

Late Romano-British Pottery Production in Context: the Crambeck Ware Industry and its Landscape Setting

Volume 1 of 2

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Abstract

Pottery is an ever-present aspect in the study of Roman Britain, although the focus is frequently on distribution, decoration and the location of kilns. The landscape of production is therefore often a neglected aspect of pottery studies. This thesis examines the late Romano-British Crambeck pottery industry with an emphasis on its surrounding landscape. It suggests that such industries need to be considered in their landscape settings before processes of trade and distribution can be fully understood. It argues the need to contextualise the process of production through an understanding of the character of landscape use and scale of the production site(s).

Such an approach to the study of the Crambeck industry has revealed its placement within the confines of an Iron Age promontory fort, its proximity to a possible henge as well as Bronze Age round barrows, and at least one Iron Age chariot burial unique to the Arras culture of East Yorkshire. This has raised questions about the continuity of activity in this landscape. Coupled with an analysis of the pottery recovered from the site, notably the presence of non-Crambeck wares of earlier date and a substantial amount of calcite-gritted ware, it is therefore possible to suggest that the late Roman potters may not have been the first to produce their wares in this landscape, although they were certainly the first to do so in such a commercial manner. This thesis has combined previous investigations of the industry with geophysical surveys and excavation conducted by the author as a part of this study of the Crambeck landscape. Understanding of this industry has significantly benefitted from this approach and the need to understand such production landscapes in their entirety has been demonstrated.

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Author's Declaration

This thesis includes information from a range of sources which are listed in the bibliography. Unless otherwise stated all maps and photographs are the author's own. The research undertaken here is the author's own work and has not been previously present for an award at this or any other university.

Introduction

This research serves to demonstrate the complex nature of the pottery production landscape at Crambeck. It has begun to answer some questions but also raised several new issues that require further investigation. The conclusions propose that an understanding of the character of landscape use and the scale of a pottery industry's manufacturing site is essential in contextualising the processes of production: an understanding of these and the landscape in which they are situated underpins that of the distribution and consumption of the pottery.

It is necessary to address at the beginning of this thesis why the study of the Crambeck industry is important. Its fabrics and forms have long been established, as has its role in the pottery supply of late Roman Britain. Crambeck was one of the major suppliers to the North of England at a time when the producers of the middle Roman period were in decline. It had a consistent distribution across the North of the country, up to and along Hadrian's Wall. Furthermore, the evidence suggests its production continued into the fifth century, beyond the end of Roman administration in the province, although its ultimate longevity remains unknown. As such, Crambeck was a major part of the industry and economy of the late Roman period in the North and in Britannia. The research presented in this thesis sought to answer a set of specified questions focusing on the Crambeck landscape:

How open was this landscape, were there visible remains of earlier monuments, and what did the late Romano-British landscape inherit from such past activity?

Was there one main production site at Jamie's Craggs, Crambeck, with a few small outliers, or were there a series of 'factories' of varying sizes spread across the landscape?

Were these sites or 'factories' contemporary with one another or do they represent different phases of production across the landscape?

And finally, did the potters live and work on the same site at Jamie's Craggs or were there other settlements elsewhere in the surrounding landscape?

The broad nature of these questions required methods suitable for a wider landscape investigation. As such, the aim of this research was to understand the character of landscape use and the scale of the production site(s) as well as to contextualise the processes of production of Crambeck ware. The nature of the site and the established research questions dictated the methods applied to their investigation.

In order to answer these questions, I applied a variety of desk-based and field investigation methods. Previous work on the industry was collated and considered. Historic Environment Records and Aerial Photographs were collected and mapped onto the landscape with the use of Geographical Information Systems (GIS) software. An earthwork survey was undertaken resulting in a new identification of a feature in the Jamie's Craggs area. Several geophysical surveys were undertaken in the landscape, which in the case of the Jamie's Craggs site, led to a small scale ground-truthing excavation. All results, both pre-existing and those produced as part of this research, were mapped onto the landscape with the aid of GIS facilitating new interpretations of the Crambeck landscape over time, from prehistory to the fifth century AD.

There were several major outcomes of this research as follows. The presence and nature of prehistoric activity in the Crambeck landscape has been clarified. The existence of a large Iron Age enclosure, possibly a promontory fort, at Jamie's Craggs has been established. In addition, the main hub of the Crambeck production was situated in the interior of these earthworks. There are also several worked flints present across the Crambeck landscape, as well as the buried remains of a possible henge (although this feature may prove to be natural). Some of the trackways in the area are believed to have their roots in prehistory and there are

a number of Bronze and Iron Age burials in the landscape, the mounds of which would have been visible in the Roman period and at least one remained so until the 1980s.

This research has been able to strongly suggest that rather than there being several ‘factories’, there was in fact one central production centre based in the Iron Age earthworks at Jamie’s Craggs with a handful of smaller outlying kilns. All currently known kilns appear to be roughly contemporary, dating to the mid to late fourth century. However, it is likely that there are other outlying kilns of an earlier Roman date that are yet to be located in the landscape.

Corder’s dating of two cists burials (1989a), one of which cut the furnace of a kiln at Jamie’s Craggs, has been proved through the application of AMS technology. The individual dated from the mid to late fourth century and it is reasonable to assume that other similar burials in the Crambeck landscape were deposited within a comparable date range. In addition, an excavation undertaken as part of this research discovered the cremated remains of a child, likely deposited in the fourth century, containing over seventy worked jet and glass beads. It is not the intention here to suggest that the Crambeck landscape or part thereof was considered to be a cemetery. That being said, the Roman burials were placed with apparent deliberate acknowledgement of other earlier burials; some were close to Bronze Age round barrows, and the two excavated by Corder and the cremation were a short distance from at least one Iron Age chariot burial. This suggests a continuity of assigning particular meaning to the Crambeck landscape from prehistory through to the end of the Roman period. It suggests a recurring need to have a sense of ownership over the landscape through reinforced everyday connections to place and space.

An excavation undertaken in 2014 as part of this research also demonstrated the good preservation of at least one Crambeck kiln at Jamie’s Craggs. The furnace was not far below

the modern surface and was in reasonable condition. This is positive as it gives any future investigations of the Crambeck kilns the opportunity to further understand the internal structure of the kilns.

The research presented here makes the suggestion that the late third and fourth century Crambeck wares were not the first pottery produced in this landscape. The quantity of calcite-gritted ware, often found in association with kilns production Crambeck fabrics, suggests that there was a pre-existing tradition in the landscape of pottery production, likely originating in the Iron Age. It is plausible that the fourth century production therefore represents the commercialisation of this industry on a much larger scale, likely connected to a military contract (e.g. Evans 1985) and a change in demand, resulting in the production of more Romano-British forms and fabrics. A similar situation of earlier styles of pottery being produced alongside a late Romano-British tradition is demonstrated at Norton, a few miles to the north of Crambeck (Corder 1950, 37). In addition, the pottery evidence from the site (including analysis of sherds from the 2014 and earlier excavations) suggests an earlier Romano-British period of activity in the Crambeck landscape. There are a reasonable number of non-Crambeck fabrics that have been imported from elsewhere in Britain and the continent, dating to the second and early third centuries. Unfortunately, there is no other evidence of earlier activity but the pottery does suggest its presence somewhere in the immediate Crambeck landscape.

Definition of Landscape

Before discussing the role of pottery and landscapes in archaeology and the nature of period labels in the discipline, it is first necessary to establish what is meant by 'landscape' within the scope of this thesis. The word first emerged as a technical term used by painters in the sixteenth century but the term 'landscape archaeology' did not emerge until the 1970s

(David & Thomas 2008, 27). It was during the late twentieth century that ‘landscape’ began to mean something more than a unit of analysis above that of the ‘site’, landscapes became worthy of their own investigation (David & Thomas 2008, 27). Since then, the term ‘landscape’ or ‘landscape archaeology’ has acquired a multitude of meanings (e.g. see Johnson 2007, 2-3). Landscape is described by Ucko:

“...landscape everywhere in the world is a construct of human beings – whether through human ascription to it of mythological creation, or through physical actions by the humans themselves...” (Ucko 1994, xviii–xix)

Landscape is therefore made up of both the natural geological aspects (the physical environment contributing to living conditions and exploited for resources), and the concept of place. Places in the landscape are assigned significance by the inhabitants or those passing through a space. It is the places that make up the landscape and that give their inhabitants their own distinctive identities (Casey 2008, 44-50).

In the context of this research, the term ‘landscape’ refers to both the physical construct of the area around Crambeck and the significance attached to it as a place throughout history. The physical area of what can be considered to be the ‘Crambeck landscape’ is an area centred on the Jamie’s Craggs field with a radius of approximately one and a half miles (Figure 1). Around this centre is the area directly involved with Crambeck pottery production, including other close-by kilns. Beyond this lies the wider Crambeck landscape, including sites with less direct yet relevant connections to the Romano–British production at Crambeck. The area considered as the Crambeck landscape here is somewhat dictated by the research questions asked. This research focuses on the production of the ware and its setting and questions where the potters lived (see discussion of research questions in Chapter 3). As a result, its physical application on the ground is restricted to the central production

centre and the reasonable area in which potters can be considered to have ‘commuted’ to work if they did not live on site.

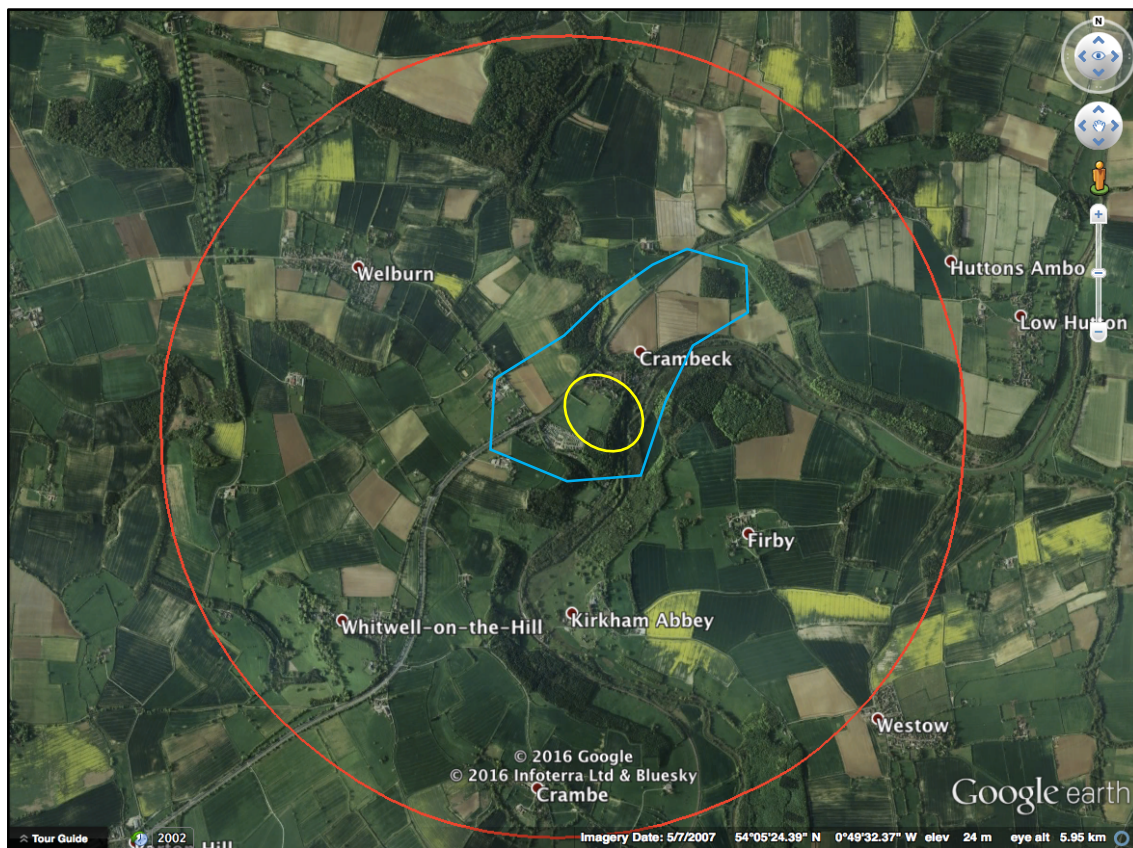


Figure 1 Approximate area of what can be considered as the ‘Crambeck landscape’ (red circle). The main production centre at Jamie’s Craggs is circled in yellow. The central area of the ‘Crambeck landscape’ is outline in blue.

