 1.6.

The copying of the form of imports was not simply restricted to execution on the wheel; there are numerous examples of imitations of imported wheel-made forms produced by hand, perhaps with the assistance of a turning board.

Note 1.7.

The term Roman is used here to label all imports to Britain from the Empire.

Note 1.8.

This is apparent from personal research by the author in the source region including examination of Museum collections at Amiens, Chalons-sur-Marne, Epernay and Laon Museums and of excavated and surface collected assemblages from the Aisne Valley. A systematic study of this phenomenon is required.

Note 1.9.

In general it is reasonable to assume that particular pottery types were produced and employed for specific uses, such as transport, storage, food preparation and consumption; form and function are likely to be closely related. (It must be borne in mind, however, that the use of any vessel would not have been 'closed'). In some cases the standard function of certain classes or forms is known from objective evidence (eg. as with the globular amphora, Dressel 20, which is known, from epigraphic evidence to have contained olive oil (Sealey 1985, 67-75)). In other cases vessel function may be strongly implied or interpreted from characteristics of fabric, form and finishing (Lambrick 1984, 169). In the case of form, for instance, two examples are illustrative: large bodied narrow necked and handled vessels, often with an apparent spout for pouring, are conventionally interpreted as liquid containers, namely flagons (eg. Hawkes & Hull 1947, 241-6); similarly small hemispherical vessels which fit the hand comfortably are interpreted as drinking cups. Interpretations such as these are attractive being reasonable from a practical point of view. Rather less satisfactory is, of course, the surmising of usage on the basis of analogy (*cf.* Hodder 1982b, 9-27), for instance, it has been suggested that 'Pompeian Red' ware dishes were used as 'non-stick pans' for baking (Peacock 1977c, 147; Boon 1967, 40 & Note 1; Greene 1979, 129; Okun 1989, 46). In a range of cases the nomenclature associated with a form is evocative of a specific usage, instances being the so-called 'honey-jar' and the 'pie-dish'. This may be misleading and is undesirable. The function/s of some forms, however, remains obscure, as in the case, for example, of (so-called) pedestal urns (Elsdon & May 1987, 13).

More research is required in this field to establish customary uses of vessels. Some important advances have been made recently through the chemical analysis of organic residues both on and contained within vessel walls (eg. Heron & Pollard 1988; Heron 1989; *cf.* Needham & Evans 1987, for a non-Roman example). This work may eventually provide an objective control upon imputed function. Patterning in the occurrence of limescale and carbonized residues may be a broad guide to the customary usage of types (eg. Lambrick 1984, 169; *cf.* Swain 1987, 64).

Note 1.10.

The evidence from the Bath Lane site, Leicester, LEI 13 (AW), is of interest in this connection, with a shift occurring from a cattle/sheep/goat bias in phase 1 to a pig bias by phase 3 (late first century A.D.); though it should be noted that the sample size is modest.

NOTES TO CHAPTER THREE.

Note 3.1.

Whilst sherds and vessels may be classifiable as belonging to this category on the basis of possession of certain diagnostic attributes of form, fabric, decoration, etc., it is nonetheless true that the categorization of pottery as culturally Roman may arise from its context of recovery and associations.

NOTES TO CHAPTER FOUR.

Note 4.1.

This impression was confirmed by Drs Peter Scott and Arthur Fraser, of the School of Geography and Earth Resources, University of Hull (pers. comm. February 1989). The latter, who is a clay mineralogist, emphasized the fact that there is a: "remarkable monotony" about the coarse constituents within the boulder clays, drift deposits and glacial gravels of the north of England, rendering it: "impossible to differentiate" likely production sources on petrological grounds (pers. comm. February 1989; *cf.* Catt & Penny 1966; Madgett & Catt 1978).

Note 4.2.

Dr Tony Johnson of the Department of Geological Sciences, University of Durham, kindly arranged for inclusions to be identified by thin section analysis. The work was undertaken by Dr C.H. Emeleus who supplied a report. Dr Johnson added a commentary. The author is grateful to both. Six sherds were sampled, all from stratified contexts; sample No.1 came from a rim sherd illustrated in the report (Long 1988, Fig.3 No.125).

Note 4.3.

Alternative interpretations are that either the vessels were manufactured elsewhere, that is to say, in an area where the inclusion types represented occur *in situ*, which would mean the Midland Valley of Scotland, or perhaps Derbyshire, or that the rocks actually travelled though human action, possibly as items of exchange.

Note 4.4.

In his unpublished note on the petrology Dr Johnson observed that since all the inclusions were from rocks commonly present in boulder clay this was their likely source. Moreover, he concluded that: "the presence of fresh Whin Sill dolerite is interesting and suggests that the potter may have chosen this particular rock for the ... mixture".

NOTES TO CHAPTER FIVE.

Note 5.1.

Sherds of Central Gaulish Samian ware with highly micaceous fabric and evidently of first century A.D. date (*cf.* Boon 1967) have been recorded during the current study. The incidence of such items is noted under site Gazetteer entries. The impression gained is that sherds of this ware are occasional (rather than common or very rare) within the study area (*cf.* Dickinson 1986, 130-1), and that their frequency with regard to SGSW may be similar to that in other regions in Britain. Close examination of the distribution of this ware within the study area would no doubt be beneficial. It is important, for instance, that ratios between these two contemporary ware types are calculated so that impressionistic evidence may be tested and objective patterns established.

Note 5.2.

These dates are, of course, simply the date suggested by the aggregate dates of similar material which is, itself, in some way 'dated'.

Note 5.3.

Two sites on the margins of the research area, both closely associated with the Roman military, have each produced examples of Drag. 24/25 and Ritt. 9. The sites are Strutt's Park, Derby (Forrest 1968, 164; ids B. R. Hartley) and Red House, Corbridge (Hanson *et al.* 1979, 40). The foundation of the Red House site should be contemporary with that at Binchester.

Note 5.4.

Owmby, LIN 27, Goldhill, NOTT 17, and Aldborough, NYK 1, are excluded from this analysis since in each case it is not yet established whether there was an early (ie. first century) Roman military occupation.

Note 5.5.

Since samian ware, indeed SGSW, was found by the author to be present in bags for contexts later in the sequence and from other season's work it evidently had not been selected out of the assemblage examined.

Note 5.6.

Such forms are known from the Aisne Valley region of France (pers. exam.).

Note 5.7.

Beakers and/or perhaps jars, apparently in TN are recorded at Leicester, LEI 13, from a number of assemblages: (AK), (AV), (AZ), (BA) and (BE) (pers. comm. R. Pollard) and a sherd from a closed form, presumably a beaker, is now known from Stanwick, NYK 23 (B).

Note 5.8.

The extent to which such processing may result in the under representation of Cam. 113 in quantified groups in terms of weight (and by implication sherd count) can be established by comparing the mean weight for the type (as indicated by complete examples) with the mean for the quantified sample as suggested when the total weight for the type is divided by the RE total.

Note 5.9.

In her Gazetteer of Gallo-Belgic wares in Britain Timby (1982, Appendix 1) lists the presence of Cam. 7 in TN at Dragonby on the basis of information supplied by Jeffrey May. This appears to be a mistake: there is no entry in her Gazetteer for TR at Dragonby though this fabric is present and indeed the entry under TN could well be a conflation of TN and TR present there for Cam. 7 or 8 is recorded at Dragonby in TR. No examples of Cam. 7 in TN were encountered by the current author when the Gallo-Belgic material from Dragonby was examined, nor is there any reference to this type in the draft pottery report (Elsdon & May 1987).

Timby also lists Cam. 7 in TN from Old Winteringham referencing the 1976 excavation report (Stead 1976), SHU 7 (A). Again this appears to be erroneous since no such examples are listed in the report (eg. Rigby 1976, Fig.63) and none were encountered by the current author when the Gallo-Belgic material from this site was examined.

Note 5.10.

Cam. 16 is recorded from a number of Flavian military sites to the north of the study area including Corbridge (Gillam 1957, 213), Burrow (Gillam 1957, 213; Rigby 1988), Camelon (pers. comm. John Dore, June 1989), and South Shields (Rigby 1988, 318), where its presence along with other early pottery presumably indicates a Flavian period fort in the vicinity.

Cam. 16 was not, however, present amongst the assemblage recovered from the 1986-7 excavations at the Flavian fort of Elginhaugh from where no TN or TR was encountered (pers. comm. J. Dore, June 1989). Nor was any TN recovered from the excavations at the Flavian military installation at Corbridge, Red House (Hanson *et al.* 1979; pers. comm. J. Dore, June 1989). Additionally, no examples of Cam. 16 were found to be present amongst the pottery from the Flavian fort and vicus at Castleford (pers. comm. P. Rush, June 1988).

Note 5.11.

At least one sherd of TN was, however, present amongst post-first century contexts at Old Sleaford 1984-5, LIN 26 (C), not included in the quantified sample).

Note 5.12.

Note that the figures for Feature 40 (FN 40) appearing in Table 11 and on Figure 5.50 include a small amount of Gallo-Belgic pottery from a sealed deposit immediately overlying the main cut of the feature but which appears to be related to its filling; however, the pottery from this deposit is not included in the quantified figures appearing on Tables 5.6 to 10.

Note 5.13.

There is some evidence for this general trend in the case of the pottery from phase 1 at the Blackfriars St site, Leicester, LEI 13 (BE), which is believed to be of pre-conquest date (*cf.* 5.2.8 (iii)). Here TR comprises 17.87% of the TN/TR component, compared with the mean for seven assemblages of 14.97%.

Note 5.14.

Examples of the other imported early fine wares studied by Greene (1979) are virtually absent from the study area, a fact which conforms with their general rarity in Britain (*cf.* Willis 1990a); where they do occur their incidence is recorded in the Gazetteer.

Note 5.15.

Greene recorded a total of 197 cups compared to 102 beakers on a number of vessels represented basis (1979, 16-7) during his: "systematic examination of virtually all the relevant museum and excavation collections up to 1972" (Greene 1979, 36).

Note 5.16.

The beaker from Newstead (*cf.* 5.4.1 (ii)) is a case in point. Similarly a roughcast beaker from Brough, NHU 3 (B), published by Wacher, appears from its drawing, as though it might be Lyon ware and is described as having a: "white fabric with olive-green metallic slip" (1969, 150, Fig.60 No.160); that it is dated as: "probably late Antonine" may simply arise from its association with a group of second century pottery. Unfortunately this item has not been encountered amongst pottery from (B) examined by the current author, and hence its identity cannot be established with certainty.

Note 5.17.

The cup represented at High Cross, LEI 11 (C) is rouletted; two cups from East Bight, Lincoln, LIN 17 (K), have applied, so-called, 'raspberry roundels' with 'leaves', whilst another from the same provenance has 'scale' decoration.

Note 5.18.

The identification is known to the author from an archive drawing of a base and lower wall profile of a roughcast beaker and identified as Lyon ware by Sheila Elsdon; the sherd(s) themselves have not been seen by the current author.

Note 5.19.

Note that the percentages of the Binchester sample, DUR 1 (C), derive from groups which do not include samian (*cf.* 5.2.8 (i)).

Note 5.20.

However, note that if the pottery from Phases 1 and 2 at Binchester is summed (which is justified since the former represents pre-constructional activity and the latter deposits associated with the earliest building, of early Flavian date, presumably a fort building (Ferris & Jones forthcoming)), Lyon ware comprises merely 0.12% of the total by weight, 0.43% by count.

Note 5.21.

One site which has produced a comparatively large sample of Lyon ware is the Claudio-Neronian site at Kingsholm Close, Kingsholm (159 sherds/725g: Hurst 1985, Table 1). Unfortunately the relative frequency of Lyon ware as opposed to SGSW amongst the assemblage cannot be established from the data presented in the report (Hurst 1985). Significantly it may also be noted that the site appears to have produced no TR and comparatively sparse TN (5 sherds/22g: Hurst 1985, Table 1).

NOTES TO CHAPTER SIX.

Note 6.1.

In the current study specific types of amphorae are identified by the use of the name (or names) by which they are most commonly known (eg. Dressel 20, Haltern 70, etc.); most, but not all of the types considered here appear amongst the class categories of Peacock and Williams (1986). Where this is the case, in the Gazetteer and in the Appendices (6.2 to 4.84) the Peacock and Williams class number(s) is specified alongside the common name.

Note 6.2.

There will probably always be sherds that we cannot allocate to forms, and fabrics we will not be able to closely source.

Note 6.3.

The note in the report on the 1919-21 excavations at the Roman fort at Ilkley, WYK 3 (B), (Woodward 1926, 258-9) seems exceptional.

Note 6.4.

This item is presumably the lower half of a Cam. 186c now on display in the site museum (pers. exam. July 1992).

Note 6.5.

Curiously this phenomenon is not alluded to by Williams (1990).

Note 6.6.

Dressel 2-4 is also represented amongst the assemblage from the site of the Claudian-Neronian fortress at Longthorpe (Wilson, M. G. 1974, 97, & Fig. 51 No.2) where a rim and a handle from different vessels were recovered. The fabrics have not been sourced.

Note 6.7.

Two apparent mis-identifications may be noted. In the report upon the pottery from the Skeldergate and Bishophill Senior sites at York, NYK 28 (J) and (I), Perrin records the presence of a Dressel form 2-4 in a Tripolitanian fabric (1981, 61). However, this appears to be a mis-identification for Williams has stated that the form was not made in Tripolitania (1990, 345). In his report upon the excavations at Hayton, NHU 14, Johnson publishes an illustration of a handle fragment which he describes as: "from 'Coan' [*sic*] type" (1978, 92, Fig.22 No.4), that is Dressel 2-4. However, that this allocation is problematic is suggested both by the illustration, which shows the sherd to be less than diagnostic of form, and the fabric description. The handle form, for instance, is not bifid but has a single central groove along its exterior face; whilst this form of handle is not unknown on form 2-4 (*cf.* Sealey 1985, 37), it is unusual. The sherd as published could perhaps be from a Dressel 7-11 form.

It may also be recorded here that the identification of vessels of Dressel 2-4 form from Great Casterton, LEI 10, seems highly probable. The site appears to have produced one or two examples of Dressel 2-4 though the identifications are not completely assured. An illustration of an amphora rim fragment from the excavations of the early 1950s, LEI 10 (A), was published by Gillam (1954, 7, Fig.2 No.1). Both it and a handle sherd were stratified in sealed deposits ante-dating the town wall and rampart and are said to derive: "from tall Italian amphorae, probably of first century date" (1954, 7). This implies that the items were of Dressel 2-4 and indeed the drawn rim appears to be an example of the type. The handle sherd is said to be peaked, a feature of the 2-4, though it is also reported to be three-ribbed, whilst those of the Dressel 2-4 normally comprised of two joined rods. It is stated that the rim and handle were found in association, but that they may be from different vessels. The fabrics represented are said to be similar, the rim being: "smooth pinkish-white" (Gillam 1954, 7).

Note 6.8.

Sealey states that Cam. 184 is known from Iron Age contexts in Britain, though to date, all examples are from Essex (1985, 134); he lists the Lexden tumulus as a find-site following Peacock (1971, 183). Williams, however, doubts that Cam. 184 was ever present amongst the amphorae from this burial (1986, 125). Subsequently Williams has stated that: "There is now no evidence to suggest that this type of amphora arrived in Britain during the pre-Roman

Iron Age" (forthcoming); yet this claim appears to overlook the fact that an example is recorded from Period 1 at Camulodunum (Hawkes & Hull 1947, 251-2 & 280).

Note 6.9.

With regard to the date of the arrival of the Pélichet 47 in Britain it is relevant to record that no amphorae of this form were recovered during excavations at Sheepen in 1970 (Sealey 1985), and possibly only one was present amongst the Camulodunum assemblage, this being unstratified (Hawkes & Hull 1947, 253); this provides further evidence for a post c. A.D. 60 debut for the form in Britain).

Note 6.10.

Dressel 20 is recorded from a number of Roman military sites of the first century A.D. on the fringes or to the north of the study area. It is documented at Longthorpe, where it was recovered from both the site of the Claudio-Neronian fortress (Wilson, M. G. 1974, 97, Fig.51 Nos 3 & 5) and the associated 'works depot', from where at least five rims were forthcoming, (Peacock 1987), and Inchtuthil (Darling 1985, 333-5, Fig.101 No.72). The form is also known from the fort sites of Elginhaugh, (pers. exam. June 1989), and Strutt's Park, where a rim of first century form was found unstratified at the site of the (?) late Claudian to early Flavian fort (Dool 1986, 28, Fig.10 No.2), as well as the so-called 'supply base' at Corbridge Red House, of Flavian date (Hanson *et al.* 1979, 53-4).

Note 6.11.

Dressel 20 may be represented at Stanwick, NYK 23, since amphorae body sherds in the Baetican fabric were recovered in the course of the 1981-9 work. However, none of these are diagnostic of the Dressel 20 form. Since a rim sherd from a late Haltern 70 amphora, which also occurs in the Baetican fabric, has been recovered from the site (*cf.* 6.3.11) the body sherds in question may actually be from this latter form, not Dressel 20.

Note 6.12.

Fitzpatrick documents Leicester amongst his list of British find-sites of Dressel 20 in later Iron Age contexts and cites the Blackfriars site, that is to say, these sherds from Phase 2 (Fitzpatrick, 1989 Fig.8 & Appendix 6.2), however, he does so without qualification. Given that these sherds may easily be from a post-conquest arrival (Clay & Mellor 1985, 23, for the dating of the phase) this ascription by Fitzpatrick seems to be erroneous.

Note 6.13.

The form is also known from native/civilian sites of apparently modest status in Northamptonshire, for instance, Ashley (MacRobert 1985, 101, Fig.9 No.36), a site which lies just outside the study area on the south bank of the Welland opposite Medbourne, LEI 18.

Note 6.14.

The bottom part of an amphora of Cam. form 189 may have been recovered at Aldborough, NYK 1, since Charlesworth mentions that: "A substantial part of the base of a narrow, carrot-shaped [*sic*] amphora is [on display in the museum]" (1970, 19). However, no part of an amphora of Cam. 189 form was seen by the current author during a visit to the site museum (3.7.92). The bottom part of a Cam. 186c amphora is on display though and it may be this item to which Charlesworth is actually referring.

Similarly Jarrett reports the presence of a sherd from: "a carrot-shaped [*sic*] amphora which might have been current in the first century" amongst the pottery from the 1950s excavations at the fort at Ebchester, DUR 6, (Jarrett 1960, 218). Again it is not known by the current author whether this item is actually from a Cam. 189 or from some other amphora form type.

Note 6.15.

The only evidence for the consumption of dates in Roman Britain comes not from a military site *per se* but from a burnt horizon within the *colonia* at Colchester, believed to be of Boudiccan date (Murphy 1984); the consumers would almost certainly have been retired Legionaries and their families.

Note 6.16.

Okun records that: "The type of amphora found in the Upper Rhine area changes after the Roman conquest ... though ... there is a greater diversity of types" (1989, 43-4). The implication is that the conquest is the cause of this alteration, however, in fact it probably simply reflects what was happening in the western Empire anyway.

Note 6.17.

These comprise assemblages from Leicester, St Nicholas St 1965-6, LEI 13 (AS) and St Nicholas Circle 1969, (AZ) (no RE data is available for either), Lincoln, East Bight 1964-6, LIN 17 (K) (no RE data) and York, Blake St, NYK 28 (Q) (count data only).

NOTES TO CHAPTER SEVEN.

Note 7.1.

The social and/or practical value of mortaria may be indicated by the frequency of repaired vessels, since this might be viewed as an index of how easy or difficult it was to replace vessels. Examples of mortaria of the period apparently reconstituted by means of lead riveting are known, for instance, from within the study area at Old Winteringham SHU 7 (A) (Hartley, K.F. 1976, 117, Fig. 54 No.1) and the Flavian fort at Hayton, NHU 14 (A) (pers. exam. 15.3.91); whilst it is unclear whether the hole bored through a wall-sided mortarium from the Jewry Wall site, Leicester, published by Kenyon (1948, 139, Fig.37 No.17) was for a rivet or otherwise.

At least three of the 132 (minimum) mortaria recovered at Sheepen in 1970 are reported as displaying rivet holes (Hartley, K.F. 1985, Catalogue of the Mortaria, microfiche). This constitutes 2.22% of the mortaria. The latter figure is considerably higher than the 'average' established recently by Evans for five Roman assemblages, that is, including all pottery types, (Evans, J. forthcoming A). This relatively high percentage at Sheepen seems all the more conspicuous considering the fact that replacement vessels should have been more readily accessible at the site than virtually anywhere else in the country at this time. Other factors may of course be operative here, for instance, attempts at reconstruction could be considered more feasible with thick-walled vessels such as mortaria than with thinner, more fragile forms. Systematic quantitative information on this phenomenon from both military and native/civilian assemblages would be desirable.

Note 7.2.

It is possible that Colchester was the site of the potteries of Hartley's Groups I and II, or some of them. However, a strong case against Colchester being the source is put forward by Hartley (1977).

Note 7.3.

The documented finds are of items dated as later first century or later first/early second century. No items dated exclusively or principally to the second century are included.

Note 7.4.

Amongst a total of 23 mortaria, dating to the period c. A.D. 70-100, recovered from the fort and vicus at Ilkley, WYK 3, only one is from the Verulamium region (Hartley, K.F. 1966).

Note 7.5.

Whether the four vessels of the form recovered during excavations on the line of the Legionary and subsequent western defences in 1969 (Radley 1972, 63, Fig.17 Nos 1-4) are included in Hartley's 1971 listing is not clear to the current author.

Note 7.6.

A mid to late Flavian date seems probable for this vessel, though the rim profile is similar to one from Camulodunum (Hawkes & Hull 1947, Fig.53 No.33). Two sherds which may be from mortaria were recovered at Wheeler's site F, but equally these items may be from amphorae (pers. exam. 22.5.89). Three sherds (from two vessels) were recovered during the 1980s work, NYK 23 (B), but these need not be first century in date either on typological or stratigraphic grounds; on balance, they are probably later Roman.

Note 7.7.

Kay Hartley has generally included numeric information in her reports.

NOTES TO CHAPTER EIGHT.

Note 8.1.

The necessities of the current format require that general statements be made about this material, however, it must be acknowledged that the pottery comprising each of these categories displays very considerable variation with demonstrably extensive nuances of both form and fabric. Since the domain of the study is spatially wide and the timescale examined relatively long it is inevitable that the present survey is more selective and generalizing than is the case elsewhere with the current thesis.

Note 8.2.

Imitations of Gallo-Belgic platters and early samian might also be examined in detail in anticipation of enlightening results, however, space limitations preclude this here. Data for this has been collected by the author.

Note 8.3.

This class is incorporated in Thompson's B2-1, B2-3 and B2-4 categories (1982, 117-37) where a wide number of variations are illustrated.

Note 8.4.

It should be recalled here that the Camulodunum assemblage covers essentially only the latter part of the 'Belgic' ceramic phase.

Note 8.5.

Similarly hand-made Iron Age tradition pottery of the north of the study area was not adapted in a like transitional fashion, its characteristics hardly lent themselves to this end. An astonishing fusion of the two traditions has been documented amongst the assemblage from the 1975-80 excavations at Binchester, DUR 1 (C). Here several crude hand-made vessels, in fabrics typical of Iron Age tradition vessels, occur which represent attempts to produce Rusticated jar forms.

Note 8.6.

This is so in the cases of the finds from Thorpe, NOTT 32 (F), Brough, NHU 3 (A), and Great Casterton, LEI 10 (A). The vessel from Thorpe comes from a group stratified in a slot feature below the rampart of the conquest period fort; Wacher sees this as representing "pre-conquest" occupation, though in fact this is unclear (see Gazetteer entry for further details and discussion). The vessel from Brough (Corder 1934, 15, Fig.5 No.21) was apparently recovered from a feature associated with the early Flavian fort; however, the form seems somewhat early for such a context and so it may be that the item is residual material from the known pre-fort occupation (see Gazetteer entry). Finally the vessel from Great Casterton came from deposits underlying the town wall and rampart of the later civilian settlement, and not from the area of the early fort. Hence this may relate to civilian settlement outside the early fort.

Note 8.7.

A similar situation evidently ensued in north-west Northamptonshire (*cf.* Jackson & Dix 1988, 79)).

Note 8.8.

Personal examination of the pottery forms represented indicates this dating to be approximately correct.

Note 8.9.

In the case of Unit 9 only the diagnostic element was available and hence this is discounted from the analysis.

Note 8.10.

This could be a function of a lack of reporting.

NOTES TO CHAPTER NINE.

Note 9.1.

All of this data has been collected by the current author with the exception of that from Blake St., York, NYK 28 (Q), which draws upon information supplied by Dr J. Monaghan; that for East Bight, Lincoln, 1964-6, LIN 17 (K), which is extracted from Darling's publication (Darling 1984); and that for three of the five Leicester assemblages (namely LEI 13 (AN), (AS) and (AZ)) which was calculated from figures supplied by Dr R. Pollard.

Note 9.2.

Reference to unpublished plans shows that the three trenches excavated in 1984-5, comprising LIN 26 (C) all lie south and west of the 1960s trenches excavated by Margaret Jones, that is LIN 26 (B). Her site H trenches are actually coterminous with the 1984-5 trench 1. Examination of the trench provenances of the comparatively large quantity of Gallo-Belgic pottery from (B) (*cf.* Chapter 5) reveal this to have come only from Jones' Trenches A to D, whilst trenches E to H lying between c. 20-90m to the west evidently produced no Gallo-

Belgic pottery. It is probably significant that Jones trenches A to D all lie immediately adjacent to Mareham Lane whilst none of the other trenches do. Hence this evidence appears to indicate both spatial patterning in the Old Sleaford assemblage and that Mareham Lane pre-dates the Roman conquest (the latter being a possibility speculated upon by May (1976a, 9)).