Landscape is many things both within the confines of this thesis and the wider discipline. It encompasses the geological composition of the land around Crambeck, the various natural environments that existed there over the millennia, and the significance attached to the central area (outlined in blue, Figure 1) throughout history. In addition, it encompasses the impact of human activity on the land as a result of the significance assigned to the place. This thesis does not just consider one landscape in one period of time, it examines the impact of human activity on the natural land, along with the subsequent and accumulating impact of past activities (reflecting attached significance to a place) on succeeding generations of

land users. The picture presented as a result of this research is by no means complete but does provide a deeper understanding of a space and place throughout time.

Pottery and Landscapes in Archaeology

Pottery is one of archaeology's most durable and frequent sources of information. It has had a long, varied history of manufacture being found in a large number of cultures across the world and it is its durability that makes it a valuable resource for the archaeologist (Price 1987). Pottery is usually studied from three main approaches: dating, fabric and form, and trade and distribution (Orton & Hughes 2013). These are interconnected and together can provide a range of information about a past culture and its people.

The usefulness of pottery to archaeological investigations is outlined by Orton and Hughes (2013, Chapter 2) amongst others (e.g. Price 1987) and is summarised here. Identifying the types of pottery present can date a site. This is further facilitated by establishing the particular fabrics and forms in order to construct typologies of wares. These can depict the development of a pottery industry over time. The stratigraphic relationship between sherds and more accurately datable artefacts such as coins then allows these typologies to be applied chronologically. Such methods make the dating of features through the analysis of any pottery present particularly useful in the absence of other securely datable material culture. Emerging techniques, such as rehydroxylation, are improving the accuracy of dating pottery although this particular technique is not yet widely applied. Studying fabric composition through the application of lab-based techniques investigating the chemical make-up of the clay used can indicate the location of the production centre which in turn informs discussions of trade and the economy. Form can indicate the function of the vessel and chemical study of internal residue can identify its last contents. Form and fabric together can indicate the social level of a site which can inform discussions of social hierarchies. Distributional

analysis of a ware can shed light on methods of trade and the economy of the peoples involved. Consequently, there are many varied benefits to be gained from the analysis of pottery and it will therefore remain one of the foremost studies artefact groups in the archaeological discipline.

However, it is the study of landscapes that provides material culture with its wider context, landscape being the “...*context in which objects are found, and from which meaning can be sought.*” (Stoddart 2000, 3). The common nature of pottery in the archaeological record and its usefulness to the study of a site or culture often leads to the landscape of pottery production being overlooked and the contextual analysis of such landscapes is a common omission from the focus of pottery studies. Therefore, the question must be posed, how can a full and complete picture be gained, as far as is possible, of a production site and the wares produced, without first establishing an understanding of the landscape in which this usually social activity took place? It is the contextualisation of production, through an understanding of its scale and landscape, that underpins discussions of distribution and decoration. The landscape of a pottery industry affected the practicalities of production, such as sources of raw materials and routes of distribution, as well as the more subjective nature of the decorations applied by the potters. Consequently, comprehension of one is required to facilitate an understanding of the other. Thus, the contextualisation of its landscape is essential to the understanding of any pottery manufacturing site, no matter its chronological period.

Much of the previous study of the Crambeck industry has been concerned with identifying its fabrics, their common forms and patterns of distribution (e.g. the papers included in Wilson ed., 1989). This has focused on a discussion of the industry on the late Roman economy in Britain and the possible role of a military contract in its success as represented by its unusually consistent pattern of distribution (e.g. Evans 1985). Some analysis has been

undertaken regarding the specific forms and decoration of Crambeck wares in order to suggest an origin for the potters of the industry (e.g. Swan 1984). As already discussed, an understanding of a pottery industry such as Crambeck can only be achieved through a consideration of the landscape context in which it was produced. The potters would have been influenced by the landscape in which they lived and worked, therefore it is necessary to reconstruct this environment as far as is possible. The landscape provides the background to the production of pottery as much today as it did in the third and fourth centuries.

Period Labels

Before outlining the aims and structure of this thesis, it is necessary to have a short discussion of the nature and role of period labels within the archaeological discipline and define their use throughout this thesis. History is usually divided by the different ‘peoples’ inhabiting a place at any given time, for example the Egyptians, Romans, Tudors, Victorians etc., and this is a particular trait of the current approach to the archaeological study of the past. The continued prevalence of these well-used terms is perhaps due to the ease and familiarity they offer to those attempting to describe the past; each label having its own chronological connotations that are generally widely understood. However, the revelations across archaeological and historical disciplines in recent decades have increasingly revealed the connections between and overlap across what were previously viewed as separately defined blocks of time. In light of this, the benefit to the continued use of period labels lies in their familiarity and the general understanding of their chronological connotations and the cultures they represent.

Bradley (2007) discussed some of the problems with the use of period labels in relation to the study of prehistory. The Three Age system separated prehistory into the stone, bronze and iron ages, the division stemming from the belief that social changes and process in past

cultures were based around technological innovation. However, Bradley (2007) suggests that since the nineteenth century, archaeologists have retained this antiquarian terminology but have changed its connotations. He argues that the continued use of these terms is based on precedent within the discipline but the distinguishing features of the periods they describe have substantially changed over the past two centuries (Bradley 2007). It is true that metal artefacts from prehistory are analysed in great detail and as such are given great significance by archaeologists for their information potential. But Bradley (2007) proposes that the question remains whether metalwork dominated the lives of prehistoric peoples and therefore suggests the original significance of these objects must be demonstrated but not assumed. Archaeologists cannot translate the significance these objects have to their studies into a similar significance held by their creators and those who used them. Bradley (2007) instead supports the notion that prehistoric period divisions should not be based on tools and metalwork but rather a more appropriate series of divisions might be found in the changes that occurred in settlement patterns. He suggests that while these changes were not synchronous across all regions in Britain, there were enough shared features to assess the general trends (Bradley 2007).

A similar theory can be applied to the study of Roman Britain. The analysis of its metal objects, and indeed the wealth of material culture from the province, can reveal much about the lives of its inhabitants. Typologies can be, and have been established, depicting changing styles and fashions. But it was not necessarily the individual pieces of material culture that made Britain 'Roman'. The island's 'Roman-ness' can be seen in its settlement patterns and the distinctive buildings influenced by centralised administration from Rome (see Millett's discussion of Romanisation, 1990; and Mattingly 2007). It can be argued that settlement patterns for the majority of the province's population did not significantly change until the middle of the second century when towns developed, along with villas and a preference for

construction using stone that was seen in both urban and rural areas (Ottaway 2013, 181). However, it can still be argued that settlement patterns for the majority did not change markedly from the Iron Age to the Anglo–Saxon period; the influence of the Roman administration being limited to specific changes relating to social standing or in particular areas of the landscape (Ottaway 2013, 181-198). It is these distinctly ‘Roman’ aspects that usually provide the focus for settlement studies of the period. The acceptance of settlement patterns as a better indicator of social change requires a reassessment of when the ‘Roman period’ in Britain existed and what it constituted of.

With this in mind it is necessary to outline what is meant by the period terms used in this thesis. The common labels are used but the indistinct nature of the boundaries between the periods is recognised. Discussion of prehistoric Crambeck focuses on the Iron Age, although some mention of earlier periods is made. The term ‘Iron Age’ is used purely for ease and broadly defines the peoples, cultures and societies that existed in the period before centralised Roman administration. Similar use is made of the term ‘Roman’. This is a chronological reference, covering the period between the invasion of the Roman army in 43 AD and the point at which centralised administration of the province was withdrawn around 410 AD. It is not used to define a distinct set of ‘Roman’ people as this term encompasses an assortment of cultures that existed throughout Britain.

Nor should the assumption be made that life in the Iron Age and what it meant to ‘be Roman’ in Britain remained constant over the course of the several hundred years encompassed by the respective period labels. Aspects of culture changed over time, resulting in Roman Britain at the beginning of the second century being very different to the province in the fourth century AD. Roman culture was absorbed and adapted to life in Britain. This evolved into what is generally termed the Romano-British culture and was a combination of the island’s more traditional ways of life and varied influences from the continent, whilst also

being subject to geographical and chronological variations (Dark & Dark 1997; Hingley 1989; Esmonde-Cleary 2009). Discussions of the post-Roman period in this thesis encompass the centuries between the end of the Roman administration and the Anglo-Saxon period. This was a time when parts of the administration system used by Rome were retained in Britain but nor was the island, generally speaking ‘Roman’, no longer being centrally administered from Roman and nor was it yet Anglo-Saxon. The terms ‘post-Roman’ or ‘post-Romano-British’ sometimes been applied in this thesis although others do exist, for example ‘late antiquity’ (Dark 2010).

Period labels are used throughout this thesis for ease of reference, primarily to delineate chronology. They do not suggest there was a defined, definitive, or sudden change from one period to another, nor is it suggested that cultures in each period did not undergo change over time.

Aims and Structure of this Thesis

This thesis emphasises the complex nature of the pottery production landscape at Crambeck. As previously mentioned, an understanding of the character of landscape use and the scale of production are essential in establishing a greater comprehension of a pottery industry. It is emphasised here that an understanding of the production landscape underpins that of the distribution and consumption of the fabrics.

In general terms the following chapters will move from theoretical discussions of the study of pottery in archaeology and Roman Britain to a consideration of the previous investigations concerning the Crambeck landscape. The methodology applied throughout this research is detailed, before a discussion of the specific evidence for activity in the Crambeck production landscape from prehistory through to the fifth century AD. This will then be set into the

wider context of Yorkshire before a comparison is made of the Crambeck industry to others across Roman Britain.

The foundations of this thesis are established in the first three chapters. Chapter 1 lays the theoretical foundation by examining the application of theoretical developments to the study of Roman Britain and the analysis of Romano-British pottery. The theoretical stance applied throughout this thesis is outlined. The chapter discusses similar developments in the approaches to the investigation of landscapes. Chapter 2 reviews previous investigations concerning the Crambeck production industry and its environs. It draws together and analyses prior knowledge of the industry and the Jamie's Craggs production site. Chapter 3 sets out the research questions that provide the focus of this thesis and discusses the methods applied by the author to the physical investigation of the Crambeck production landscape.

Chapters 4 and 5 analyse the evidence for activity in the Crambeck landscape over time from prehistory to the late Roman period. The impact of the landscape on the Romano-British potters is considered and the likely causes of the decline and end of the Crambeck industry are examined. Comparison and analysis of pottery assemblages excavated from the Jamie's Craggs site facilitates a discussion of the possibility of an earlier phase of Roman activity in the area and the likelihood of calcite-gritted ware being produced alongside the Crambeck fabrics.