Note 9.3.

From a methodological perspective it may be noted that amongst these seventeen groups, where Roman pottery is present this material registers a higher relative frequency when sherd count is the measure than when the measure is weight in ten out of eleven instances (*cf.* Tables 9.3 & 9.4). This evidently indicates that sherds of Iron Age and Transitional pottery are consistently more robust than those from Romanized types. In turn the RE data (*cf.* Tables 9.3 & 9.4) suggests that where rims from Roman types occur these produce figures which show a higher relative frequency for this material than arises when either weight or count are the measures. This suggests that vessels of Iron Age or Transitional type are heavier (and larger) than are Roman types and that the weight and count measures are bias (in the context of this pottery) if our concern is to estimate the number of vessels actually represented amongst groups (*cf.* Orton 1989, 96); this is of course, not problematic to the current thesis since the concern here is with the comparison of proportions occurring in different groups.

Note 9.4.

Comparison with the phase 2 material from the site of the basilica at Silchester (Fulford 1987) must await the final report on the excavations there.

Note 9.5.

These groups have been assigned this dating on the basis of their Gallo-Belgic, samian and Roman coarse ware elements (*cf.* Haselgrove & Turnbull 1985, 15; Millett No date).

Note 9.6.

This data verifies Haselgrove and Turnbull's intuitive statement that pottery from this area was: "rich in imports" (1985, 13).

Note 9.7.

Unfortunately no groups later than Feature 317 were quantified by the current author, hence the situation by the very end of the first century remains to be clarified.

APPENDIX 4.1 (FIGURE 4.1): THE INCIDENCE OF ANCASTER - BREEDON POTTERY.

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
BREEDON HILL	LEI 3.
BURROUGH HILL	LEI 4.
DRAYTON II, VILL SITE	LEI 6.
EAST LANGTON	TLAHS Vol. LXIV, 1990, 106.
EATON	LEI 7.
ENDERBY, GROVE FARM	Pers. comm. P. Clay.
ENDERBY, LEICESTER LANE	Sharman & Clay 1991; Elsdon 1991, Fig.9.
HARSTON	Kenyon 1950, Fig.9 No.1.
LEICESTER	LEI 13; Kenyon 1950, Fig.15 No.3.
LOUGHBOROUGH	LEI 15.
MARKET HARBOROUGH	LEI 17; Kenyon 1950, Fig.15 No.4.
MEDBOURNE	LEI 18.
MELTON MOWBRAY	Kenyon 1950, Fig.13 No.3.
NORMANTON-LE-HEATH	LEI 20.
SHANGTON	TLAHS Vol. LXV, 1991, 108.
SPROXTON	LEI 24.
THISTLETON	LEI 25.
TUR LANGTON	TLAHS Vol. LXII, 1988, 91; Vol. LXIV, 1990, 108; Vol. LXV, 1991, 106.
TWYFORD	Kenyon 1950, 54, Fig.15 Nos 1 & 2.
WHITWELL	LEI 26.
LINCOLNSHIRE:	
ANCASTER QUARRY	LIN 2.
CASTHORPE HILLS	Challis & Harding 1975(ii), 10, Fig.16 No.1.
COLSTERWORTH	LIN 7.
DENTON	LIN 8.
DUNSBY	Marjoram 1973, 38.
HELPRINGHAM FEN	LIN 13.
LONG BENNINGTON, MIDDLE FARM	Marjoram 1974, 20.
RUSKINGTON	Elsdon & May 1987, 68.
SALMONBY, HILL FARM	LAASR Vol. 6, 1955, 5.
TALLINGTON 37	LIN 33.
NOTTINGHAMSHIRE:	
BASSINGFIELD	Challis & Harding 1975(ii), 9, Fig.15 Nos 11-12; Elsdon 1983, 23.
BINGHAM	Elsdon 1983, 23.
DORKET HEAD, RAMSDALE PARK	NOTT 9.
DUNSTON'S CLUMP	NOTT 1.
FARNSFIELD, CARR BANK FARM	NOTT 13.
GAMSTON	NOTT 16.
HOLME PIERREPONT	NOTT 20.
NOTTINGHAM, DRURY HILL	Pers. comm. S. Elsdon, Nov. 1989.
RATCLIFFE-ON-SOAR, RED HILL	NOTT 29
SCRATTA WOOD	NOTT 30.
SHELFORD	NOTT 31.

Find-sites which do not appear in the Gazetteer are denoted on Figure 4.1 by a cross.
This pottery is known from several sites in Derbyshire, including: Little Chester (Leary 1988, 52), Swarkeston (Posnansky 1955, Fig.16 No.7) and Willington (Elsdon 1980) and these are recorded on Figure 4.1.

APPENDIX 4.2 (FIGURE 4.2): THE INCIDENCE OF DRAGONBY - SLEAFORD POTTERY.

COUNTY & SITE.	REFERENCE
LINCOLNSHIRE:	
ANCASTER	LIN 1.
EWERBY	LIN 10.
HELPRINGHAM	LIN 13.
OLD SLEAFORD	LIN 26.
SAPPERTON	LIN 30.
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1.
GRIMSBY, WEELSBY AVE.	SHU 3.
KIRMINGTON	SHU 5.
OLD WINTERINGHAM	SHU 7.
WINTERTON	SHU 11.

APPENDIX 5.1 (FIGURE 5.2): THE INCIDENCE OF SGSW.

COUNTY & SITE.	NUMBER OF SGSW FORMS RECORDED**	REFERENCE.
LEICESTERSHIRE:		
DRAYTON I VILLA	1	Info. R. Pollard 12.2.92.
DRAYTON II VILLA	1	LEI 6
GOADBY MARWOOD	2	LEI 9
GREAT CASTERTON	*9	LEI 10
HIGH CROSS	*6	LEI 11
HUMBERSTONE FARM	Several	LEI 12
LEICESTER	24	LEI 13
MEDBOURNE	Several	LEI 18
MELTON MOWBRAY, SCALFORD BROOK	1	LEI 19
NARBOROUGH VILLA	Not Known	Info. R. Pollard 12.2.92.
SAPCOTE VILLA	Not Known	Info. R. Pollard 12.2.92.
SKEFFINGTON	1	Info. R. Pollard 12.2.92.
STAUNTON HAROLD (SK 393 222)	Not Known	TLAHS Vol.XLVII 1971-2, 66.
WHITWELL	5	LEI 26
LINCOLNSHIRE:		
ANCASTER	*2	LIN 1
HORNCASTLE	*1	LIN 15 Only 1 item reported.
INGOLDMELLS POINT	2	LIN 16
LINCOLN	22	LIN 17
LONG BENNINGTON, A1 BYPASS	2	LIN 19
LUDFORD	*1	LIN 21
NORTON DISNEY VILLA	*5	LIN 25
OLD SLEAFORD	*1	LIN 26
OWMBY	*1	LIN 27
SALTERSFORD	*1	LIN 29 Only 1 item reported.
SAPPERTON	*6	LIN 30
TALLINGTON 37	Not Known	LIN 33
ULCEBY CROSS	Not Known	LIN 35
NOTTINGHAMSHIRE:		
BROXTOWE	*7	NOTT 6
EAST BRIDGFORD	24	NOTT 10
FARNSFIELD, CAMP HILL	Not Known	NOTT 12
GOLDHILL	*3	NOTT 17
LITTLEBOROUGH	Not Known	NOTT 21
MANSFIELD WOODHOUSE	*1	NOTT 23
MEERING	*1	NOTT 24 Only 1 item.
OSMANTHORPE	2	NOTT 26
RATCLIFFE, RED HILL	*1	NOTT 29
STAUNTON-IN-THE-VALE	1	UNG Mus. Id. SHW 15.11.89.
THORPE	*10	NOTT 32
WILLOUGHBY-ON-THE-WOLDS	6	NOTT 33
WOODBOROUGH, FOX WOOD	1?	NOTT 34 1 sherd, poss. SGSW
SOUTH HUMBERSIDE:		
DRAGONBY	*11	SHU 1
FERRIBY SLUICE	5	SHU 2
HIBALDSTOW	Not Known	SHU 4
NORTH KILLINGHOLME HAVEN	Not Known	SHU 6
OLD WINTERINGHAM	15	SHU 7

THEALBY MINE 'NORTH'	1	SHU 10	
WINTERTON VILLA	*2	SHU 11	
NORTH HUMBERSIDE:			
BRANTINGHAM	1	NHU 2	
BROUGH	14	NHU 3	
ELMSWELL	1	NHU 8	
FAXFLEET 'B'	2	NHU 10	
GARTON SLACK	1	NHU 11	
HAYTON	9	NHU 14	
HAYTON, GRANGE FARM	Not Known	Johnson 1978, 60.	
HULL, GREYLEES AVENUE	1	Didsbury 1990, 92.	
NORTH CAVE	1	NHU 15	
REDCLIFF	8	NHU 17	
RUDSTON	5	NHU 19	
WOODMANSEY, PARK GRANGE FARM	1	NHU 28	
NORTH YORKSHIRE:			
ALDBOROUGH	9	NYK 1	
BAINBRIDGE	6	NYK 2	
CATTERICK BRIDGE	4	NYK 3	
ELSLACK	4	NYK 6	
MALTON	*7	NYK 14	
PIERCEBRIDGE, HOLME HOUSE	Not more than 3	NYK 18	3 sherds.
STANWICK	12	NYK 23	
STAXTON, NEWHAM'S PIT	2	NYK 24	
WEST HESLERTON	1	NYK 26	1 sherd.
YORK	13	NYK 28	
SOUTH YORKSHIRE:			
DONCASTER	10	SYK 1	
TEMPLEBROUGH	*7	SYK 5	
WEST YORKSHIRE:			
CASTLEFORD	Not Known	WYK 1	
DALTON PARLOURS	Not more than 3	WYK 2	3 vessels represntd.
ILKLEY	14	WYK 3	
SLACK	8	WYK 5	
CLEVELAND:			
CATCOTE	4	CLV 1	
THORPE THEWLES	4	CLV 4	
COUNTY DURHAM:			
BINCHESTER	11	DUR 1	
BOWES	*1	DUR 2	
DURHAM CITY	2	DUR 5	1 sherd.
EBCHESTER	9	DUR 6	
GRETA BRIDGE	*1	DUR 8	

* denotes information derived from reports, or through personal research, etc. which is known not to be a a full listing of the material present.
** note that Dragendorff form 18 and 18R are here grouped as one form, as are examples of 15/17 and 15/17R.

APPENDIX 5.2 (FIGURE 5.3): INCIDENCE OF DRAGENDORFF FORM 15/17.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
LEICESTER	LEI 13
LINCOLNSHIRE:	
ANCASTER	LIN 1
LINCOLN	LIN 17
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6
EAST BRIDGFORD	NOTT 10
GOLDHILL	NOTT 17
THORPE	NOTT 32
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
REDCLIFF	NHU 17
RUDSTON	NHU 19
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
ELSLACK	NYK 6
MALTON	NYK 14
STANWICK	NYK 23
YORK	NYK 28
SOUTH YORKSHIRE:	
DONCASTER	SYK 1
TEMPLEBROUGH	SYK 5
WEST YORKSHIRE:	
ILKLEY	WYK 3
SLACK	WYK 5
CLEVELAND:	
THORPE THEWLES	CLV 4
COUNTY DURHAM:	
BINCHESTER	DUR 1
EBCHESTER	DUR 6

APPENDIX 5.3 (FIGURE 5.4): INCIDENCE OF DRAGENDORFF FORM 18.

COUNTY & SITE.	REFERENCE.	DATING.
LEICESTERSHIRE:		
DRAYTON II VILLA	LEI 6	Not Dated.
GREAT CASTERTON	LEI 10	C-N; P-F.
HIGH CROSS	LEI 11	Not Dated.
LEICESTER	LEI 13	C; N; N-EF; EF; F; LF.
MELTON MOWBRAY, SCALFORD BROOK	LEI 19	F.
SKEFFINGTON	R. Pollard 12.2.92.	F.
WHITWELL	LEI 26	N-EF; F; F-T.
LINCOLNSHIRE:		
INGOLDMELLS POINT	LIN 16	Not Dated.
LINCOLN	LIN 17	N; N-EF; EF; F; F-T.
LONG BENNINGTON, A1 BYPASS	LIN 19	Not Dated.
NORTON DISNEY VILLA	LIN 25	F.
OLD SLEAFORD	LIN 26	Not Dated.
SAPPERTON	LIN 30	F; F or F-T.
NOTTINGHAMSHIRE:		
BROXTOWE	NOTT 6	Not Dated.
EAST BRIDGFORD	NOTT 10	N-EF; F; LF.
GOLDHILL	NOTT 17	Not Dated.
THORPE	NOTT 32	P-F; N-EF; F.
WILLOUGHBY-ON-THE-WOLDS	NOTT 33	Not Dated.
SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1	Not Dated.
OLD WINTERINGHAM	SHU 7	C-N; C-EF; F.
THEALBY MINE 'NORTH'	SHU 10	Not Dated.
NORTH HUMBERSIDE:		
BROUGH	NHU 3	N-EF; EF; F.
HAYTON	NHU 14	N-F; F.
REDCLIFF	NHU 17	C-N.
NORTH YORKSHIRE:		
ALDBOROUGH	NYK 1	F.
BAINBRIDGE	NYK 2	Not Dated.
CATTERICK BRIDGE	NYK 3	F.
ELSLACK	NYK 6	Not Dated.
MALTON	NYK 14	P-F; EF; F.
STANWICK	NYK 23	C-N.
STAXTON, NEWHAM'S PIT	NYK 24	F.
YORK	NYK 28	EF; F; F-T.
SOUTH YORKSHIRE:		
DONCASTER	SYK 1	F.
TEMPLEBROUGH	SYK 5	Not Dated.
WEST YORKSHIRE:		
ILKLEY	WYK 3	Not Dated.
SLACK	WYK 5	Not Dated.