Chapters 6 and 7 provide the broader context to the analysis of the Crambeck landscape. The first provides the regional context of Yorkshire throughout prehistory as well as the Iron Age and Roman periods and gives a regional overview of Romano-British pottery in the North of England from the first to the fifth century AD. Chapter 7 compares Crambeck with several other Romano-British pottery industries, both preceding and contemporary, from Yorkshire and elsewhere in Roman Britain. The chosen industries are examined in terms of landscape

setting, fabrics and their forms, methods of trade and distribution, market economies, kiln structure, and influences from other manufacturers. In this way the Crambeck industry is set into the wider picture of pottery production within Roman Britain.

Chapter 8 summarises the research presented here and emphasises the key points made, culminating in the complex nature of the Crambeck production landscape. The chapter assesses the extent to which the research questions set out at the beginning of this introduction and in Chapter 3 have been answered and considers the new and additional questions raised regarding the Crambeck industry and the Jamie's Craggs production site as a result of this research.

Chapter 1 Theoretical Background

This chapter establishes the theoretical background supporting this thesis. It will first address the development of the study of Roman Britain (1.1). Antiquarian approaches will be considered along with culture-historical, processual and postprocessual archaeologies. Where appropriate, some consideration of the role of landscapes will be given. The chapter will then examine the development of Romano-British pottery studies (1.2). This will discuss how the various theories applied by the archaeological discipline have altered approaches to the study of pottery from Roman Britain. The following section will examine the various approaches applied to the study of landscapes and the development of landscape archaeology over time (1.3). It will consider the application of these approaches to the understanding of Roman Britain. The chapter will end by summarising the theoretical approaches to the study of Roman Britain, Romano-British pottery and the understanding of past landscapes (1.4).

1.1 The Study of Roman Britain

This section examines the key schools of thought within archaeological theory. The developments and wider contexts are discussed, following a broadly chronological structure. The developing roles of landscapes are considered throughout, although this is discussed in specific detail in section 1.3 below. The development of theoretical perspectives within archaeology and the study of Roman Britain were not as distinct as the structure of this section could suggest. It was, and remains, a far more complex debate.

This discussion has been included to set the later chapters of this thesis into the theoretical context of the discipline. It serves to place the investigation of the Crambeck landscape into this context and makes this research relevant to the wider archaeological discipline.

Antiquarianism and Culture History

The study of the past is rooted in ancient societies such as Greece and Rome, a fact exemplified by the works of Tacitus and Suetonius, amongst others. The exploration and investigation of past societies in the medieval period often had strong religious motivators and the recovery of ancient artefacts was frequently used by the royalty of Europe to weave themselves into their nations' histories (Trigger 2006, 48–49).

Interest in Roman Britain can be traced back to the medieval period through authors such as Gildas (c516–c570AD) and William of Malmesbury (c1095–c1143AD), although their frequent use of myths as fact makes such works unreliable in relation to Roman Britain. As a result, the study of Roman Britain was slow to emerge as a defined discipline (Todd 2004, 443).

During this period, the focus was on recovered artefacts with little consideration for individual sites (Todd 2004, 444). The most significant archaeological work of the sixteenth century regarding Roman Britain was William Camden's *Britannia* (1586). This was the first attempt to produce a history of the province and had many subsequent editions (Todd 2004, 445). Camden's work existed very much within the political context of the time and reflected on geographical exploration and religious reform. It was a survey of the history and topography of the UK that catalogued Roman monuments, coins and inscriptions (Tyers 1996, 1), as such it did not include a discussion of landscapes as would be understood in the discipline today.

The Renaissance saw the classical periods studied in a way not previously undertaken, motivated to a significant extent by the desire of the great merchant cities of Italy to acquire a pedigree connecting them to the distant past (Trigger 2006, 53). Thus, intellectual changes were influenced by the political and economic aspirations of the time. There was a particular

focus on the discovery and translation of ancient texts, although these remained disconnected from the material culture, the latter being used to illustrate events described in ancient texts rather than as evidence in their own right. It was in this light that the academic study of Britain's Roman past emerged (Ottaway 2013, 38).

Later, the Age of Reason led to the classification of artefacts in the sixteenth and seventeenth centuries which represented the beginning of the earnest collection of antiquities relating to the Roman Empire across Europe, typified by the initial discovery of Pompeii in 1599. It was at the end of the sixteenth century that 'landscape' emerged as a technical phrase applied to paintings, but the term would not be explicitly applied to archaeology until the 1970s and was not widely used until the 1980s (David & Thomas 2008. 27; see section 1.3 below).

The eighteenth to twentieth centuries were the zenith of antiquarian approaches to archaeology. Such investigations were generally a hobby of upper class gentlemen with the means to fund expeditions to collect 'curiosities', although the motivations behind their search for such objects were varied. This form of archaeological investigation was tempered by the belief that artefacts could merely illustrate the information provided in ancient texts (Trigger 2006, 80). Many antiquarian investigations were further inhibited by the persistent belief that God created the world on 23rd October 4004BC (Ussher 1650). This narrow view resulted in the general dismissal of the periods and cultures that had existed before the emergence of written texts.

The decades of the eighteenth century saw a shift towards regional studies as well as an emerging appreciation for the role of topography and landscapes in archaeology (Freeman 2007, 67). It was in the latter part of this century that the Three Age system of interpreting prehistory was developed by Thomsen (1848), dividing the period prior to ancient texts into

the stone, bronze and iron ages. This interpretation was applied to prehistoric material culture in an attempt to fill the gap left by the lack of textual evidence (Trigger 2006, 105).

It was during this century that the study of Roman Britain began to be defined as a sub-discipline as demonstrated by works such as Gordon's *Itinerarium Septentrionale* (1726), and Horseley's *Britannia Romana* (1732). Archaeology and the study of Roman Britain was institutionalised by the establishment of societies and museums during this century, including the Society of Antiquaries and the British Museum (Ottaway 2013, 40). The eighteenth century is characterised by the collection of monuments and material culture, although by the end of the century some archaeologists were beginning to place greater emphasis on the investigation of sites or areas in the study of Roman Britain (e.g. Wellbeloved's *Eboracum*, 1842). The developments of this period therefore resulted in a shift towards a broader scope of study with increasing emphasis on sites or areas, although landscapes were yet to be considered as explicitly as they came to be in the later twentieth century.

The eighteenth and nineteenth centuries saw the emergence of approaches to archaeological research influenced by colonial attitudes; in Britain this resulted from the country's imperial background. Essentially, colonial approaches to archaeology were used to degrade and reduce indigenous populations to an inferior state in order to justify the colonisation of Australia and Africa. This was linked to ethnography, which was used to suggest that native cultures were unable to adapt to a more 'civilised' way of life (Trigger 2006, 208), resulting in their perception as inferior to Western civilisation. Colonial archaeology reflected the prejudiced views of the colonising powers in its dehumanisation of indigenous peoples. Racial identities were equated to archaeological cultures leading to a focus on tracing such identities through time as well as establishing chronologies of cultural materials (Croucher 2010, 351-364).

The theory of creolisation, discussed by Croucher (2010), influenced colonial attitudes towards archaeology. This proposed that the material cultures of the colonial powers were adopted by indigenous cultures and incorporated into underlying cultural systems. This did not necessarily equate to change as the original indigenous cultural identity could be retained, rather than being obliterated by the adopted ideals. This theory is often applied to discussions of the changing aspects of material culture in Iron Age to Roman Britain (for example, Webster 2001). The concept of Romanisation in Britain is greatly influenced by colonial approaches to archaeological investigation which results in a narrow view of identity and therefore of culture (Pitts 2007, 693).

The broader scope of study that emerged as a result of developments in the nineteenth century is perhaps most clearly illustrated within the study of Roman Britain in the concept of Romanisation. Francis Haverfield is regarded as the founder of Romano–British studies and the concept of Romanisation (Haverfield 1905; for an account of his role in the development of the archaeological discipline and the study of Roman Britain, see Freeman 2007). Theories of Romanisation encompass the process(es) by which the ‘native’ population adopted, forcefully or otherwise, a ‘Roman’ lifestyle. The concept of Romanisation is very much the product of the colonial era in Britain, reducing cultural identity to the question of ‘Roman’ versus ‘native’ (Mattingly 2007, 14), thus resulting in a very narrow view of Roman Britain (Pitts 2007, 693). Theories of Romanisation progressed from the perception of indigenous peoples dominated by the Roman civilisation, to the view that Romanisation was a programme of conversion and that certain aspects of ‘Roman’ lifestyles were adopted by the indigenous peoples (e.g. Millett 1990, 1). Both views of Romanisation fuelled the search for specific site types with a focus on military fortifications, the great public buildings of the urban settlements, and extravagant villas perceived as belonging to the ‘Roman’ elite. The antiquarians conducting the excavations viewed the

occupants of such sites as their Roman social equivalents. This was inherently influenced by colonial approaches to archaeological investigation in Britain. However, the colonial approach to this issue is flawed in its neglect of the rural landscapes, resulting in a biased view of Roman Britain.

The study of Roman Britain during this period therefore consisted of interpretive frameworks which resulted in certain site types being chosen for investigation, for example, because of their perceived connection to certain military campaigns discussed in the ancient sources (e.g. Caesar's *Commentarii de Bello Gallica*, published sometime between c58-c49BC). Wheeler's investigations at Maiden Castle are a key example of this, being part of research into Roman Dorchester and the search for the Iron Age forts taken by Vespasian (e.g. Wheeler 1935). Despite the fragmented approach of antiquarian archaeologists, without their contributions many important remains would have been lost and the foundation upon which the modern study of the past and Roman Britain would not have been laid.

The culture historical approach encompassed a way of collecting and organising archaeological data with a different aim in mind. The collection of artefacts and monuments continued but there were also attempts to organise this data through the creation of typologies and the definition of cultures. Culture history has provided the framework behind much of the antiquarian archaeologies but it did not fully emerge until the late nineteenth and early twentieth century. It was brought to the fore in Germany and popularised by the work of Gustaf Kossinna (1858-1931), who believed that migration was responsible for cultural change and assigned only a minor role to the diffusion of ideas.

Culture history developed under the influence of political and economic considerations of the period as well as the intellectual changes with approaches to archaeology being influenced by the growing awareness of the variations in the geographic distributions of

material culture. This was rooted in nationalism, with political regimes using archaeological evidence to drive nationalist fervour and to establish ethnic and cultural links to claimed ancient ancestors (e.g. Kossinna 1911).

It was through the culture historical approach that the study of Roman Britain emerged. The work of Francis Haverfield laid the foundations for the study of Roman Britain as a sub-discipline in its own right (for example, 1905; 1924) but it was not until the early twentieth century that the first attempts to create syntheses of Roman Britain emerged, for example, the works of R.G. Collingwood (1930; 1932) and Charlesworth (1949). The culmination of such syntheses can be seen in Frere's *Britannia: A History of Roman Britain* (1967). Frere's work utilised typologies of artefacts and sites with a basic binary approach to Romanisation, key motifs of the culture-historical approach. It was during this period of culture historical approaches to the past that initial investigations of the Crambeck pottery industry at Jamie's Craggs took place (see Chapter 2).

The developments in archaeology and the study of Roman Britain in the first half of the twentieth century heralded the beginning of both in their modern forms. The wider discipline saw a focus on stratigraphic recording and a continuing use of culture historical explanatory mechanisms such as migration and diffusion. Research into Roman Britain in this period, mirrored such developments and was dominated by prominent figures such as Mortimer Wheeler (b.1890 d.1976), many of whom advocated strict excavation methods with a focus on aspects such as stratigraphy and finds records (Wilkes 1989, 246). Documentary evidence of Roman Britain was increasingly being employed alongside evidence from excavations and other field methods (rather than material culture being used to illustrate events in those texts), although this brought its own problems when attempting to combine the information from the two sources of data to create a coherent understanding. Such investigations utilised emerging archaeological information as well as pre-existing sources although this brought

its own issues as not all such sources for Roman Britain were reliable. For example, the medieval manuscript falsified by Charles Bertram (*De Situ Britannia*, 1757) was considered a primary reference for Roman Britain for seventy years, remaining influential in the early twentieth century despite having been proved a forgery (Todd 2004, 448). Landscapes remained an elusive and unacknowledged aspect of the study of Roman Britain, with research foci firmly fixed on the classification and typologies of objects and the investigation of the prominent site types (e.g. Ottaway 2013, 38-46).

Little changed in the early part of the twentieth century regarding approaches to Roman Britain, with the focus remaining on specific site types and landscapes as entities worthy of study in their own right remaining neglected (Ottaway 2013, 44). The exception was the development of archaeological methods, e.g. aerial photography, under the influence of military archaeologists such as Wheeler. In the study of Roman Britain, this meant a continued focus on the military, urban and villa sites to the detriment of landscapes. A more structured methodology began to develop, particularly with the widespread development and implementation of stratigraphic principles. There were some exceptions to the general focus, the earliest example being Pitt Rivers (1827–1900) whose extensive work was exceptionally methodical for the time and he had a unique focus on everyday artefacts that contradicted the focus across the discipline on the more aesthetically interesting objects. A later example is P. Corder's work on the Roman rural settlement at Elmeswell, Yorkshire (Corder 1940).

The culture historical approach had a number of shortcomings. It attributed cultural change to external factors thus limiting explanations of change in societies from internal sources. There was a focus on the collection of artefacts and monuments rather than whole areas or landscapes, resulting in a narrow view of the past. This approach was influenced by nineteenth century ideas of nationalism which used archaeological evidence to trace specific peoples through time. Despite being used to fuel the creation of national identities, the value

of the culture historical approach lay in its ability to trace the development of material culture through time as well as in its increased awareness of the complexity of the archaeological record (Trigger 2006, 313).

Processualism

The perceived shortcomings of cultural historical frameworks led to the emergence of functional processual archaeology (Trigger 2006). Whereas the cultural historical approaches examined social change as a result of external factors through diffusion and migration, the functional processual approaches attempted to understand social and cultural systems from the inside through the interrelation and interaction of their different parts (Trigger 2006, 314). These approaches to archaeological data led to the replacement of the culture historical emphasis on ethnicity with a focus on how prehistoric cultures or societies had operated and changed: interest in behaviour replaced that of archaeological culture.

Functional processualist approaches frequently describe cultures as systems, with each part being explained in reference to its function and in relation to the whole (Johnson 2010, 80). Changing attitudes in other disciplines, such as New Geography (e.g. Guest 1883; Mackinder 1904), impacted how archaeologists approached their data and consequently how the past is viewed. This led to change in both the practical and theoretical aspects of the discipline. The inter-disciplinary exchange of ideas, techniques and theories played a key role in the development of archaeological theories (see the work of Clarke, e.g. 1968; 1977).

Processualists had, and still have, a diverse array of views and interpretive standpoints. However, they were united by a growing sense of dissatisfaction with the direction the discipline was taking along with a belief it needed to be more 'scientific' and anthropological in its methods (Johnson 2010, 21; Clarke 1968; 1973). Processualism accepted the culture historical need to organise the data being gathered, although the key difference was the

treatment of archaeological information as data in an objective rather than subjective way. Processualism also recognised the need to be specific about the questions asked of the data to test hypotheses.

Processual approaches saw archaeological investigation move into laboratory environments (Johnson 2010, 37). Archaeologists remained concerned with the collection and organisation of data but did so with increasing interest in cultural behaviour and the testing of hypotheses. The lack of documentary evidence for prehistory created the need for a new way of approaching cultural change, leading many to turn to anthropology for inspiration. This created a processual emphasis on people as biological entities. Some, such as Binford (1962; 1965), suggested that changes in cultural systems were adaptive responses to changes in the natural environment. Therefore, cultural change became less about individual agency, focusing instead on biological behaviour.

In contrast to the culture historical frameworks for the past with their emphasis on supporting the ancient texts, the mid-twentieth century saw attention shift towards the answers that could be provided by the archaeological record itself. Archaeologists began to ask different questions of past cultures and to approach their investigations in different ways, for example through the concept of systems theory (e.g. Binford 1968; Flannery 1967; 1968).

In the study of Roman Britain, focus turned towards the examination of towns as economic centres, which led to the investigation of the effects on their hinterlands (e.g. Roman Wroxeter, Gaffney et al 2000). There had been a lack of dedicated works on this topic until the 1990s when hinterlands began to play a larger role in research (e.g. Perring 1998). Following this, the creation of the Planning Policy Guidance 16 (PPG16) legislation forced the emergence of large rural projects in relation to the development of urban areas, which

had not previously been undertaken (for a fuller discussion of the investigation of Roman towns and their hinterlands see Chapter 6).

With the application of processual thinking to archaeology came practical as well as theoretical developments. Prior to this, investigations had been undertaken by interested local parties (Corder's work at Crambeck is an early example of this, see Chapter 2). However, with the increased threat to archaeology caused by the scale of destruction inflicted by construction, there was the need for a qualitatively different scale of response by rescue archaeology (Corder's work at Mount Pleasant is an early example of rescue archaeology, 1989b). The building boom of the 1950s and 1960s led to a massive increase in the amount of archaeology being uncovered and subsequently destroyed, leading to attempts by amateur and academic archaeologists to record it before it was lost. By the 1980s and 1990s, rescue archaeology had emerged as a distinct sub-discipline (e.g. see the works of Perring regarding London, e.g. 1991). This, along with the application of new techniques (such as aerial photography, pioneered by O.G.S. Crawford (1928; 1929), and radio carbon dating (C14) etc.), led to a vast increase in the amount of archaeological data being collected and greater variation in the types of information the data could provide.

The effects of the rescue archaeology movement led to the creation of the commercial archaeological profession (as opposed to the academic) and was much influenced by processual theoretical frameworks. Rescue archaeology emerged alongside the development and implementation of a host of new technologies and techniques that contributed to the processual desire to test hypotheses within the discipline, consequently, these resulted in an explosion of archaeological data (Clarke 1973, 10-11). Many of these techniques were borrowed from other disciplines and contributed to the development of new approaches to the investigation of the past.

The 1960s and 1970s saw the recognition of threats posed to the archaeological resource by things such as large scale urban development, ring road/motorway construction, quarrying, and deep ploughing (Jones 1984, 2). The archaeological discipline was ill-equipped to face the sheer scale of the new threats. This led to its professionalisation and the emergence of specialised commercial archaeology units (Thomas 1974, 6, 14), resulting in the development and adaptation of recording and excavation techniques. However, the overwhelming volume of construction led to many sites being excavated but not published creating a backlog of grey literature that still exists today (see the ADS website¹) The experiences of the 1970s and rescue archaeology brought about an improved, more mature approach to archaeological investigation (Jones 1984, 145). The substantial increase in the scale of development culminated with the integration of archaeological concerns in the planning process with legislation such as Planning Policy Guidance 16 (PPG16, 1990).

Part of the new functional processual approaches to the study of the past was to relate human activity to environments, resulting in the emergence of a landscape approach to archaeology. The earliest forms of landscape archaeology were focused on the relationship between people and their physical environments (David & Thomas 2008, 28). There were exceptions to this general focus, including Aston and Rowley's (1974) *Landscape Archaeology: An Introduction to Fieldwork Techniques on Post-Roman Landscapes*, which discussed combining archaeological fieldwork with landscape history. The physical environments were examined, for example by Evans (1975), from a biological and environmental perspective. Landscapes were viewed as places of resources and their carrying capacities were examined, creating a focus on peoples' biological relationship with the environment. The desire to examine these relationships led to increasingly accurate and systematic

¹ <http://archaeologydataservice.ac.uk>

methods of establishing the ways past people occupied and used the land (for example, Clarke 1968; Foard 1978).

Environmental archaeology emerged as a specialism alongside landscape archaeology. The scientific analysis of samples collected from sealed archaeological layers provided the opportunity to reconstruct previously unknown details of past landscapes. This included the identification of plants present in the sample which, combined with zooarchaeological information, provided archaeologists with a picture of local ecosystems.

These sub-disciplines proved particularly enlightening regarding the study of Roman Britain. Only certain parts of the rural landscape had previously been investigated, for example, Hadrian's Wall and its hinterlands, villas such as Chedworth (National Trust 1968; Goodburn 1979), and the pioneering work done by Fox (1923) in the Cambridgeshire Fens. Aside from the specific exception, the majority of the rural landscape of Roman Britain had not been investigated in any detail. Mortimer Wheeler, in the latter years of his life, was an advocate of rural research and he argued that Romano-British studies needed to adopt the developments occurring more widely within archaeology or else become increasingly sidelined (e.g. Wheeler 1938). Such highly controversial views were initially rejected by the majority of those within the discipline.

Despite the resistance of traditionalists such as J.N.L. Myers (1936), the views voiced by Wheeler and others (for example, Burley 1961; Collingwood and Richmond 1969) along with the processual approaches to archaeology, did have an impact on the study of Roman Britain. Attention began to move from the military, villa and urban sites to the rural landscapes of the province (e.g. Millett 1990). The new approaches and the increasing study of rural areas were used to add to the discussions on the Romanisation of the native population and the decline and end of Roman Britain. There was a focus on exchange

systems and economic imperatives (e.g. Millett 1990). These overriding topics had been the focus of Romano–British research since the antiquarian period. Despite being more economically focused, approaches to Roman Britain remained relatively unchanged.

The 1970s and 1980s saw a vast increase in the number of sites known from Roman Britain, an upward trend that has continued to the present day (Hingley 1989, 3; Roman Rural Settlement Project²). The emergence of rescue archaeology and the technological innovations (e.g. the application to archaeology of geophysical survey and aerial photography, etc.) have contributed to this increase. Taylor's (2007) *Atlas of Roman Rural Settlement in England* is one example of studies concerning whole landscapes and moving away from the traditional focus of certain site types. The Roman Rural Settlement Project³ has produced an up to date survey of all the known Roman sites in Britain (Figure 2) and has demonstrated the increase in information (Figure 3).

² <http://www.reading.ac.uk/archaeology/research/roman-rural-settlement/>

³ <http://archaeologydataservice.ac.uk/archives/view/romangl/index.cfm>

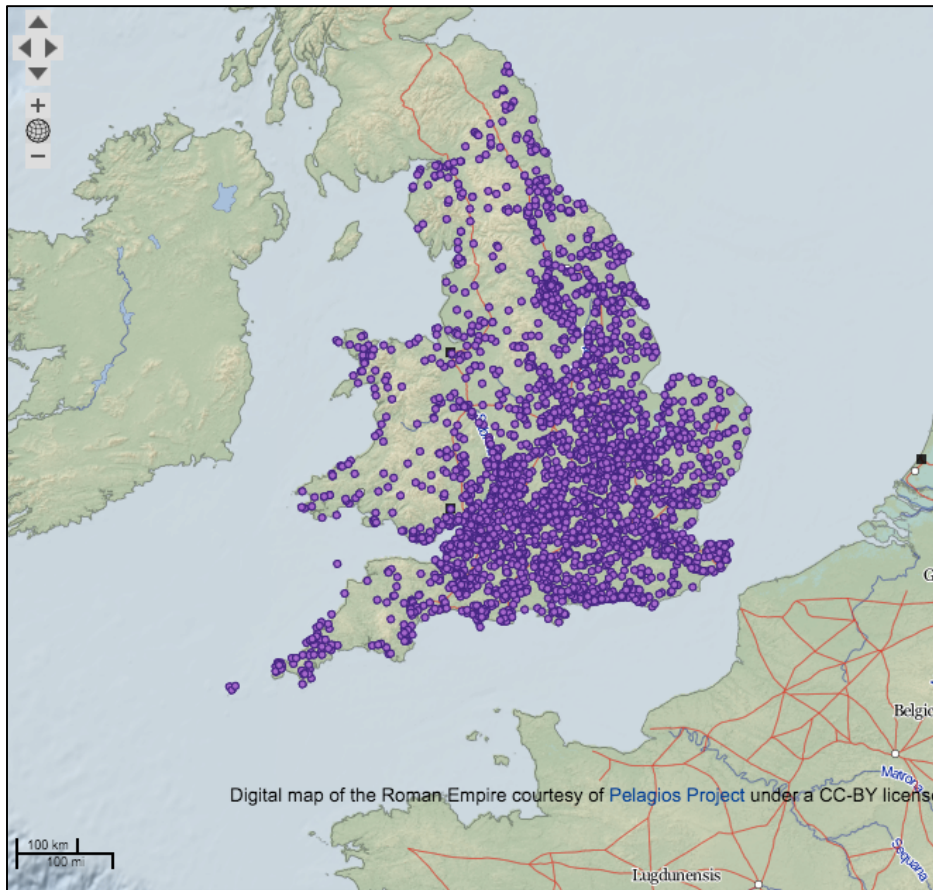


Figure 2 Map showing all known Roman sites to date in Britain (Roman Rural Settlement Project, <http://archaeologydataservice.ac.uk/archives/view/romangl/index.cfm>).