CLEVELAND:		
CATCOTE	CLV 1	Not Dated.
THORPE THEWLES	CLV 4	F.
COUNTY DURHAM:		
BINCHESTER	DUR 1	Not Dated.
EBCHESTER	DUR 6	F; F-T.

Abbreviations:

T-C Tiberio-Claudian; C - Claudian; C-N - Claudio-Neronian; N - Neronian; N-EF - Neronian-early Flavian; P-F - Pre-Flavian; EF - Early Flavian; F - Flavian; LF - Late Flavian; F-T - Flavian - Trajanic.

APPENDIX 5.4 (FIGURE 5.5): INCIDENCE OF DRAGENDORFF FORM 24/25.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
LINCOLN	LIN 17
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
STANWICK	NYK 23

APPENDIX 5.5 (FIGURE 5.6): INCIDENCE OF DRAGENDORFF FORM 27.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
DRAYTON I VILLA	Info. R. Pollard 12.2.92.
GREAT CASTERTON	LEI 10
HIGH CROSS	LEI 11
LEICESTER	LEI 13
WHITWELL	LEI 26
LINCOLNSHIRE:	
LINCOLN	LIN 17
NORTON DISNEY VILLA	LIN 25
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6
EAST BRIDGFORD	NOTT 10
THORPE	NOTT 32

SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1	
FERRIBY SLUICE	SHU 2	
OLD WINTERINGHAM	SHU 7	
WINTERTON VILLA	SHU 11	
NORTH HUMBERSIDE:		
BROUGH	NHU 3	
HAYTON	NHU 14	
REDCLIFF	NHU 17	
RUDSTON	NHU 19	(or Drag. 35).
NORTH YORKSHIRE:		
ALDBOROUGH	NYK 1	
BAINBRIDGE	NYK 2	
MALTON	NYK 14	
STANWICK	NYK 23	
YORK	NYK 28	
SOUTH YORKSHIRE:		
DONCASTER	SYK 1	
TEMPLEBROUGH	SYK 5	
WEST YORKSHIRE:		
ILKLEY	WYK 3	
SLACK	WYK 5	
CLEVELAND:		
CATCOTE	CLV 1	
THORPE THEWLES	CLV 4	
COUNTY DURHAM:		
BINCHESTER	DUR 1	
EBCHESTER	DUR 6	

APPENDIX 5.6 (FIGURE 5.7): INCIDENCE OF DRAGENDORFF FORM 29.

COUNTY & SITE.	REFERENCE.	DATING
LEICESTERSHIRE:		
GOADBY MARWOOD	LEI 9	Not Dated.
GREAT CASTERTON	LEI 10	C-N; N-EF; EF.
HIGH CROSS	LEI 11	N-EF; F.
LEICESTER	LEI 13	C; C-N; N; EF; N-EF.
WHITWELL	LEI 26	C-N.
LINCOLNSHIRE:		
INGOLDMELLS POINT	LIN 16	Not Dated.
LINCOLN	LIN 17	N; N-F; EF; F.
LUDFORD	LIN 21	Not Dated.
NORTON DISNEY VILLA	LIN 25	EF.
OWMBY	LIN 27	Not Dated.
SAPPERTON	LIN 30	N-EF.

NOTTINGHAMSHIRE:		
BROXTOWE	NOTT 6	C-N.
EAST BRIDGFORD	NOTT 10	N-EF; EF; F.
MANSFIELD WOODHOUSE	NOTT 23	Prob. late 1st century.
OSMANTHORPE	NOTT 26	Not Dated.
THORPE	NOTT 32	N-EF; P-F.
WILLOUGHBY-ON-THE-WOLDS	NOTT 33	Not Dated.
SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1	C-N.
FERRIBY SLUICE	SHU 2	Not Dated.
OLD WINTERINGHAM	SHU 7	T-C; C; C-N; N; N-EF; F.
WINTERTON VILLA	SHU 11	EF.
NORTH HUMBERSIDE:		
BRANTINGHAM	NHU 2	Not Dated.
BROUGH	NHU 3	P-F; N-EF; EF; F.
FAXFLEET 'B'	NHU 10	N-EF.
HAYTON	NHU 14	EF
REDCLIFF	NHU 17	T-C; (L)N-EF.
RUDSTON	NHU 19	EF; F.
WOODMANSEY, PARK GRANGE FARM.	NHU 28	EF.
NORTH YORKSHIRE:		
ALDBOROUGH	NYK 1	LF.
BAINBRIDGE	NYK 2	Not Dated.
ELSLACK	NYK 6	C-N (apparently).
MALTON	NYK 14	N-EF; F.
STANWICK	NYK 23	C-N.
YORK	NYK 28	C-N; EF.
SOUTH YORKSHIRE:		
DONCASTER	SYK 1	N-EF; EF.
TEMPLEBROUGH	SYK 5	N; EF.
WEST YORKSHIRE:		
ILKLEY	WYK 3	F.
SLACK	WYK 5	Not Known.
CLEVELAND:		
CATCOTE	CLV 1	N-EF.
COUNTY DURHAM:		
BINCHESTER	DUR 1	N-EF.
BOWES	DUR 2	F.
DURHAM CITY	DUR 5	Not Dated.
EBCHESTER	DUR 6	EF; F.

APPENDIX 5.7 (FIGURE 5.8): INCIDENCE OF DRAGENDORFF FORM 37.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GOADBY MARWOOD	LEI 9
GREAT CASTERTON	LEI 10
HIGH CROSS	LEI 11
LEICESTER	LEI 13
WHITWELL	LEI 26
LINCOLNSHIRE:	
ANCASTER	LIN 1
LINCOLN	LIN 17
NORTON DISNEY VILLA	LIN 25
SAPPERTON	LIN 30
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6
EAST BRIDGFORD	NOTT 10
THORPE	NOTT 32
WILLOUGHBY-ON-THE-WOLDS	NOTT 33
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
FERRIBY SLUICE	SHU 2
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
ELMSWELL	NHU 8
FAXFLEET 'B'	NHU 10
GARTON SLACK	NHU 11
HAYTON	NHU 14
HULL, GREYLEES AVENUE	Didsbury 1990, 92.
NORTH CAVE	NHU 15
RUDSTON	NHU 19
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
BAINBRIDGE	NYK 2
CATTERICK BRIDGE	NYK 3
ELSLACK	NYK 6
MALTON	NYK 14
STANWICK	NYK 23
STAXTON, NEWHAM'S PIT	NYK 24
YORK	NYK 28
SOUTH YORKSHIRE:	
DONCASTER	SYK 1
TEMPLEBROUGH	SYK 5
WEST YORKSHIRE:	
ILKLEY	WYK 3
SLACK	WYK 5

COUNTY DURHAM:	
BINCHESTER	DUR 1
EBCHESTER	DUR 6
GRETA BRIDGE	DUR 8

APPENDIX 5.8 (FIGURE 5.9): INCIDENCE OF RITTERLING FORM 8.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
LEICESTER	LEI 13
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.9 (FIGURE 5.10): INCIDENCE OF RITTERLING FORM 9.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
LEICESTER	LEI 13
LINCOLNSHIRE:	
LINCOLN	LIN 17
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH YORKSHIRE:	
STANWICK	NYK 23
YORK	NYK 28
COUNTY DURHAM:	
BINCHESTER	DUR 1

APPENDIX 5.10 (FIGURE 5.11): INCIDENCE OF RITTERLING FORM 12.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
LINCOLN	LIN 17
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
SOUTH YORKSHIRE:	
TEMPLEBROUGH	SYK 5
WEST YORKSHIRE:	
SLACK	WYK 5
COUNTY DURHAM:	
BINCHESTER	DUR 1
EBCHESTER	DUR 6

APPENDIX 5.11 (FIGURE 5.12): INCIDENCE OF SGSW DATED AS TIBERIAN OR TIBERIO - CLAUDIAN.

COUNTY & SITE.	REFERENCE.	
LEICESTERSHIRE:		
LEICESTER	LEI 13	(Tiberian).
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7	(Tiberio-Claudian).
NORTH HUMBERSIDE:		
REDCLIFF	NHU 17	(Tiberio-Claudian).
NORTH YORKSHIRE:		
STANWICK	NYK 23	(Tiberian).

APPENDIX 5.12 (FIGURE 5.13): INCIDENCE OF SGSW DATED AS CLAUDIAN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
LEICESTER	LEI 13
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10
OSMANTHORPE	NOTT 26
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.13 (FIGURE 5.14): INCIDENCE OF SGSW DATED AS CLAUDIO - NERONIAN.

COUNTY & SITE.	REFERENCE.	
LEICESTERSHIRE:		
GREAT CASTERTON	LEI 10	
LEICESTER	LEI 13	
NOTTINGHAMSHIRE:		
BROXTOWE	NOTT 6	
SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1	
OLD WINTERINGHAM	SHU 7	
NORTH YORKSHIRE:		
ELSLACK	NYK 6	(Apparently).
STANWICK	NYK 23	

APPENDIX 5.14 (FIGURE 5.15): INCIDENCE OF SGSW DATED AS NERONIAN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
LEICESTER	LEI 13
LINCOLNSHIRE:	
LINCOLN	LIN 17
SALTERSFORD	LIN 29
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10
THORPE	NOTT 32
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH YORKSHIRE:	
STANWICK	NYK 23
YORK	NYK 28
SOUTH YORKSHIRE:	
TEMPLEBROUGH	SYK 5
WEST YORKSHIRE:	
CASTLEFORD	WYK 1
CLEVELAND:	
THORPE THEWLES	CLV 4
COUNTY DURHAM:	
BINCHESTER	DUR 1

APPENDIX 5.15 (FIGURE 5.16): INCIDENCE OF SGSW DATED AS PRE - FLAVIAN.

COUNTY & SITE.	REFERENCE.	
LEICESTERSHIRE:		
GREAT CASTERTON	LEI 10	
LEICESTER	LEI 13	
MEDBOURNE	LEI 18	(Poss. Pre-Flavian).
LINCOLNSHIRE:		
LINCOLN	LIN 17	
SALTERSFORD	LIN 29	
NOTTINGHAMSHIRE:		
BROXTOWE	NOTT 6	
EAST BRIDGFORD	NOTT 10	
OSMANTHORPE	NOTT 26	
THORPE	NOTT 32	

SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
ELSLACK	NYK 6
MALTON	NYK 14
STANWICK	NYK 23
YORK	NYK 28
SOUTH YORKSHIRE:	
TEMPLEBROUGH	SYK 5
WEST YORKSHIRE:	
CASTLEFORD	WYK 1
CLEVELAND:	
THORPE THEWLES	CLV 4
COUNTY DURHAM:	
BINCHESTER	DUR 1

APPENDIX 5.16 (FIGURE 5.17): INCIDENCE OF SGSW DATED AS NERONIAN - EARLY FLAVIAN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
HIGH CROSS	LEI 11
LEICESTER	LEI 13
WHITWELL	LEI 26
LINCOLNSHIRE:	
LINCOLN	LIN 17
SAPPERTON	LIN 30
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6
EAST BRIDGFORD	NOTT 10
THORPE	NOTT 32
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
FAXFLEET 'B'	NHU 10
HAYTON	NHU 14 (c. A.D. 65-90).

NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
MALTON	NYK 14
STANWICK	NYK 23
YORK	NYK 28
SOUTH YORKSHIRE:	
DONCASTER	SYK 1
TEMPLEBROUGH	SYK 5
CLEVELAND:	
CATCOTE	CLV 1
COUNTY DURHAM:	
BINCHESTER	DUR 1
EBCHESTER	DUR 6

APPENDIX 5.17 (FIGURE 5.18): INCIDENCE OF SGSW DATED AS EARLY FLAVIAN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
HIGH CROSS	LEI 11
LEICESTER	LEI 13
LINCOLNSHIRE:	
LINCOLN	LIN 17
NORTON DISNEY VILLA	LIN 25
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6
EAST BRIDGFORD	NOTT 10
THORPE	NOTT 32
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
WINTERTON VILLA	SHU 11
NORTH HUMBERSIDE:	
BROUGH	NHU 3
RUDSTON	NHU 19
WOODMANSEY, PARK GRANGE FARM	NHU 28
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
CATTERICK BRIDGE	NYK 3
MALTON	NYK 14
YORK	NYK 28
SOUTH YORKSHIRE:	
DONCASTER	SYK 1
TEMPLEBROUGH	SYK 5

WEST YORKSHIRE:	
SLACK	WYK 5
COUNTY DURHAM:	
EBCHESTER	DUR 6

APPENDIX 5.18 (FIGURE 5.19): INCIDENCE OF SGSW DATED AS FLAVIAN.