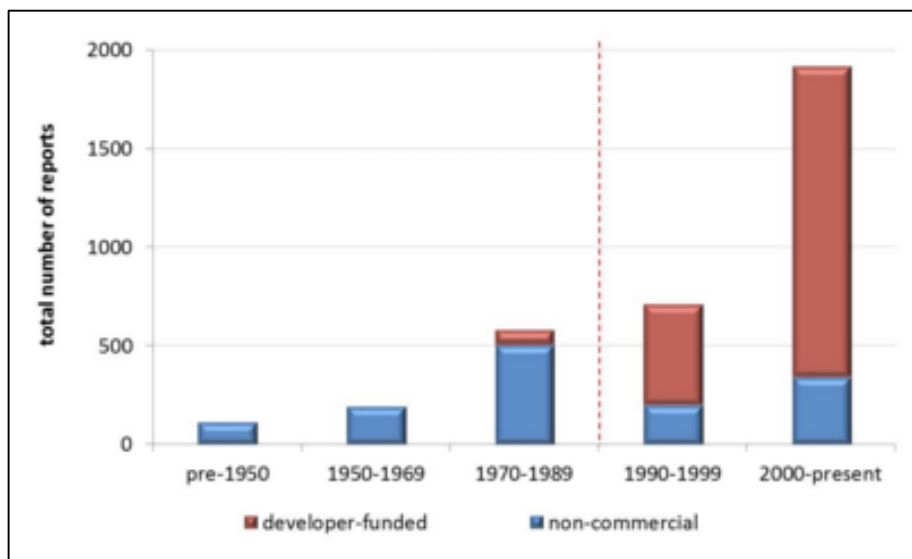


Figure 3 Graph depicting the number of grey literature reports produced relating to Roman sites in Britain (Roman Rural Settlement Project, <http://archaeologydataservice.ac.uk/archives/view/romangl/index.cfm>).

Postprocessualism

Following processual theories, along with the practical implications of rescue and landscape archaeology, there emerged a growing sense of dissatisfaction with the archaeological discipline, resulting in postprocessual theories.

Postprocessualism, much like its predecessor, is not a single body of thought, there are many variations united in their attempts to understand past societies through identity. In short, postprocessualist approaches suggested that the individuals of the past had been lost in the depth of archaeological structure systems, instead they tried to understand society through identity. Postprocessualist approaches placed importance on the everyday routines of past cultures, asserting that archaeologists needed to look at thoughts and values as well as material culture in order to reach an understanding of the past (Collingwood 1946; Hodder 1982; Johnson 2010, 107–108). Hodder's work is seen as generally epitomising the postprocessual approaches (e.g. 1986; 1999). Scholars such as Shanks and Tilley (1987) came to prominence, placing emphasis on agency over structure. Shanks and Tilley (1987) typified the postprocessualist criticism of processual thinking, suggesting that the discipline needed to reach a level of critical reflexivity.

It was during 1970s and 1980s that the biases within the studies of Roman Britain began to be addressed with vigour. Authors of histories of Roman Britain began to consider alternative approaches to the traditional historical perspective and attention turned from one site type or one aspect of its function to the significance of whole landscapes (Hingley 1989, 5). The 1980s also brought a sense of dissatisfaction amongst those studying Roman Britain which focused on the lack of advance and general stagnation within the discipline (Hingley 1989, 1).

Postcolonial archaeology has also played a part in postprocessual approaches. Colonial racism resulted in tensions between archaeologists and indigenous communities across the world (Knappett 2012, 251). Many indigenous cultures view archaeological investigation as a desecration of their sacred land and often feel misrepresented (Colwell–Chanthaphonh 2010). In recent years, however, the postcolonial approach has grown from a minor sub-discipline to having a significant role within archaeology (Knappett 2012, 252), with the increasing inclusion of people in the study of their own heritage and archaeology (Colwell–Chanthaphonh 2010, 269). This has resulted in collaboration between archaeologists and indigenous communities. However, many concerns still remain, particularly around issues such as the repatriation of indigenous human remains (Knappett 2012, 260). This is essentially a disagreement concerning what constitutes a landscapes with the relationship of indigenous identities to such places. Much development remains necessary before the discipline is rid of its colonial and racist prejudices but some postprocessual concepts provide a starting point. Postprocessualism embodies a more critically reflective archaeological discipline but it must be noted that other approaches to archaeology are not therefore colonial or racist by default.

Postprocessualism does have some legitimate critiques of processualist approaches to archaeology, some of which have already been touched on. Firstly, postprocessualist approaches emphasise the importance of the individual of the past along with their thoughts and values (Johnson 2010). Postprocessualism placed emphasis on agency, suggesting that processualism in its functional scientific approach to archaeological data, had obscured the individual. Secondly postprocessual approaches rejected the idea that data and theory could exist separately from one another, suggesting instead that data is always seen through the lens of theory whether or not archaeologists acknowledge the fact (Johnson 2010, 105). Postprocessualists suggest that artefact meanings are applied in the political present,

therefore interpretation of archaeological data is always a political act (Johnson 2010, 110). Postprocessualist approaches argued that meaning assigned to artefacts by archaeologists in the present are assumed to be the same as those assigned by past peoples (Johnson 2010, 106). It also emphasised the necessity for material culture to be examined in the same way as historical texts with the need to recognise factors such as manipulation and bias (Johnson 2010, 109).

Postprocessual critiques of processualist fieldwork are embodied in the notion of interpretation at the point of the trowel. This emerged in the late 1980s and suggested that interpretations made as excavation is taking place must have some primacy: there has to be some element of logic behind why a circular cut feature is thought to be a posthole and not a pit. Hodder (1997) argues that this reflexive approach to interpretation would lead to more detailed information about a site and better recording of its features. This concept emerged in line with the postprocessualist critique of processualism and condemned the mechanistic recording systems advocated in the previous decades. Postprocessualist thinking suggested that the processual functionalist approaches to archaeology were too compartmentalised and were based on a naïve belief that an objective archaeological record can be created in the field. These approaches suggested this should be replaced with a focus on individual agency, on the people of the past, their thoughts and values, suggesting that there are no social trends within cultures.

Critique of interpretation at the point of the trowel can be surmised as follows. Such interpretations assume that archaeologists can have all the answers at the point of excavation. However, it is usually the later analysis of data collected through fieldwork that credible interpretations are made about a site or landscape. The excavator is not in possession of all the facts and it is only through reanalysis of data that new and alternative interpretations of sites/landscapes can be made. As such, excavation reports have to be, to some extent,

recognised as one interpretation of the data. Part of this investigation of the Crambeck industry includes the reanalysis of previously collected and interpreted data (see Chapters 2, 4 and 5).

There must be a functional application to the administration, excavation, and interpretation processes of archaeological investigation. Without it, much data would be lost. Carver discusses this need for process in his *Making Archaeology Happen: Design Versus Dogma* (2011). Without the development of its processes how would archaeological investigation be any different from its earlier forms? Carver highlights the importance of project designs and research questions within these. It is possible to use new techniques to acquire a varied range of information about whole landscape down to the smallest objects, but without clear process, without a design with clear research questions, how can knowledge and understanding of the past progress? A set of clear research questions within a project design provides focus for practical investigations. They point the archaeologist towards gaps in current knowledge and provide a basis on which these can begin to be investigated. A process that flows from the project design (including funding), to the questions being asked of a site, to the post-excavation procedures, through to the need for any conservation or further intervention and archiving gives the discipline direction and purpose. Without this current archaeologist would be no different from their antiquarian predecessors. This is very much in line with the processualist desire to test hypotheses.

Postprocessualism also had an impact on landscape archaeology and shaped the sub-discipline into its current form. Landscape archaeology included the descriptive methods of mapping archaeological features over wider areas as well as the interpretative methods of examining the social use of space by past cultures or communities (Darvill 2008, 238). In the 1980s landscape archaeology, began to take on a more cultural and social focus. Discussions began to emerge around the social and cultural contours of the landscape as well

as is physical aspects (David & Thomas 2008, 35). Consequently, social aspects of landscapes were considered rather than just the biological aspects.

The influence of postprocessualist thinking can be seen in the study of Roman Britain (Mattingly 2007, 5) with an increasing focus on the individual and decreasing attention on the 'Roman' versus 'native' approaches. Throughout the twentieth and twenty-first centuries attitudes towards explaining the past changed, resulting in a broader range of approaches to archaeological investigation, including that of Roman Britain. This is illustrated in the changing opinions towards Romanisation:

“Romanisation is increasingly seen as a discrepant and diverse experience; one in which people actively participated in different ways, often seeking to resist dominant political and cultural forms. At the same time, it is being emphasised that there was no single Roman way of life to be adopted, transformed, or resisted...” (Hill 2001, 12)

As Romanisation has been applied by current approaches, it has increasingly incorporated the wider concept of identity through postcolonial and postprocessualist thinking. There has been a recent rejection (for example, Pitts 2007) of the traditional concept of Romans versus natives in favour of the study of neglected aspects of identity, such as gender. Identity is established within material contexts. The narrow colonial view of the past did not persist in the wider discipline but it remains a considerable part of the study of Roman Britain through the concept of Romanisation and more recently that of identity.

As discussed above, postprocessualist approaches argued that the individual of the past had been lost in structure. In the study of Roman Britain this resulted in the new approaches to Romanisation, primarily concerned with explaining culture through identity. This focused on the thoughts and values of the indigenous population at the point of invasion, moving beyond the binary division of whether they accepted or rejected a more 'civilised' lifestyle.

It also led to discussion surrounding the end of the Empire and the extent to which this provoked a return to more indigenous lifestyles – had the majority of the population ever been ‘Roman’ at all? Whilst these are valid questions they ignore the social aspects of Roman Britain and the concept that identities are established in relation to broader contexts. As such, the concept of Romanisation can be argued to be entirely unhelpful to the study of first century Britain as it does not accurately depict events of the time. The concept is somewhat outdated in current examinations of the period, having emerged from colonial attitudes to the study of the past.

To some extent the current study of Roman Britain is rooted in postprocessualist perspectives which are themselves a return to culture historical approaches with their focus on individual agency. The contents page of Mattingly’s *An Imperial Possession: Britain in the Roman Empire* (2007) illustrates this, moving through a chronological discussion of the major events of the period, although the discipline as a whole thought more along the lines of work by, for example, Millett (e.g. 1990; James & Millett 2001). These approaches to Roman Britain are concerned with identity before and after the conquest as well as the economy which regards to the distribution of materials. This postprocessualist account returns to some of the key culture historical principles and neglects to consider the economics of production.

Many of the postprocessual critiques of processualism remain relevant, particularly the importance of the individual in interpretations of the past. However, in practice, not all such critiques are realistic. It is of course necessary and important that individuals are not obscured by archaeologists’ attempts to understand the past, but the individual experiences of the past cannot provide an understanding of it in the present. Archaeological investigation should not be about the impossible task of establishing past individual experiences, rather, as postprocessualism suggests, it is the identity of these individuals that can be used to

understand culture. That said, identity is not the only concept of culture; other factors, such as landscape, need to be considered for a fuller understanding of past cultures, the ways they interacted with each other, and the world around them. While it is fruitless to attempt to understand past cultures through the thoughts and experiences of individuals, the study of identity can be used as a gateway to a wider understanding of culture. If all data is viewed through theory and all interpretations are made in the political present, then how can the thoughts and experiences of past individuals be faithfully reconstructed? This is a problem with which postprocessualists have struggled and is an iterative interpretation rather than an end point to studies of the past. Many processualists had not forgotten the individual but postprocessualism offered valid points regarding the organisational rather than theoretical needs of approaches to archaeological data.

An example of the construction of a pottery kiln demonstrates the benefits of drawing different aspects of archaeological theories together to interpret the past. The construction of a pottery kiln is, in most cases, a collective and social act. Whilst experimental archaeology has shown that it is possible for a kiln to be built by a single person, it must be questioned whether the collection of fuel, acquiring of land permissions etc. were also individual acts. There was an understanding of the technical aspects of potting, such as the physical skills of the craft and the mechanisms by which the products were sold, that were passed down. Therefore, the construction and use of kilns have broader social context. The practicalities of the act require multiple people to gather the materials needed and to physically construct the kiln, which can then be used to provide a service to the community. On a larger scale, it can be used to produce an object to trade in the immediate area. The practicalities of running a kiln therefore mean it had to be situated close to a clay source, have ready access to wood for fuel, and in most cases by close to a transport system to facilitate distribution.

Consequently, a pottery production site cannot be understood without first comprehending how the potters and their community interacted with their wider landscape. A consideration of such a landscape must include aspects such as the geology, topography, soils, drainage, vegetation and other ecological issues. Unfortunately, much of this data is not available for Crambeck (see Chapter 2.1). Therefore, a grasp of the social context and landscape setting of production is required in order to achieve an understanding of the processes, economic impact, identity and politics of production. Questions such as how the presence of the kiln(s) in the landscape affected the community and how people associated with them – for example, were they buried close to them – are important, as the landscape of production cannot be explained solely in terms of process and the economy.

The application of landscape studies to the understanding of pottery industries has so far been, for the most part, restricted to the production of distribution maps displaying the locations of various industries (for a recent example see the EngLaID project⁴). There are few examples of production being related to local features in the landscape, a problem demonstrated in Chapter 7 through a comparison of Crambeck to other Romano-British pottery production industries.

Summary

Archaeology in the twenty-first century has developed far beyond antiquarian approaches to the past. This section has highlighted how archaeological theories of investigation have progressed through the collection phase (antiquarian), and the organisation phase (culture history), ultimately arriving at the analysis and interpretation of the past through processual and postprocessual theories. These phases did not exist in isolation, there being many shared

⁴ <https://englaid.com/2015/01/09/mapping-pottery/>

and overlapping concepts between them. Current archaeological theory does not include the emergence of any new 'isms' as such. Rather, much of the discipline focuses on new applications of existing theories with emphasis on the archaeological data rather than the theories behind interpretations. There is now a general acknowledgement that approaches to the study of the archaeological record are varied and are influenced by many differing theoretical agendas.

Theory remains an important part of archaeological study. It is the theoretical opinions that influence how archaeological investigation is conducted as well as the interpretations that are made of the archaeological record. A clear progression through various trends within theoretical thought can be discerned, many being responses to the intellectual, political and economic issues of the time that were influenced by what archaeologists perceived as the current issues (Johnson 2010, 230).

Antiquarian and culture historical approaches to the past provided the basis upon which later archaeological investigation was developed but it was the emergence of processual thinking that brought about greater development through new ideals. Although postprocessualism has made some valid critiques of processual thinking, it is not a viable approach to the study and interpretation of the past. Whilst identity provides opportunities for wider perspectives of cultures, it neglects other aspects such as the social nature of past actions and the influence of landscape. Therefore, it is important to draw together the important concepts of processual and postprocessual theories to create understandings of human activity within social settings and their wider landscapes.

It has been demonstrated how the study of Roman Britain has, eventually, embraced the theoretical developments that occurred in the wider discipline of archaeology. The study of Roman Britain has begun to consider whole landscapes though further progress is required

to make this the primary line of investigation with a branching out to other aspects such as identity, only once an understanding of the landscape setting has been achieved. This is important as it is necessary to understand the role the landscape had in identity and culture. That said, whilst the methodological approach to the study of Roman Britain has altered to consider wider landscape areas, the attitudes to theoretical issues have not kept pace (see section 1.3). In order to move forward, the discipline needs to first embrace both the functional processual and identity centred postprocessualist approaches. The combination of these theoretical concepts leads to an approach to the study of the past that focuses on social context and landscape setting whilst acknowledging the role of identity, providing the best opportunity to further understanding. In addition, the study of Roman Britain needs to move away from discussions of Romanisation. This is a largely unhelpful concept that is rooted in outdated colonial approaches.

The study of Roman Britain would benefit in many ways from a more social landscape focused approach. For example, the distribution and consumption of a particular pottery ware cannot be understood without first examining the scope of production in the landscape and understanding the social context and processes of that production. This is a useful hybrid of processual and postprocessual concepts that can be applied to the topic of Roman Britain. How can we, as archaeologists, achieve an understanding of daily life and the individuals of the period without first understanding the character of the province as a whole, how the landscapes were used, and the wider social factors that drove changes to politics and the economy? Within this, the function of pottery throughout Roman Britain is recognised (see section 1.2 for a discussion of its subsequent usefulness to archaeological study): its use in transporting goods across the province and the Roman Empire more widely. The most common function of ceramic vessels was as containers for the transport and distribution of

other goods (primarily foodstuffs), a point which is discussed in greater detail by Cool (2006) and Allason-Jones (2011).

This thesis embraces a functional processual approach whilst recognising the use of postprocessual approaches to identity. It argues that the distribution, consumption and even decoration of a particular pottery ware, using Crambeck as an example, cannot be understood without first establishing the process of production and contextualising the nature of that production landscape. This thesis examines the particular way in which the Crambeck landscape changed throughout the Roman period and the impact their surroundings may have had on the Crambeck potters. It accepts the diversity and complexity of landscapes and attempts to understand why this particular landscape was used for pottery production without assuming the same can be applied to other similar sites.

1.2 Pottery in Archaeology and the Development of Romano-British Pottery Studies

Pottery plays a key role in archaeological investigation and its study can reveal much about past societies, economies and cultures. This section will examine the development of pottery in archaeology in loose chronological order before briefly discussing its role in current archaeological investigations. This will be followed by an assessment of the study of Romano-British pottery. The section will end by summarising the approach taken by this thesis to the study of pottery.

Pottery in Archaeology

The following overview of the development of pottery studies and its changing role within archaeological investigation owes much to Orton, Tyers and Vince (1993) *Pottery in Archaeology* (referred to as Orton et al) and the second edition of the same book by Orton and Hughes (2013).

Pottery is extremely useful to investigation of the archaeological record and can provide three main forms of evidence: dating, function and distribution (i.e. trade). The basic questions that can be asked of pottery are *when* it was made, *where* it was made, *what* it was made for, and *which* clay source was used in its production? As Orton and Hughes (2013) summarise, today archaeologists have different attitudes towards pottery:

“For some it has an indefinable fascination, and is potentially full of information, which has to be teased out by careful and painstaking study. At the other end of the scale, it is seen as the most common of archaeological materials, whose main functions are to slow down the real business of digging, fill up stores, and behave as an archaeological black hole for post-excavation resources. Between these extremes there is a whole spectrum of opinion...” (Orton & Hughes 2013, 3)

Pottery can be used to date a site or features within it. This is often done in stylistic terms but other artefacts can also be used to date the pottery by association (e.g. coins). However, there are some problems with using pottery in this way, namely the lack of a commonly applied scientific dating method for the sherds, as noted by Hurcombe (2007, 185). Scientific methods of dating pottery are emerging, such as rehydroxylation (RHX)⁵, but their application is not currently widespread and requires further development. Until an accurate technique for dating pottery is frequently applied, archaeologists must continue to date it by stylistic means or by its stratigraphic associations with securely dated finds.

The study of pottery can also yield distributional information alluding to aspects of the economy such as trading patterns. This can provide a picture of past economies and can lead to questions regarding the methods of distribution. *Amphorae* are a key example of pottery studied with a focus on trade and distribution (e.g. Callender 1965; Peacock & Williams

⁵ For example, see Clelland, Wilson, Carter & Batt 2014; Orton & Hughes 2013, 224-225; Clelland, University of Manchester *An Introduction to Rehydroxylation Dating*.

1986). Stamps and written inscriptions on the *amphorae*, known as *tituli picti*, represent the primary use of the vessel and can provide information such as place of origin, date and original contents. The distributional study of pottery is not without its problems as not all pottery is as explicit as *amphorae* in its usefulness in providing information of trade, distribution and economy. Methods of analysis such as quantification need to be developed in such a way to account for discrepancies occurring during excavation. At the very least, quantification data applied to distributional studies cannot be understood as absolute fact, and archaeologists have to be aware of the potential gaps in this data.

Study of a vessel's form and characteristics can indicate its function, or at least the use to which it was most suited (Orton et al 1993, 28). Characterising the forms of sherds collected from a site or areas within in can indicate the function or use of these spaces. However, in order to establish a more detailed understanding of activities undertaken at a site or in a landscape, this information must be used in conjunction with other factors, such as other material culture present and contextual or stratigraphic data.

The study of the manufacturing process and technology involved in producing ceramic vessels has been a focus of pottery studies throughout its various phases of development. Such studies can put pottery in to its social context and indicate the amount of resources required (Orton et al 1993, 31). This can lead to questions about the pottery industry in relation to the local and regional economies and whether it was a part- or full-time, seasonal or year-round, individual or community activity. It can set the production process into its wider physical, social and economic landscapes.

In the mid twentieth century, several authors made attempts to divide the development of the study of pottery into a chronological sequence, (e.g. Shepard 1956, Matson 1984, Van der Leeuw 1984). Orton et al draw on these first attempts at chronological phases to suggest

three of their own, relating closely to developments in archaeological theory. They will be used here as the basis for the discussion of the development of pottery studies within archaeology.

Orton et al's three phases are used in both editions of *Pottery in Archaeology* (1993; 2013). They are defined as the art historical, the typological, and the contextual (Table 1). These can be equated to the antiquarian, culture historical and processual developments seen in the study of Roman Britain discussed in the previous section. In general terms, it is clear from these three phases that the development of the study of pottery echoed the theoretical developments in archaeology.

Phase	Art-Historical	Typological	Contextual
Date	1500+	1880+	1960+
Scale	Whole potsherds	Sherds	Microscopic to assemblages
Parallel Theme	Archaeometry Technology	Archaeometry Quantification Technology	Archaeometry Ethnography Quantification Technology

Table 1 Phases of the study of ceramics within archaeology. Reproduced from Figure 1.1 in Orton & Hughes 2013, 5.