COUNTY & SITE.	**REFERENCE.**
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
HIGH CROSS	LEI 11
LEICESTER	LEI 13
MELTON MOWBRAY, SCALFORD BROOK	LEI 19
SKEFFINGTON	Info. R. Pollard 12.2.92.
WHITWELL	LEI 26
LINCOLNSHIRE:	
ANCASTER	LIN 1
HORNCASTLE	LIN 15
LINCOLN	LIN 17
NORTON DISNEY VILLA	LIN 25
SAPPERTON	LIN 30
TALLINGTON 37	LIN 33
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10
LITTLEBOROUGH	NOTT 21
THORPE	NOTT 32
WILLOUGHBY-ON-THE-WOLDS	NOTT 33
SOUTH HUMBERSIDE:	
FERRIBY SLUICE	SHU 2
HIBALDSTOW	SHU 4
OLD WINTERINGHAM	SHU 7
WINTERTON VILLA	SHU 11
NORTH HUMBERSIDE:	
BROUGH	NHU 3
HAYTON	NHU 14
RUDSTON	NHU 19
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
CATTERICK BRIDGE	NYK 3
MALTON	NYK 14
PIERCEBRIDGE, HOLME HOUSE	NYK 18
STAXTON, NEWHAM'S PIT	NYK 24
YORK	NYK 28
SOUTH YORKSHIRE:	
DONCASTER	SYK 1

WEST YORKSHIRE:	
DALTON PARLOURS	WYK 2
ILKLEY	WYK 3
SLACK	WYK 5
CLEVELAND:	
THORPE THEWLES	CLV 4
COUNTY DURHAM:	
BINCHESTER	DUR 1
BOWES	DUR 2
EBCHESTER	DUR 6

APPENDIX 5.19 (FIGURE 5.20): INCIDENCE OF SGSW DATED AS LATE FLAVIAN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
DRAYTON I VILLA	Info. R. Pollard 12.2.92.
GREAT CASTERTON	LEI 10
HIGH CROSS	LEI 11
LEICESTER	LEI 13
WHITWELL	LEI 26
LINCOLNSHIRE:	
LINCOLN	LIN 17
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6 (possibly LF).
EAST BRIDGFORD	NOTT 10
STAUNTON-IN-THE-VALE	UNG Mus. Id. SHW 15.11.89
THORPE	NOTT 32
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
ELMSWELL	NHU 8
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
CATTERICK BRIDGE	NYK 3
MALTON	NYK 14
WEST HESLERTON	NYK 26
SOUTH YORKSHIRE:	
DONCASTER	SYK 1
WEST YORKSHIRE:	
ILKLEY	WYK 3
SLACK	WYK 5
CLEVELAND:	
THORPE THEWLES	CLV 4

COUNTY DURHAM:	
BINCHESTER	DUR 1

APPENDIX 5.20 (FIGURE 5.21): INCIDENCE OF SGSW NORTH OF THE HUMBER AND TRENT DATED AS FLAVIAN - TRAJANIC.

COUNTY & SITE.	REFERENCE.
NORTH HUMBERSIDE:	
BROUGH	NHU 3
FAXFLEET 'B'	NHU 10
GARTON SLACK	NHU 11
HULL, GREYLEES AVENUE	Didsbury 1990, 92.
NORTH CAVE	NHU 15
RUDSTON	NHU 19
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
CATTERICK BRIDGE	NYK 3
MALTON	NYK 14
YORK	NYK 28
SOUTH YORKSHIRE:	
DONCASTER	SYK 1
WEST YORKSHIRE:	
ILKLEY	WYK 3
SLACK	WYK 5
COUNTY DURHAM:	
BINCHESTER	DUR 1
EBCHESTER	DUR 6
GRETA BRIDGE	DUR 8

APPENDIX 5.21 (FIGURE 5.25): THE INCIDENCE OF TERRA NIGRA (TN).

COUNTY & SITE.	NUMBER OF TN FORMS RECORDED	REFERENCE.	
LEICESTERSHIRE:			
GREAT CASTERTON	Not Known	LEI 10	
LEICESTER	14	LEI 13	
WHITWELL	1	LEI 26	Uncertain, poss. not true TN.
LINCOLNSHIRE:			
ANCASTER	*1	LIN 1	
LINCOLN	1	LIN 17	
OLD SLEAFORD	10	LIN 26	
NOTTINGHAMSHIRE:			
EAST BRIDGFORD	2	NOTT 10	
SOUTH HUMBERSIDE:			
DRAGONBY	8	SHU 1	
KIRMINGTON	Not Known	SHU 5	
OLD WINTERINGHAM	12	SHU 7	
SOUTH FERRIBY CLIFF	1	SHU 8	
NORTH HUMBERSIDE:			
BROUGH	2	NHU 3	
EASINGTON CLIFF	1	NHU 5	
HAYTON	1	NHU 14	
REDCLIFF	16	NHU 17	
NORTH YORKSHIRE:			
CATTERICK BRIDGE	1	NYK 3	
MALTON	1	NYK 14	
STANWICK	3	NYK 23	
YORK	1	NYK 28	
SOUTH YORKSHIRE:			
TEMPLEBROUGH	1	SYK 5	
CLEVELAND:			
CATCOTE	1	CLV 1	2 sherds, separate vessels
THORPE THEWLES	1	CLV 4	2 sherds.
COUNTY DURHAM:			
BINCHESTER	2	DUR 1	
CHESTER-LE-STREET	1	DUR 3	
EBCHESTER	1	DUR 6	

* denotes information derived from reports, or through personal research, etc. which is known not to be a a full listing of the material present.
Note that whilst the current author knows of no proper TN from Castleford WYK 1, so-called 'Eggshell TN' (*cf.* Greene 1979, Chapter 10) has been recognized from the site of the vicus (id SHW 15.6.1988).

APPENDIX 5.22: INCIDENCE OF CAM. FORM 1 IN TN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13

APPENDIX 5.23 (FIGURE 5.28): INCIDENCE OF CAM. FORM 2 IN TN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
ANCASTER	LIN 1
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.24: INCIDENCE OF CAM. FORM 3 IN TN.

COUNTY & SITE.	REFERENCE.
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.25: INCIDENCE OF CAM. FORM 4 IN TN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7

APPENDIX 5.26 (FIGURE 5.29): INCIDENCE OF CAM. FORM 5 IN TN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.27: INCIDENCE OF CAM. FORM 6 IN TN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13

APPENDIX 5.28 (FIGURE 5.30): INCIDENCE OF CAM. FORM 8 IN TN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
SOUTH FERRIBY CLIFF	SHU 8
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.29: INCIDENCE OF CAM. FORM 9 IN TN.

COUNTY & SITE.	REFERENCE.
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7

APPENDIX 5.30 (FIGURE 5.31): INCIDENCE OF CAM. FORM 12/13 IN TN.

COUNTY & SITE.	REFERENCE.	
LEICESTERSHIRE:		
LEICESTER	LEI 13	
LINCOLNSHIRE:		
OLD SLEAFORD	LIN 26	
SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1	
OLD WINTERINGHAM	SHU 7	
NORTH HUMBERSIDE:		
REDCLIFF	NHU 17	

APPENDIX 5.31 (FIGURE 5.31): INCIDENCE OF CAM. FORM 14 IN TN.

COUNTY & SITE.	REFERENCE.	
LEICESTERSHIRE:		
LEICESTER	LEI 13	
WHITWELL	LEI 26	Uncertain, poss. not true TN.
LINCOLNSHIRE:		
OLD SLEAFORD	LIN 26	
NOTTINGHAMSHIRE:		
EAST BRIDGFORD	NOTT 10	
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7	
NORTH HUMBERSIDE:		
REDCLIFF	NHU 17	

APPENDIX 5.32 (FIGURE 5.32): INCIDENCE OF CAM. FORM 16 IN TN.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
LINCOLN	LIN 17
OLD SLEAFORD	LIN 26
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10

SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
HAYTON	NHU 14
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
CATTERICK BRIDGE	NYK 3
MALTON	NYK 14
YORK	NYK 28
COUNTY DURHAM:	
BINCHESTER	DUR 1

APPENDIX 5.33 (FIGURE 5.33): INCIDENCE OF CAM. FORM 51 IN 'TN'.

COUNTY & SITE.	**REFERENCE.**
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
NORTH HUMBERSIDE:	
BROUGH	NHU 3
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23
COUNTY DURHAM:	
BINCHESTER	DUR 1

APPENDIX 5.34 (FIGURE 5.34): INCIDENCE OF CAM. FORM 56 IN TN.

COUNTY & SITE.	**REFERENCE.**
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.35: INCIDENCE OF MISCELLANEOUS FORMS IN TN.

COUNTY & SITE.	FORMS	REFERENCE.	
LEICESTERSHIRE:			
LEICESTER	Cam. 17; Cam. 24a; Cam. 50; Beakers	LEI 13	
LINCOLNSHIRE:			
OLD SLEAFORD	Poss. Cam. 15	LIN 26	
SOUTH HUMBERSIDE:			
DRAGONBY	Cam. 28; Cam. 50	SHU 1	
OLD WINTERINGHAM	Cam. 17; Cam. 58	SHU 7	
NORTH HUMBERSIDE:			
REDCLIFF	Cam. 8/9; Cam. 15; Cam. 26b; Cam. 31b; Cam. 58; Rigby 1973, Forms 5 & 38.	NHU 17	
NORTH YORKSHIRE:			
STANWICK	Platters; Beaker	NYK 23	
SOUTH YORKSHIRE:			
TEMPLEBROUGH	Platters	SYK 5	
CLEVELAND:			
CATCOTE	Platters	CLV 1	2 sherds
THORPE THEWLES	Platter	CLV 4	2 sherds

APPENDIX 5.36 (FIGURE 5.35): THE INCIDENCE OF TERRA RUBRA (TR).

COUNTY & SITE.	NUMBER OF TR FORMS RECORDED	REFERENCE.
LEICESTERSHIRE:		
LEICESTER	10	LEI 13
LINCOLNSHIRE:		
ANCASTER	*1	LIN 1
COLSTERWORTH	1	LIN 7
OLD SLEAFORD	7	LIN 26
FONABY	1	Elsdon 1981.
NOTTINGHAMSHIRE:		
OSMANTHORPE	1	NOTT 26
SOUTH HUMBERSIDE:		
DRAGONBY	4	SHU 1
OLD WINTERINGHAM	5	SHU 7
NORTH HUMBERSIDE:		
HAYTON	1	NHU 14
REDCLIFF	7	NHU 17
RUDSTON	1	NHU 19

NORTH YORKSHIRE:		
STANWICK	5	NYK 23

* denotes information derived from reports, or through personal research, etc. which is known not to be a a full listing of the material present.

APPENDIX 5.37: INCIDENCE OF CAM. FORM 3 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13

APPENDIX 5.38: INCIDENCE OF CAM. FORM 4 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13 & Timby 1982, Appendix 1.

APPENDIX 5.39: INCIDENCE OF CAM. FORM 5 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13

APPENDIX 5.40: INCIDENCE OF CAM. FORM 6 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13 & Timby 1982, Appendix 1.
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.41: INCIDENCE OF CAM. FORM 7 IN TR.

COUNTY & SITE.	REFERENCE.
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.42: INCIDENCE OF CAM. FORM 8 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.43: INCIDENCE OF CAM. FORM 53 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13

APPENDIX 5.44 (FIGURE 5.38): INCIDENCE OF CAM. FORM 56 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.45: INCIDENCE OF CAM. FORM 58 IN TR.

COUNTY & SITE.	REFERENCE.
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.46 (FIGURE 5.39): INCIDENCE OF CAM. FORM 112 IN TR.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
ANCASTER	LIN 1
OLD SLEAFORD	LIN 26
FONABY	Elsdon 1981.
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.47 (FIGURE 5.40): INCIDENCE OF TERRA RUBRA 1A.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
COLSTERWORTH	LIN 7
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.48 (FIGURE 5.41): INCIDENCE OF TERRA RUBRA 1B.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.49 (FIGURE 5.42): INCIDENCE OF TERRA RUBRA 1C.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.50 (FIGURE 5.43): INCIDENCE OF TERRA RUBRA 2.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
OLD SLEAFORD	LIN 26
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17

APPENDIX 5.51: INCIDENCE OF TERRA RUBRA 3.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13
LINCOLNSHIRE:	
ANCASTER	LIN 1
OLD SLEAFORD	LIN 26
FONABY	Elsdon 1981.
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17
NORTH YORKSHIRE:	
STANWICK	NYK 23

APPENDIX 5.52 (FIGURE 5.44): THE INCIDENCE OF THE CAM. TYPE 113 BUTT BEAKER.