The *art historical* phase encompasses the sixteenth to early nineteenth centuries and encompassed the recovery and description of whole vessels (Orton et al 1993, 5). This antiquarian culture historical approach viewed the vessels as culture objects. Works focussed on describing vessels found and by the seventeenth century there was a concentration on burial urns (Orton et al 1993). The eighteenth and nineteenth centuries saw a broadening of interests into pottery from various periods and in differing forms. However, the focus remained firmly on the higher status vessels, coinciding with the focus on military, urban and villa sites in the study of Roman Britain (see 1.1 above).

Study of pottery from Roman Britain during the art historical phase broadly focused on the fine rather than the coarse wares and saw some attempts to produce handbooks and coherent

chronologies of whole vessels (see Tyers 1996, Chapter 1, pp1-23). Haverfield's work can be seen as the culmination of this art historical approach to pottery studies (e.g. Haverfield 1910; for a comprehensive list of Haverfield's works see the bibliography in Freeman 2007).

The *typological* phase encompassed the late nineteenth to early twentieth centuries and focused on the study of sherds rather than whole vessels (Orton et al 1993, 5). This developed as part of the culture historical approaches (see 1.1 above) and recognised the potential of using pottery as dating evidence through its organisation into typologies and with reference to stratigraphic relationships. This swiftly led to a recognition of the need to systematically organise the data and increased pressure for a system of classification (Orton & Hughes 2013). The first distribution maps of pottery types were also produced during this period (e.g. Abercromby 1904).

The two main foci of the typological phase were chronology and regional spatial distributions (for example, the studies of *amphorae*, e.g. Dressel 1891). These aimed to correct chronological sequences of the development of vessel forms and in doing so, to define cultural areas. As a result, the method of quantification was developed (this is discussed in further detail below). This provided a way to numerically describe pottery and produced data such as the sherd count and weight of an assemblage, fuelling the focus on chronological development and spatial distributions (Orton & Hughes 2013). Ultimately, this phase was the 'age of type', which proved a useful way of subdividing pottery and could be ordered according to the chronological development of forms, but required the development of a more sophisticated and accurate system to describe pottery.

The *contextual phase*, not to be confused with Hodder's contextual archaeology, followed the typological from the mid twentieth century. It was concerned with the study of pottery at various scales, from whole assemblages to the microscopic, reflecting the processual

desire to test hypotheses. This processualist approach to pottery saw a change in the information depicted in distribution maps from evidence of people in terms of settlements, to that of economies and trade. Shepard was a key figure in this period and in the development of ceramic studies in general (e.g. Shepard 1956). Orton et al outline her contribution to the study of pottery:

“She drew together strands then current – chronology, trade / distribution and technological development – and identified the aspects of excavated ceramics which should be studied to shed light on each of these areas...identification of types for chronology, identification of materials and their sources for trade, and the physical characteristics of vessels to show their place in technological development. In doing so she laid the foundation for many future studies.” (Orton et al 1993, 13)

Shepard drew on the works of several others in her attempts to construct classifications of forms based on their ‘characteristic points’ (e.g. Birkhoff 1933; Meyer 1957) and in her creation of descriptive systems for decoration on pottery (e.g. Douglas & Reynolds 1941; Beals et al 1945) (Orton & Hughes 2013, 12). Her work influenced ceramic studies on both practical (shape, classification, descriptive systems for decoration) and theoretical levels (discussions of uses and limitations of the concept of type, proposition of a tentative flexible view of typology).

It was during this contextual phase that the need for standardisation emerged in order to facilitate the comparison of sites both individually and collectively and resulted in semi-official reports (e.g. Young 1980). This was fuelled by the vast quantities of material being gathered through the rescue archaeology movement (see section 1.1) and was part of the emerging processual thinking on the study of pottery, reflecting the desire to be more scientific and methodical in the study of ceramics. It was during this period that lab-based scientific processes began to be applied to pottery (e.g. chemical analysis of the fabric to

identify clay source). This was of most use in studying the geographical origin of specific wares and the application of fabric analysis to determine what substances vessels may have contained (*amphorae* are such an example, see Peacock 1977; 1982). This typifies the impact of processualism on pottery studies with the demands of rescue archaeology leading to a professionalisation of the discipline.

Four topics, ethnoarchaeology, technology, scientific methods of investigation, and quantification, contributed to the development of ceramic studies alongside the more general changes in the study of Roman Britain and archaeological theories.

Ethnoarchaeology encompassed the realisation of the value of ethnographic studies in archaeological interpretation and featured mostly in the contextual phase. This developed as a way for archaeologists to integrate the excavated finds with the societies that produced and used them (Orton et al 1993, 17). An interest in the technology behind types of pottery emerged under the influence of ethnoarchaeology (Orton et al 1993, 18) aided by the application of increasingly accurate scientific lab-based techniques of investigation.

The emergence of quantification played a role in the typological and contextual phases of ceramic studies. Quantification is essentially a numerical approach to different types of pottery with the aim of describing an assemblage in terms of proportions of types and forms present, (Orton et al 1993, 21). It is a practical application of processual theories to the analysis of pottery. Various numerical measures can be applied, including weight, number of sherds present, and estimated vessel equivalents (EVEs), amongst others. As multiple measures developed, attempts to compare them were made. Quantification led to the integration of ceramics into the wider analysis of finds assemblages.

It is through the application of methods such as quantification that pottery studies have become an essential part of understanding the past and Hurcombe sums up the current usefulness of ceramic studies in archaeological investigations:

“The firing qualities, decoration and inclusions can all be used to characterise particular kinds of pottery and, if supplemented by scientific analysis such as petrological studies, can result in specific sources being identified, thus outlining patterns of exchange and trade...Where it is combined with contextual information its value increases again and, because pottery is so durable once fired, it tends to be a dominant force in studies of material culture and artefacts found on sites.” (Hurcombe 2007, 179)

Recent focus within pottery studies has been upon the decorative schemes, notions of identity (linked to decoration), and the movement of material through the study of distribution. Such foci reflect a postprocessual approach to pottery studies which is not without its flaws. This approach to pottery in archaeology neglects the social issues and the economic processes of production. Therefore, it cannot provide a complete understanding of the information provided by the pottery of the culture and society of which it was a part.

Pottery and Roman Britain

The study of Romano–British pottery followed many of the same developments. These, along with an assessment of what it can contribute to the understanding of Roman Britain will be discussed below. Tyers (1996) provides an account of the development of Romano–British studies, much of which is summarised here.

Roman pottery received some mention in works as early as the sixteenth and seventeenth centuries (for example, in Camden’s *Britannia*, 1586), but it was not until the eighteenth century and antiquarian approaches to archaeology that pottery was studied in greater detail in its own right. A number of papers (e.g. Pownall 1779) in early volumes of *Archaeologica*

(Journal of the Society of Antiquaries) were concerned with Roman pottery discovered in Britain (Tyers 1996, 1–2). At this early point of Romano-British pottery studies, there was a heavy reliance on the classical written sources for explanations of the pottery, its use, and manufacture. Some simple catalogues were produced of material found including illustrations, description and lists of materials (for example, Combe & Jackson 1787).

Edmund Tyrel Artis (e.g. 1828; 1847) was perhaps the first to contribute a major development to the study of Romano–British pottery. Working in the Nene Valley in the early nineteenth century, he was not only concerned with the vessels themselves but also with the structure of the kilns and how they operated (Artis 1847; Tyers 1996, 3). To this end he performed a number of experiments to better understand the inner workings of the Romano–British pottery kilns and how they produced certain colours in the vessels. As well as being an early example of experimental archaeology, this also demonstrated an application of what were to become processual attitudes to archaeological investigation.

Following Artis, a number of other antiquarian archaeologists worked on the study of Roman–British pottery, for example Charles Roach Smith (e.g. 1845; 1880), with some producing descriptions and drawings to exceptionally high standards (Tyers 1996). Nevertheless, this antiquarian methodology continued to describe the pottery and to view vessels as culture objects. By the late nineteenth century, culture historical theories of investigation were impacting the study of Romano–British pottery.

Throughout the early twentieth century the study of Romano–British pottery developed swiftly, with attention first being focused mostly on the fine wares and eventually broadening to include everyday coarsewares. Collingwood's *The Archaeology of Roman Britain* (1930) included two chapters on pottery that contained illustrations of the most common types of Romano–British to be found with comments on their date and likely origin.

However, by the Second World War a comprehensive catalogue of all known common types of Romano–British pottery had yet to be produced, although some, such as Collingwood (1930) had tried (Tyers 1996, 19).

The 1940s and 1950s saw an increase in both the quality and quantity of the evidence from kiln sites along with a growing appreciation of the regional character of Romano–British pottery, in particular the coarsewares (Tyers 1996, 19). Focus shifted from pottery in Roman Britain as a whole, to regional ‘Roman’ identities within the province and the focus on the elite wares shifted to include the more everyday wares (for example the work at Jewry Wall Leicester, see Kenyon 1948; Tyers 1996, 18–19). This was in line with the developments in pottery studies more broadly as well as with approaches to the study of Roman Britain and archaeological theory. Gillam published ‘Types of Roman Coarse Pottery Vessels in Northern Britain’ in *Archaeological Aeliana* (1957), its core containing illustrations of three hundred and fifty types of Romano–British pottery, cross–referenced with one hundred and thirty–four dated groups (Tyers 1996, 19–20). A year prior to this, Gillam (1956) had produced a paper examining the relationship between the Northern frontier and the resources of its pottery supply, including consideration of Crambeck ware (Tyers 1996, 19). Phillip Corder provided the next notable advance of the 1950s by focusing on the structure of Romano–British pottery kilns and produced a paper dedicated to the topic (Corder 1957; see Tyers 1996, 20). Such works were the first concrete beginnings of a more scientific approach to the study of pottery from Roman Britain and the sub–discipline continued to be influenced by developing archaeological theories of investigation.

From the 1950s and 1960s, pottery studies, including those concerning Roman Britain, became heavily influenced by processual methodologies. The sub–discipline was increasingly concerned with identifying the sources of wares as well as establishing distribution patterns (Tyers 1996, 20). This can be considered as the beginning of modern

scientific approaches to pottery studies, both generally and within the study of Roman Britain. Peacock (1982, 3) notes that the first half of the twentieth century saw a marked bias towards establishing chronologies based on typological analysis. Work in the 1970s and 1980s was concerned mainly with fabric, quantification, and form with a continuing focus on the study of kilns and production sites (Peacock 1982, 22). These studies were fuelled by a focus on the economies of the Roman world, with pottery used to illustrate these systems (e.g. see Fulford 1979; Evans 1985; Millett 1990).

The 1980s and 1990s saw the development of guidelines for the study of Romano–British pottery, for example Young (1980). This was the systemisation of pottery recording methods. Thus, the study of Romano–British pottery had begun to use scientific approaches and developed along similar lines to the study of pottery within archaeology as a whole. Peacock summarised the state of Romano–British studies in the 1980s:

“In the past the main thrust of ceramic research has been directed towards the classification and identification of pottery so that we have been much preoccupied with naming, dating and determining the origin of different wares. Obviously this is vitally important and must continue to receive priority, but the study had now developed to a level where broader synthesis and evaluation is not only possible but essential, for much spadework has been done and we have reached a major turning-point offering exciting new possibilities for the future.” (Peacock 1982, 3-4)

Peacock’s point remains valid. The major turning point and new possibilities relate to the emergence of the new scientific, lab–based techniques in the latter decades of the twentieth century. This remains relevant today because these techniques are continually developing and new ones constantly emerging. The study of Romano–British pottery needs to progress apace with these developments and new techniques if it is to remain relevant to current

archaeological investigations and if archaeologists are to maximise the information pottery studies can provide.