COUNTY & SITE.	REFERENCE.	
LEICESTERSHIRE:		
LEICESTER	LEI 13	
LINCOLNSHIRE:		
ANCASTER	LIN 1	
COLSTERWORTH	LIN 7	
LINCOLN	LIN 17	
OLD SLEAFORD	LIN 26	
NOTTINGHAMSHIRE:		
DORKET HEAD, RAMSDALE PARK	NOTT 9	
RATCLIFFE-ON-SOAR, RED HILL	NOTT 29	
SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1	
OLD WINTERINGHAM	SHU 7	
NORTH HUMBERSIDE:		
BROUGH	NHU 3	
FAXFLEET 'A'	NHU 9	
REDCLIFF	NHU 17	
RUDSTON	NHU 19	
NORTH YORKSHIRE:		
STANWICK	NYK 23	
YORK	NYK 28	
WEST YORKSHIRE:		
CASTLEFORD	WYK 1	
CLEVELAND:		
CATCOTE	CLV 1	1 sherd, prob. 113
THORPE THEWLES	CLV 4	*cf.* Cam. 113

APPENDIX 5.53 (FIGURE 5.60): THE INCIDENCE OF LYON WARE.

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
HIGH CROSS	LEI 11 (C).
LEICESTER	LEI 13 (AA), (AK), (AL), (AN), (AQ), (AS), (AU), (AV), (AW), (AX), (AZ), (BA), (BB), (BC) & (BE).
LINCOLNSHIRE:	
LINCOLN	LIN 17 (J), (K), (O), (V), & (W).
OLD SLEAFORD	LIN 26 (B).
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6 (B).
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7 (A).
NORTH YORKSHIRE:	
YORK	NYK 28 (Q).
WEST YORKSHIRE:	
CASTLEFORD	WYK 1 (A).
COUNTY DURHAM:	
BINCHESTER	DUR 1 (B) & (C).

APPENDIX 5.54 (FIGURE 5.62): THE INCIDENCE OF CUPS IN LYON WARE.

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
HIGH CROSS	LEI 11 (C).
LEICESTER	LEI 13 (AU), (AV) & (BE).
LINCOLNSHIRE:	
LINCOLN	LIN 17 (J), (K) & (V).
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM	SHU 7 (A)*.
NORTH YORKSHIRE:	
YORK	NYK 28 (Q).

* Body sherds probably from a cup form.

APPENDIX 5.55 (FIGURE 5.63): THE INCIDENCE OF BEAKERS IN LYON WARE.

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AA), (AK), (AN), (AQ), (AS), (AW), (AX), (AZ), (BA), (BB), & (BC).
LINCOLNSHIRE:	
LINCOLN	LIN 17 (V).
OLD SLEAFORD	LIN 26 (B).
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6 (B).
NORTH YORKSHIRE:	
YORK	NYK 28 (Q).
WEST YORKSHIRE:	
CASTLEFORD	WYK 1 (A).
COUNTY DURHAM:	
BINCHESTER	DUR 1 (B) & (C).

APPENDIX 6.1 (FIGURE 6.1): THE INCIDENCE OF (?) DRESSEL FORM 1 SPECIES AMPHORAE.

COUNTY & SITE.	REFERENCE	FABRIC
NORTH YORKSHIRE:		
BEADLAM VILLA	(Rigby 1988)*	Campanian fabric (Peacock 1971, 164, Fabric No. 2)

* This item was published as being from a Dressel 1 species amphora, an identification which has recently been questioned.

APPENDIX 6.2 (FIGURE 6.2): THE INCIDENCE OF DRESSEL FORM 2-4 AMPHORAE (Peacock & Williams Class 10).

COUNTY & SITE.	REFERENCE	FABRIC
LEICESTERSHIRE:		
GREAT CASTERTON	LEI 10 (A)	Fabric not sourced.
LEICESTER	LEI 13 (AA)	Tarraconensian fabric No.2 (Peacock & Williams 1986, 95)
LINCOLNSHIRE:		
LINCOLN	LIN 17 (K) & (W)	
SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1 (C)	Not sourced.
OLD WINTERINGHAM	SHU 7 (A)	Including sherds in Campanian fabric.
NORTH HUMBERSIDE:		
BROUGH	NHU 3 (B) & (G)	(B) Prob. 2-4, ? South Spanish. (G)* Campanian fabric.
REDCLIFF	NHU 17 (B)	Not sourced.
NORTH YORKSHIRE:		
STANWICK	NYK 23	(B) Items occur in Tarraconensian fabric No. 1 (Peacock & Williams 1986, 94), in Campanian fabric and in other Italian fabrics; other unsourced fabrics are present.
WEST HESLERTON	NYK 26	Tarraconensian fabric (details of fabric type not published).
YORK	NYK 28 (I), (K), (L), (N), (Q), (T) & (W).	(I) Handle in Campanian fabric; body sherd unsourced. (K) Spike in Campanian fabric. (L) Body sherd, fabric probably Italian. (N) Campanian and Italian fabrics are represented. (Q) Handle in Campanian fabric; handle possibly in Italian fabric; other sherds unsourced.

		(T) No details of fabrics are published. (W) Not sourced.
SOUTH YORKSHIRE:		
TEMPLEBROUGH **	SYK 5 (A)	No details published.
WEST YORKSHIRE:		
CASTLEFORD	WYK 1	Items occur in Campanian fabric, ? Italian fabric, and (probably) Tarraconensian fabric.
CLEVELAND:		
INGLEBY BARWICK *	CLV 2 (A)	Not sourced.

Note that the Campanian fabric is that characterized by Peacock as fabric No.2 (Peacock 1971, 164).

* Denotes that on typological grounds the sherds in question may possibly be from Dressel 1 species amphorae, rather than from the form Dressel 2-4.

** Denotes the possibility that the sherds in question may possibly be from Rhodian form amphorae rather than the form Dressel 2-4.

APPENDIX 6.3 (FIGURE 6.3): THE INCIDENCE OF RHODIAN FORM / CAM. FORM 184 AMPHORAE (Peacock & Williams Class 9).

COUNTY & SITE.	REFERENCE	FABRIC
LEICESTERSHIRE:		
LEICESTER (AN) probably this form. (BC) handle frag. possibly this form.	LEI 13 (AN) & (BC)	(AN) Possibly in Rhodian fabric (Peacock & Williams 1986, 103, Fabric 1). (BC) No details published.
LINCOLNSHIRE:		
LINCOLN	LIN 17 (W)	Rhodian fabric (Peacock & Williams 1986, 103, Fabric 1) & another, not sourced.
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7 (A)	Rhodian fabric (Peacock & Williams 1986, 103, Fabric 1).
NORTH YORKSHIRE:		
STANWICK	NYK 23	Two examples in Rhodian fabrics, one in Fabric 1, the other Fabric 1 or 2 (Peacock & Williams 1986, 103-4, Fabrics 1 and 2).
YORK	NYK 28 (Q)	Rhodian fabric (Peacock & Williams 1986, 103, Fabric 1).

APPENDIX 6.4 (FIGURE 6.4): THE INCIDENCE OF PELICHET 47 / GAULOISE 4 FORM AMPHORAE (Peacock & Williams Class 27).

(All instances documented here represent items stratified in deposits of first century A.D. date or are from sites where occupation dates solely to the first century A.D. See Gazetteer for further details).

COUNTY & SITE.	REFERENCE
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6 (B).
NORTH YORKSHIRE:	
YORK	NYK 28 (Q).
WEST YORKSHIRE:	
CASTLEFORD	WYK 1

APPENDIX 6.5 (FIGURE 6.5): THE INCIDENCE OF MISCELLANEOUS GAULOISE AMPHORAE FORMS (Peacock & Williams Classes 27 to 30).

COUNTY & SITE.	REFERENCE
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6 (B)
WEST YORKSHIRE:	
CASTLEFORD	WYK 1

APPENDIX 6.6 (FIGURE 6.6): THE INCIDENCE OF DRESSEL FORM 28 AMPHORAE (Peacock & Williams Class 31).

COUNTY & SITE.	REFERENCE
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17 (B)
NORTH YORKSHIRE:	
STANWICK	NYK 23 (B)*

* Probably this category.

APPENDIX 6.7 (FIGURE 6.7): THE INCIDENCE OF DRESSEL FORM 20 AMPHORAE (Peacock & Williams Class 25).

(All instances documented here represent items either stratified in deposits of first century A.D. date, bearing a stamp of a type dated to the first century A.D. or are rims typologically of first century A.D. form. See Gazetteer for further details).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AA), (AS), (AZ) & (BE)
LINCOLNSHIRE:	
EASTON	LIN 9
LINCOLN	LIN 17 (K), (O), (V) & (W)
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6 (B)
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C)
OLD WINTERINGHAM	SHU 7 (A)
NORTH HUMBERSIDE:	
BROUGH	NHU 3 (B)
HAYTON	NHU 14 (A)
REDCLIFF	NHU 17 (B)
NORTH YORKSHIRE:	
YORK	NYK 28 (N), (Q), (S) & (T).
WEST YORKSHIRE:	
CASTLEFORD	WYK 1
CLEVELAND:	
THORPE THEWLES	CLV 4 (A)*

* from Phase III, deposits dating from perhaps the mid first century A.D. to the early second century.

APPENDIX 6.8 (FIGURE 6.8):
THE INCIDENCE OF CAM. FORM 186 / BELTRAN I & II AMPHORAE
(Peacock & Williams Class 16 to 19).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER Cam. 186a: (AA). Beltran I or II: (BE).	LEI 13 (AA), (AN), (AW)* & (BE)
LINCOLNSHIRE:	
LINCOLN Cam. 186c: (K).	LIN 17 (K), (O), (V) & (W)
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C)*
OLD WINTERINGHAM	SHU 7 (A) & (B)
NORTH YORKSHIRE:	
ALDBOROUGH Cam. 186c	NYK 1
STANWICK	NYK 23 (B)
YORK Cam. 186a: (Q) Cam. 186c: (Q) & (T) Cam. 186sp: (N), (R) & (T)	NYK 28 (N), (Q), (R) & (T).
WEST YORKSHIRE:	
CASTLEFORD Cam. 186c.	WYK 1

The fabric characteristic of the Cam. 186 has also been documented at three other sites at Leicester, specifically LEI 13 (AQ), (AS) and (AV).
* Probably this category.

APPENDIX 6.9 (FIGURE 6.9):
THE INCIDENCE OF DRESSEL FORM 14 AMPHORAE
(Peacock & Williams Class 20).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AN) & (AW)

APPENDIX 6.10 (FIGURE 6.10): THE INCIDENCE OF HALTERN FORM 70 AMPHORAE (Peacock & Williams Class 15).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AN) & (BE)
NORTH YORKSHIRE:	
STANWICK	NYK 23 (B)
YORK	NYK 28 (J)*, (L), (Q) & (T).

* Body sherd, possibly from a Haltern 70, possibly from a thin-walled Dressel 20.

APPENDIX 6.11 (FIGURE 6.11): THE INCIDENCE OF LONDON 555 FORM AMPHORAE (Peacock & Williams Class 59).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AZ)

APPENDIX 6.12 (FIGURE 6.12): THE INCIDENCE OF DRESSEL FORM 21-22 AMPHORAE (Peacock & Williams Class 7).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AN)

APPENDIX 6.13 (FIGURE 6.13): THE INCIDENCE OF CAM. FORM 189 AMPHORAE (Peacock & Williams Class 12).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AN), (AS) & (BE)
NORTH YORKSHIRE:	
CATTERICK	NYK 3
YORK	NYK 28 (Q) & (S)
WEST YORKSHIRE:	
CASTLEFORD	WYK 1

APPENDIX 6.14 (FIGURE 6.14): THE INCIDENCE OF KINGSHOLM FORM 117 AMPHORAE (Peacock & Williams Class 66).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AN) (probable).

APPENDIX 6.15 (FIGURE 6.15): THE INCIDENCE OF FISHBOURNE FORM 148.3 AMPHORAE.

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AN) & (AS)
LINCOLNSHIRE:	
LINCOLN	LIN 17 (L)
NORTH YORKSHIRE:	
YORK	NYK 28 (& pers. comm. Dr R. Pollard 18.3.88)

APPENDIX 6.16 (FIGURE 6.16): THE INCIDENCE OF CAM. FORM 139.

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AZ)
LINCOLNSHIRE:	
LINCOLN	LIN 17 (K)
(Probably Cam. 139, possibly in an Italian fabric).	
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17 (B)

APPENDIX 6.17 (FIGURE 6.17): THE INCIDENCE OF CAM. FORM 176.

COUNTY & SITE.	REFERENCE
NORTH HUMBERSIDE:	
REDCLIFF	NHU 17 (B)

APPENDIX 6.18 (FIGURE 6.18): THE INCIDENCE OF DRESSEL FORM 6 AMPHORAE (Peacock & Williams Class 8).

COUNTY & SITE.	REFERENCE
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C)

APPENDIX 6.19 (FIGURE 6.19): THE INCIDENCE OF RICHBOROUGH FORM 527 AMPHORAE (Peacock & Williams Class 13).

COUNTY & SITE.	REFERENCE
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AS) & (BA)/(BB)

APPENDIX 6.20 (FIGURE 6.20): THE INCIDENCE OF AMPHORAE IN ITALIAN FABRICS.

COUNTY & SITE.	REFERENCE	FORM & FABRIC
LEICESTERSHIRE:		
LEICESTER	LEI 13 (AS)	
LINCOLNSHIRE:		
LINCOLN	LIN 17 (K) & (W)	(K) ? Prob. Dressel 2-4, in Campanian fabric. (K) Prob. Cam. 139, apparently in an Italian fabric.
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7 (A)	Dressel 2-4, Campanian fabric.
NORTH HUMBERSIDE:		
BROUGH	NHU 3 (B) & (G)	(B) Form uncertain, Poss. Dressel 2-4, Campanian fabric. (G) Dressel 2-4*, Campanian fabric.
REDCLIFF	NHU 17 (B)	Occurs in forms: Cam. 139 and Cam. 176 in Campanian fabric.
NORTH YORKSHIRE:		
BEADLAM VILLA	(Rigby 1988)	Dressel 1 species, Campanian fabric.
STANWICK	NYK 23 (B)	Prob. Dressel 2-4, items in Campanian and Italian fabrics.
YORK	NYK 28 (I), (J), (K), (L), (Q), & (T)	(I) Dressel 2-4, Campanian fabric. (J) Form(s) uncertain, Campanian fabric. (K) Dressel 2-4, Campanian fabric. (L) Dressel 2-4, fabric probably Italian. (Q) Dressel 2-4, items in Campanian fabric and possible Italian fabric. (T) Form(s) uncertain, Campanian fabric.
WEST YORKSHIRE:		
CASTLEFORD	WYK 1	Dressel 2-4, Campanian fabric, ? and Italian fabric.

Note that the Campanian fabric is that characterized by Peacock as fabric, No.2 (Peacock 1971, 164).

* Denotes that on typological grounds the sherds in question may possibly be from Dressel 1 species amphorae, rather than from the form Dressel 2-4.

APPENDIX 6.21 (FIGURE 6.21): THE INCIDENCE OF AMPHORAE IN TARRACONENSIAN FABRICS.

COUNTY & SITE.	REFERENCE	FORM & FABRIC
LEICESTERSHIRE:		
LEICESTER	LEI 13 (AA)	Dressel 2-4, Tarraconensian fabric No.2 (Peacock & Williams 1986, 95)
NORTH YORKSHIRE:		
STANWICK	NYK 23	Dressel 2-4, Tarraconensian fabric No. 1 (Peacock & Williams 1986, 94).
WEST HESLERTON	NYK 26	Dressel 2-4, Tarraconensian fabric, no further details.
WEST YORKSHIRE:		
CASTLEFORD	WYK 1	Dressel 2-4, Tarraconensian fabric, no further details.

APPENDIX 6.22 (FIGURE 6.22): THE INCIDENCE OF AMPHORAE IN RHODIAN FABRICS.

Amphorae in Rhodian form occur in a range of fabrics several of which have been characterized by Peacock; two of these fabrics are believed to be of Rhodian origin, these being Fabric 1 and Fabric 2 (Peacock 1977d; Peacock and Williams 1986, 103-4).

COUNTY & SITE.	REFERENCE	FORM & FABRIC
LEICESTERSHIRE:		
LEICESTER	LEI 13 (AN) & (BC)	(AN) Probably Rhodian form, possibly Fabric 1. (BC) Handle frag. possibly Rhodian form, perhaps Rhodian fabric (no details of fabric published).
LINCOLNSHIRE:		
LINCOLN	LIN 17 (W)	(W) Rhodian form, in Fabric 1.
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7 (A)	(A) Rhodian form, in Fabric 1.
NORTH YORKSHIRE:		
STANWICK	NYK 23 (B)	(B) Handle, Rhodian form, either Fabric 1 or Fabric 2; another handle, Rhodian form, Fabric 1.
YORK	NYK 28 (Q)	(Q) Rhodian form, in Fabric 1.

APPENDIX 7.1 (FIGURE 7.1): THE INCIDENCE OF EARLY WALL-SIDED MORTARIA *cf.* CAM. FORM 191.

COUNTY & SITE.	REFERENCE.	NO. OF VESSELS.
LEICESTERSHIRE:		
GREAT CASTERTON	LEI 10	(A) & (B) 2 vessels.
LEICESTER	LEI 13	(AA) 4 vessels.
LINCOLNSHIRE:		
LINCOLN	LIN 17	(V) 1 vessel.
TUMBY	Whitwell & Wilson 1968, 27.	1 vessel.
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7	(A) 3 vessels (or more).
NORTH HUMBERSIDE:		
REDCLIFF	NHU 17	(A) 1 vessel (or more). (B) 5 vessels (or more).

Abbreviations Employed in Appendix 7:
C = Claudian; N = Neronian; Late N = Late Neronian; N-F = Neronian-Flavian; EF = Early Flavian; F = Flavian; F-T = Flavian-Trajanic; ET = Early Trajanic; T = Trajanic.
Veru. = Verulamium.

APPENDIX 7.2 (FIGURE 7.2): THE INCIDENCE OF MORTARIA OF HARTLEY'S (1977) GROUP I.

COUNTY & SITE.	REFERENCE.	STAMPS/DATING.
LEICESTERSHIRE:		
LEICESTER	LEI 13	(AA). (AW) Dated c. A.D. 50-80.
LINCOLNSHIRE:		
LINCOLN	LIN 17	(K) Stamp of Orgil[vs], dated c. A.D. 55-85.
OLD SLEAFORD	LIN 26	Stamp of Pavllvs.
NOTTINGHAMSHIRE:		
BROXTOWE	NOTT 6	(A) & (B) Stamps of Q. Valerivs Se--, dated N-F.
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7	(A).
NORTH YORKSHIRE:		
YORK	NYK 28	A stamp of Q. Valerivs Se-- dated c. A. D. 55-80 is said to be probably from York. (Q).
SOUTH YORKSHIRE:		
DONCASTER	SYK 1	Dated c. A.D. 50-80/85.

APPENDIX 7.3 (FIGURE 7.3): THE INCIDENCE OF MORTARIA OF HARTLEY'S (1977) GROUP II.

COUNTY & SITE.	REFERENCE.	STAMPS/DATING.
LEICESTERSHIRE:		
GREAT CASTERTON	LEI 10	(A) Stamp of]assar[.
HIGH CROSS	LEI 11	Stamp of Q. Valerivs Veranivs.
LEICESTER	LEI 13	(AA) Prob. Group II.
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7	(A) Stamp of Q. Valerivs Veranivs, dated N-EF.
WINTERTON	SHU 11	Group II, Unidentified Stamp.
NORTH HUMBERSIDE:		
HAYTON	NHU 14	(A) Dated c. A.D. 60-90.
NORTH YORKSHIRE:		
ALDBOROUGH	NYK 1	(D) Stamp of Gracilis.
BAINBRIDGE	NYK 2	(C)
CATTERICK	NYK 3	Stamp of Gracilis, F.
YORK	NYK 28	Stamps of C. Iul. Pri[vatvs?], Lossa & Q. Valerivs Veranivs, dated c. A.D. 70-100. Stamp of Q. Valerivs Suriacus. *(D); (Q).*
SOUTH YORKSHIRE:		
DONCASTER	SYK 1	*Stamp of Litvgenvs II.*
WEST YORKSHIRE:		
CASTLEFORD	WYK 1	Stamps of Q. Valerivs Veranivs dated c. A.D. 90-100, & Boriedo.
ILKLEY	WYK 3	Stamps of Gracilis & T. IV. AF. plus one other, F.
SLACK	WYK 5	Group II, Unidentified Stamp, F.

APPENDIX 7.4 (FIGURE 7.4): THE INCIDENCE OF MORTARIA FROM THE VERULAMIUM REGION.

COUNTY & SITE.	REFERENCE.	STAMPS/DATING.
LEICESTERSHIRE:		
GREAT CASTERTON	LEI 10	(B).
LEICESTER	LEI 13	"LVGVD" Stamp, dated c. A.D. 65-95. (AA) Stamp of Albinvs; Stamp of Marinvs of Flavian date.
LINCOLNSHIRE:		
EASTON	LIN 9	(A) Stamp (Prob.) of Albinvs, dated c. A.D. 60-90.
LINCOLN	LIN 17	(K) & (L) Including a Stamp of Devalvs, dated c. A.D. 60-90. (V).
TUMBY	Whitwell & Wilson 1969, 106.	Stamp of Albinvs, dated c. A.D. 65-95.
NOTTINGHAMSHIRE:		
DUNSTON'S CLUMP	NOTT 1	(A) Prob. c. A.D. 70-130.
EAST BRIDGFORD	NOTT 10	(A) Stamps of Albinvs. (B) Late N or F & F.
RATCLIFFE-ON-SOAR, RED HILL	NOTT 29	(A) or (B) Stamped "F.LVGVDV" (Albinvs) dated c. A.D. 60-90. (Cii) Stamp of Albinvs.
SOUTH HUMBERSIDE:		
OLD WINTERINGHAM	SHU 7	(A) Stamp "LVGVD", dated c. A.D. 65-95.
NORTH HUMBERSIDE:		
HAYTON	NHU 14	(A) F.
NORTH YORKSHIRE:		
ALDBOROUGH	NYK 1	(E).
BAINBRIDGE	NYK 2	
YORK	NYK 28	Stamps of Albinvs & Sollus are recorded, plus a stamp of Marinvs which is prob. from York, all dated c. A.D. 70-100. (C); (Q).
SOUTH YORKSHIRE:		
DONCASTER	SYK 1	Stamps of Matvgenvs, c. A.D. 80-120; Doinvs, c.A.D. 70-110; Sollvs, c. A.D. 70-100; plus other vessels dated c. A.D. 70-100 & c. A.D. 70-120.
TEMPLEBROUGH	SYK 5	Stamps "F.LVGV[" and of Marinvs, dated as F.
WEST YORKSHIRE:		
ILKLEY	WYK 3	

COUNTY DURHAM:		
EBCHESTER	DUR 6	(B) Stamp of Sextus Valerivs, dated F-T. (D) Rim, dated F-ET.

APPENDIX 7.5. (FIGURE 7.5): EARLY MORTARIA AT NON-MILITARY SITES WITHIN THE STUDY AREA.

COUNTY & SITE.	REFERENCE.	VESSEL DETAILS.
LEICESTERSHIRE:		
RATBY BURY	LEI 23	(A) Poss. early mortarium.
LINCOLNSHIRE:		
EASTON	LIN 9	(A) Stamp (Prob.) Albinvs, Veru. region, dated c. A.D. 60-90.
NORTON DISNEY	LIN 25	(A) F or T.
OLD SLEAFORD	LIN 26	Hartley's Group I.
TUMBY	Whitwell & Wilson 1968, 27.	(?) Early wall-sided vessel, C.
	Whitwell & Wilson 1969, 106	Stamp of Albinvs, Veru. region, dated c. A.D. 65-95.
NOTTINGHAMSHIRE:		
DUNSTON'S CLUMP	NOTT 1	(A) Veru. region, Prob. c. A.D. 70-130.
RATCLIFFE-ON-SOAR, RED HILL	NOTT 29	(A) or (B) Stamped "F.LVGVDV" (Albinvs), Veru. region, dated c. A.D. 60-90. (Cii) Stamp of Albinvs, Veru. region.
SOUTH HUMBERSIDE:		
DRAGONBY	SHU 1 & (May 1966).	(C) Sherd from unused mortarium of N-EF form, found assoc'ted with F Kiln.
WINTERTON	SHU 11	Hartley's Group II.
NORTH HUMBERSIDE:		
HASHOLME HALL	NHU 13.	(A) Dated c. A.D. 60-90.
REDCLIFF	NHU 17	(A) & (B) Early wall-sided vessels, C; & (B) Flange-rim, C.
RUDSTON	NHU 19	(B) 1 vessel is poss. F.
NORTH YORKSHIRE:		
KILDALE, PALE END	NYK 10	(A) Rim, N-F form.
LANGTON	NYK 11	(A) Rim, N-F form.
STANWICK	NYK 23	(A) Site A: Rim, N-F form.
STAXTON, NEWHAM'S PIT	NYK 24	(A) 3 vessels, one F, one mid-late F, one T.

APPENDIX 7.6.
EARLY MORTARIA AT MILITARY SITES WITHIN THE STUDY AREA.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10
HIGH CROSS+	LEI 11
LEICESTER+	LEI 13
LINCOLNSHIRE:	
LINCOLN	LIN 17
NOTTINGHAMSHIRE:	
BROXTOWE	NOTT 6
EAST BRIDGFORD	NOTT 10
SOUTH HUMBERSIDE:	
OLD WINTERINGHAM+	SHU 7
NORTH HUMBERSIDE:	
BROUGH	NHU 3
HAYTON	NHU 14
NORTH YORKSHIRE:	
ALDBOROUGH	NYK 1
BAINBRIDGE	NYK 2
CATTERICK	NYK 3
HEALAM BRIDGE*	NYK 9
MALTON	NYK 14
YORK	NYK 28
SOUTH YORKSHIRE:	
TEMPLEBROUGH	SYK 5
WEST YORKSHIRE:	
CASTLEFORD	WYK 1
ILKLEY	WYK 3
SLACK	WYK 5
COUNTY DURHAM:	
EBCHESTER	DUR 6

* Possible site of fort.
+ that this site has a military phase is probable but not proven.

APPENDIX 8.1 (see FIGURE 8.1): INSTANCES OF POTTERY BEING DESCRIBED AS 'BELGIC'.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
BURROUGH HILL	LEI 4 (C).
HIGH CROSS	LEI 11.
LEICESTER	LEI 13 (AQ), (AS), (AV) & (AZ).
MEDBOURNE	LEI 18.
WYMESWOLD	LEI 28 (A).
LINCOLNSHIRE:	
ADDLETHORPE	Wilson, C. M. 1972, 6-7.
COLSTERWORTH	LIN 7 (A).
INGOLDMELLS	LIN 16 (A).
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10 (A).
GAMSTON	NOTT 16 (A).
RAMPTON	NOTT 28 (A).
NORTH HUMBERSIDE:	
BROUGH	NHU 3 (B).
REDCLIFF	NHU 17 (C).
RISBY, FISHPOND WOOD	NHU 18 (A).

APPENDIX 8.2 (see FIGURE 8.1): THE INCIDENCE OF POTTERY CLASSIFIABLE AS STYLISTICALLY 'BELGIC' (in addition to Appendix 8.1)

COUNTY & SITE.	REFERENCE.
LINCOLNSHIRE:	
LINCOLN	LIN 17 (O) & (W).
SALTERSFORD	LIN 29.
NOTTINGHAMSHIRE:	
FLAWFORD	NOTT 15 (A).
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C).
WINTERTON VILLA SITE	SHU 11 (B).
NORTH HUMBERSIDE:	
BRANTINGHAM	NHU 2.
BURSEA HOUSE	NHU 4.
GARTON SLACK	NHU 11.
REDCLIFF	NHU 17.
RUDSTON	NHU 19.

APPENDIX 8.3 (FIGURE 8.2): THE INCIDENCE OF WHEEL-PRODUCED TYPOLOGICALLY LATE IRON AGE POTTERY.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
BURROUGH HILL	LEI 4.
FRISBY	LEI 8.
GREAT CASTERTON	LEI 10.
HIGH CROSS	LEI 11.
LEICESTER	LEI 13.
LOUGHBOROUGH	LEI 15.
MARKET HARBOROUGH, BOWDEN HILL	LEI 17.
RATBY BURY	LEI 23.
THISTLETON	LEI 25.
WHITWELL	LEI 26.
WYMESWOLD	LEI 28.
LINCOLNSHIRE:	
ANCASTER	LIN 1.
COLSTERWORTH	LIN 7.
DENTON	LIN 8.
LINCOLN	LIN 17.
OLD SLEAFORD	LIN 26.
SALMONBY	LIN 28.
SALTERSFORD	LIN 29.
SAPPERTON	LIN 30.
SUDBROOK	LIN 31.
TATTERSHALL THORPE	LIN 34.
NOTTINGHAMSHIRE:	
DORKET HEAD, RAMSDALE PARK	NOTT 9.
EAST BRIDGFORD	NOTT 10.
MANSFIELD WOODHOUSE VILLA SITE	NOTT 23.
THORPE	NOTT 32.
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1.
FERRIBY SLUICE	SHU 2.
GRIMSBY, WEELSBY AVENUE	SHU 3.
NORTH KILLINGHOLME HAVEN	SHU 6.
OLD WINTERINGHAM	SHU 7.
WINTERTON VILLA SITE	SHU 11.
NORTH HUMBERSIDE:	
BARMSTON	Challis & Harding 1975, 12.
BRANTINGHAM	NHU 2.
BROUGH	NHU 3.
BURSEA HOUSE	NHU 4.
GARTON SLACK	NHU 11.
REDCLIFF	NHU 17.
RISBY	NHU 18.
SOUTH CAVE	NHU 20.
SUTTON-ON-HULL, SALTHOUSE SCHOOL	NHU 22

NORTH YORKSHIRE:	
STANWICK	NYK 23.

APPENDIX 8.4 (FIGURE 8.3): THE INCIDENCE OF BOWLS AND JARS *CF.* CAM. FORM 229.

COUNTY & SITE.	**REFERENCE.**
LINCOLNSHIRE:	
ANCASTER	LIN 1 (A).
FONABY	Elsdon 1981.
INGOLDMELLS	LIN 16 (A).
OLD SLEAFORD	LIN 26 (B) & (C).
SALMONBY	LIN 28 (A) *cf.* Cam. 229c.
TATTERSHALL THORPE	LIN 34 (A).
NOTTINGHAMSHIRE:	
FLAWFORD	NOTT 15 Rim, *cf.* Cam. 229d.
HOLME PIERREPONT	NOTT 20 (D).
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (B), (C) & (D).
GRIMSBY, WEELSBY AVENUE	SHU 3 (B) *cf.* Cam. 229.
KIRMINGTON	SHU 5 (D) Cam. 229c/d.
OLD WINTERINGHAM	SHU 7 (A) Cam. 229c/d.
WINTERTON VILLA SITE	SHU 11 (B) Cam. 229c/d.
NORTH HUMBERSIDE:	
BRANTINGHAM	NHU 2 (C).
BURSEA HOUSE	NHU 4 (B) Cam. 229c.
GARTON SLACK	NHU 11.
REDCLIFF	NHU 17 (B).
RISBY	NHU 18 (A).

APPENDIX 8.5 (FIGURE 8.4): THE INCIDENCE OF BOWLS OF CAM. FORM 209.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
HIGH CROSS	LEI 11 (C) *cf.* Cam. 209.
LINCOLNSHIRE:	
ANCASTER	LIN 1 (C) *cf.* Cam. 209.
LINCOLN	LIN 17 (O).
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C) *cf.* Cam. 209.

APPENDIX 8.6 (FIGURE 8.5): THE INCIDENCE OF PEDESTALLED BOWLS OF CAM. FORM 210.

COUNTY & SITE.	REFERENCE.
LINCOLNSHIRE:	
SALTERSFORD	LIN 29

APPENDIX 8.7 (FIGURE 8.6): THE INCIDENCE OF BOWLS OF CAM. FORM 211.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10 (B) Cam. 211b.
HIGH CROSS	LEI 11 (C)
LEICESTER	LEI 13 (AA) & (BE).
LINCOLNSHIRE:	
LINCOLN	LIN 17 (O) Cam. 211b; (W) 211.
OLD SLEAFORD	LIN 26 (C) Cam. 211b.
SALTERSFORD	LIN 29 Cam. 211b.
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10 (B) *cf.* Cam. 211b.
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C) Cam. 211b.
FERRIBY SLUICE	SHU 2 (B) *cf.* Cam. 211b.
OLD WINTERINGHAM	SHU 7 (A) *cf.* Cam. 211b.
WINTERTON VILLA SITE	SHU 11 (B) Probably Cam. 211.

APPENDIX 8.8 (FIGURE 8.7): THE INCIDENCE OF BOWLS OF CAM. FORM 212.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
FRISBY-ON-THE-WREAKE	LEI 8 (A).
GREAT CASTERTON	LEI 10 (A) *cf.* Cam. 212.
LINCOLNSHIRE:	
DENTON	LIN 8 (A) *cf.* Cam. 212a.
NOTTINGHAMSHIRE:	
THORPE	NOTT 32 (F) *cf.* Cam. 212c.
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C) *cf.* Cam. 212.
NORTH HUMBERSIDE:	
BROUGH	NHU 3 (A).
GARTON SLACK	NHU 11 (B).

APPENDIX 8.9 (FIGURE 8.8): THE INCIDENCE OF BOWLS OF CAM. FORM 213.

COUNTY & SITE.	REFERENCE.
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10 (A) *cf.* Cam. 213.

APPENDIX 8.10 (FIGURE 8.9): THE INCIDENCE OF BOWLS OF CAM. FORM 214.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AS), (AZ) & (BE) all examples *cf.* Cam. 214 Ba.
LINCOLNSHIRE:	
ANCASTER	LIN 1 (D).
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C).

APPENDIX 8.11 (FIGURE 8.10): THE INCIDENCE OF BOWLS OF CAM. FORM 215.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13 (AA) Cam. 215b.

APPENDIX 8.12 (FIGURE 8.11): THE INCIDENCE OF BOWLS OF CAM. FORM 216.

COUNTY & SITE.	REFERENCE.
NOTTINGHAMSHIRE:	
EAST BRIDGFORD	NOTT 10 (B) *cf.* Cam. 216.
THORPE	NOTT 32 (F) *cf.* Cam. 216.

APPENDIX 8.13 (FIGURE 8.12): THE INCIDENCE OF OTHER VESSELS APPROXIMATING TO THE CAM. FORM RANGE 209 - 217.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
LEICESTER	LEI 13 (BE) Cam. 211-214.
LOUGHBOROUGH	LEI 15 Cam. 214-217.
WHITWELL	LEI 26 (A) affinity to Cam. 211b.
LINCOLNSHIRE:	
LINCOLN	LIN 17 (O).
OLD SLEAFORD	LIN 26 (B) Cam. 210/214/216.
SALTERSFORD	LIN 29
NOTTINGHAMSHIRE:	
DORKET HEAD, RAMSDALE PARK	NOTT 9 *cf.* Cam. 212-216.
MANSFIELD WOODHOUSE VILLA SITE	NOTT 23 (B) Cam. 209/217.
THORPE	NOTT 32 (F) Cam. 215a/216; Cam. 211/215.
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C) *cf.* Cam. 215a, but with rounded base and a (?) single pronounced cordon.
NORTH HUMBERSIDE:	
BARMSTON	Challis & Harding 1975, 12, Fig.21 No.3.
REDCLIFF	NHU 17 (C) *cf.* Cam. 215-17.

APPENDIX 8.14 (FIGURE 8.13): THE INCIDENCE OF CAM. FORMS 209 - 217.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
FRISBY-ON-THE-WREAKE	LEI 8 (A).
GREAT CASTERTON	LEI 10 (A) & (B).
HIGH CROSS	LEI 11 (C).
LEICESTER	LEI 13 (AA), (AS), (AZ) & (BE).
LOUGHBOROUGH	LEI 15.
WHITWELL	LEI 26 (A).
LINCOLNSHIRE:	
ANCASTER	LIN 1 (C) & (D).
DENTON	LIN 8 (A).
LINCOLN	LIN 17 (O) & (W).
OLD SLEAFORD	LIN 26 (B) & (C).
SALTERSFORD	LIN 29.
NOTTINGHAMSHIRE:	
DORKET HEAD, RAMSDALE PARK	NOTT 9.
EAST BRIDGFORD	NOTT 10 (A) & (B).
MANSFIELD WOODHOUSE VILLA SITE	NOTT 23 (B).
THORPE	NOTT 32 (F).
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C).
FERRIBY SLUICE	SHU 2 (B).
OLD WINTERINGHAM	SHU 7 (A).
WINTERTON VILLA SITE	SHU 11 (B).
NORTH HUMBERSIDE:	
BARMSTON	Challis & Harding 1975, 12, Fig 21 No.3.
BROUGH	NHU 3 (A).
REDCLIFF	NHU 17 (C).
GARTON SLACK	NHU 11 (B).

APPENDIX 8.15 (FIGURE 8.19): THE INCIDENCE OF 'IMITATIONS' OF BUTT BEAKERS *cf.* CAM. FORM 113.

COUNTY & SITE.	REFERENCE.
LEICESTERSHIRE:	
GREAT CASTERTON	LEI 10 (B).
LEICESTER	LEI 13 (AA), (AL), (AQ), (AT), (AW), (AZ) & (BE).
LINCOLNSHIRE:	
ANCASTER	LIN 1 (C) & (D).
BRACEBRIDGE HEATH	LIN 4 (A).
HORNCASTLE	LIN 15 (H).
INGOLDMELLS	LIN 16 (C).
LONG BENNINGTON A1 BYPASS	LIN 19.
LUDFORD	LIN 21 (C).
OLD SLEAFORD	LIN 26 (B) & (C).
TATTERSHALL THORPE	LIN 34 (A).
SOUTH HUMBERSIDE:	
DRAGONBY	SHU 1 (C).
KIRMINGTON	SHU 5 (D).
OLD WINTERINGHAM	SHU 7 (A).
NORTH HUMBERSIDE:	
BROUGH	NHU 3 (B).
REDCLIFF	NHU 17 (A) & (B).

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