What can the study of Romano–British pottery contribute to our understanding of Roman Britain and the Empire? Peacock (1981, 187) suggests that there are two ways of looking at pottery. First the historical approach interprets ceramics only in reference to written records. This can give an indication of the economic framework surrounding distribution and thus pottery can be used to construct economic history but there are many issues here as ancient documents often exclude explicit mention of pottery or ceramics. Second is the geographical approach that encompasses attempts to understand the mechanisms and processes behind ceramic production that are not included in classical texts, including location of kilns and distribution patterns through trade. This suggests, then, that there are two main areas in which the study of Romano–British pottery can contribute to the understanding of the province and of the Roman Empire. Despite this, written references to pottery are rare, thus limiting the historical framework. Archaeologists are therefore very reliant on archaeological data for information about pottery from the Roman period.

At the historical level suggested by Peacock (1981), it is possible to understand the structure of the economy surrounding the production of pottery, more specifically, its distribution patterns. Modern scientific techniques, such as lipid analysis, can be applied to pottery to establish the last contents of the vessel. In turn, this can be used to reconstruct the economies of other traded goods such as food and wine. A geographical approach can allude to the mechanisms and processes by which the pottery was manufactured, marketed and distributed. Thus, by examining both of these approaches in conjunction with each other, it is possible to reconstruct the processes of production and distribution of pottery as well as the trade of other goods throughout Roman Britain and across the Empire.

There are many debates about the form of the Roman economy in Britain (e.g. Hodder 1974; Peacock 1977; Gillam & Greene 1981; Evans 1985; Millett 1990; Whyman 2001). These revolve around establishing how much the Roman economy was driven by marketing and how socially embedded it was, how much it reflects the modern world and how different the Roman economy was from that of the Iron Age which was inherently socially embedded. Modern scientific lab-based approaches to the study of pottery can help to clarify aspects of the Roman economy that sparked this debate.

This is exemplified in the works of Whyman (2001) and Gerrard (2005) in their discussions of the role of pottery production and post-Roman trajectories in Britain. Gerrard stated that *“It is widely accepted that Romano–British pottery production ceased in the first decades of the fifth century leaving the early post–Roman period largely aceramic.”* (2005, 30). Following this Gerrard noted that Fulford, amongst others, attributed the end of pottery production to the collapse of the monetised economy in Britain and the end of a demand led market (Gerrard 2005, 30–31). Fulford (1979, 128) also suggested that the clear decline of the pottery industries in Roman Britain did not necessarily mean they ended. He went on to suggest that the evidence presents two scenarios, a gradual decline after the removal of the Roman administration, or an abrupt end, with further investigation required to understand which of these is correct or at least most likely (Fulford 1979, 128).

It is clear that much work is required to understand why large–scale Romano–British pottery production essentially ceased with the end of Roman administration in Britain. This could be achieved by extensive study of the economy of the late fourth century and Britain in the fifth century. Whyman (2001, 55) suggested that consideration of the importance of the demand led market to the pottery industry is also needed to further understanding of the fifth century in Britain. This approach, encompassing a monetised economy and a demand led market, is essentially a discussion on the distribution of pottery.

Swan (1984) provided an excellent example of the collection of information regarding the processes of pottery production, but she was an exception most other studies at the time. The general focus throughout the 1970s and 1980s was on the economies of movement and the distribution of pottery (e.g. Fulford 1979; Evans 1985). This was a result of processual methodologies of investigation and the desire to be more ‘scientific’. Understanding of Romano-British pottery production benefitted from this processual approach, with much being discovered regarding the location of kilns (through the application of geophysical survey), firing techniques (through experimental archaeology and lab-based analysis), and the fabrics of wares (through the application of chemical and lab-based analysis).

The study of Romano-British pottery kilns needs much development. Swan (1984, 128–129) suggested some improvements in the 1980s: larger areas need to be excavated with the aim of uncovering whole factories to study spatial organisation; higher standards of recording are needed; scientific processes should be used to date kilns; and there is a general lack of palaeoenvironmental information from kiln sites (a fact still true in the case of Crambeck, see Chapter 2.1). Some of these developments have occurred since 1984, for example palaeoenvironmental information has come to play a large part in all excavations in the decades following the 1980s and recording standards across the discipline have improved significantly. However, there are always improvements to be made, especially as new techniques are developed and applied. Swan also noted how, “...*the importance of kilns for pottery studies cannot be overstated.*” (1984, 129). She emphasised the need to study in detail the processes of pottery production and specific aspects of it (e.g. slips, colours and forms) if archaeologists are ever going to begin to understand the role of the pottery in Roman Britain (Swan 1984).

It has been demonstrated here that throughout much of the ‘modern’ study of Romano-British pottery, the focus has been on the economies of trade and distribution, albeit with

some exceptions (e.g. Swan 1984). However this has neglected the economies of the processes of production, a vital issue for the study of pottery, with a general lack of focus on landscape issues with regards to pottery manufacture sites.

Summary

This section has outlined how the role of pottery in archaeology and most specifically how Romano–British pottery studies have broadly followed the developments in archaeological theory. Pottery has a central role to play in archaeological analysis as it has the potential to provide a wealth of information regarding a variety of issues. Crucial to the usefulness of pottery to archaeological investigations is the continued application and development of scientific lab–based techniques. Production locations have been identified through such methods and the pottery wares of some production centres have been defined with regards to their chemical composition.

It is clear that the study of Romano–British pottery has developed far beyond its beginnings in the eighteenth century. It now encompasses a variety of techniques and contributes a variety of information to archaeological analysis and interpretation. Despite this, the landscape settings of production sites are much neglected and are not examined in any great detail. Much additional work is required to place kilns into their landscape settings and to understand the processes of production, particularly in relation to recent changes in theoretical approaches to understand archaeological investigation.

It is suggested here that it is necessary to discuss the movement of pottery through the actions of humans and the influence of the economy in terms of the processes of production as well as distribution and trade. The study of pottery from Roman Britain is one of the economy but it is argued here that such studies need to focus on the economies of production as well as those of distribution and consumption. Therefore, this thesis is a functional processual

approach to the study of Crambeck as a late Romano–British pottery production centre with a distinct landscape focus in order to contextualise the processes of production of the industry in its wider surroundings.

1.3 Approaches to Landscapes in Archaeology and the Study of Roman Britain

Archaeologists have always been interested in space, and consequently landscapes have always been included in studies of the past (Ashmore & Knapp 1999, 1). Landscapes are the backdrop against which artefacts are plotted (Ashmore & Knapp 1999, 1). It is broadly central to the archaeological discipline and it is landscape that gives context to archaeological artefacts facilitating engagement and effective interpretation (Stoddart 2000, 3). This section will give a brief history of the development of the study of landscapes within archaeology before discussing the current approaches to landscape archaeology, including its multidisciplinary aspects, and its application to the investigation of Roman Britain.

Landscapes and Archaeology

The term ‘landscape’ emerged as a technical word used by artists in the sixteenth century but the phrase ‘landscape archaeology’ was only first applied in the mid 1970s by Mick Aston and Trevor Rowley (1974; David & Thomas 2008, 27). The discipline is rooted in concerns highlighted by Hoskins (1955) in *Making of the English Landscape*. The 1950s and 1960s were a time of post–war prosperity characterised by the recovery of agricultural fortunes, which was destroying urban and rural landscapes (Williamson 1998, 1–2). Williamson (1998, 2) summarised the contribution made by Hoskins: England’s past was exposed and visible to all, but it was being obliterated by town planners, industrial farmers and developers. The following outline of the development of landscape archaeology has been summarised from David and Thomas (2008, 27–43).

Since the 1970s, understanding of landscape archaeology has changed and the term is not universally applied in the same way across the archaeological discipline. It was during the 1970s and 1980s that landscape “...ceased to be simply a unit of analysis over and above the ‘site’ and became instead an object of investigation in its own right.” (David & Thomas 2008, 28). In the 1970s focus was on environmental aspects of landscapes – site distributions in environmental settings, economic strategies, and interregional dynamics etc. – and terms such as ‘environmental’ or ‘ecological’ archaeology were applied more frequently than landscape archaeology (although there were some exceptions, e.g. Aston & Rowley 1974). Many of these early works attempted to understand the relationship between humans and their environment in terms of economic and/or adaptive settlement and subsistence strategies. The focus on these relationships led to more detailed understanding of landscape formation processes through refined fieldwork and statistical methodologies.

There were geographical differences in approaches to the study of archaeological landscapes. For example, in the USA there was a focus on settlement systems that resulted in a corresponding focus on the process (rather than the locations) of human behaviour in the landscape (e.g. Binford 1980). In the UK the focus was on characterising the spatial patterning of sites and artefacts. Development in methods for exploring such patterning led to the realisation that the people of the past were not just adapting to environmental circumstances, archaeologists now understood that they were dealing with people interacting amongst themselves as much as they were with their physical surroundings (e.g. Hodder 1978).

This led to the impact of postprocessualism on the study of landscapes in archaeology. There was a general unease, as with the discipline more broadly, over the meaning of spatial patterning, which led to the idea that the adoption of artefact types might be a deliberate act of social inclusion or exclusion rather than simply reflecting a pre-given identity. Hodder

played an important role in the new social archaeology that came to inform approaches to landscapes.

The concept of landscape has been utilised by archaeologists for three key reasons. Firstly, the emergence of 'landscape' as different to 'environment'. Secondly, the realisation that human existence in the world is tied to social processes and cannot be completely reduced to notions of environmental adaptation. Thirdly, there have been changes in the perception of social landscapes along with the understanding that people and culture are at the core of interactions with the world. Landscape archaeology is a product of the mid-twentieth century, which saw the emergence and integration of multidisciplinary approaches to the study of the past and the discipline of archaeology. It was heavily influenced by postprocessual thinking which was partly responsible for its change in focus to more social or cultural rather than biological aspects.

The postprocessual view of landscapes was more about humans interacting as social people who engaged with their surroundings in a variety of ways, as opposed to humans acting for adaptive biological reasons. This concept included symbolic practices, encompassing social and philosophical as well as environmental understandings.

There were four main influences on archaeological practices as part of the move towards a more socially oriented landscape archaeology: cultural resource management; indigenous critiques; sourcing studies; and landscapes with style.

Cultural Resource Management saw major transformation in the 1960s and 1970s. these included increase public and professional awareness of the progressive decline of cultural sites as heritage places and an increased awareness of the establishment of new legal protections for sites. There was a shift in cultural resource management towards a more social concept of landscape. The example given by David & Thomas (2008, 33) is that of

Stonehenge and the debate surrounding the upgrading of the visitor facilities and improving the visitor 'experience'. The need for increased protection of sites was prefaced by new and explicit criteria of assessment for heritage places as locations of social significance. The changing character of Rescue Archaeology, itself a distinct part of cultural resource management, fuelled the growing concern with social landscapes. In many rescue archaeology cases the sheer scale of the project meant that investigation had to be carried out at a 'landscape' rather than 'site' scale. David and Thomas note that:

“Although in some cases it has been possible to address these landscapes in purely environmental terms, for the most part the nature of these projects has required a consideration of social networks that extend beyond residential locations, and the dispersal of social practices across the landscape.” (David & Thomas 2008, 34)

Many rescue archaeology projects were also multi-period in nature which prompted the consideration of landscape development over time.

Indigenous critiques resulted in the realisation that the environmental foci of landscape archaeology did not, in isolation, reflect indigenous people's own concepts of their landscapes, nor did they reflect the reasons why these people lived in certain ways. This realisation came from the increasing application by archaeologists of anthropological thinking to the study of the past, from an increase in direct engagement with indigenous people whose landscapes were being studied, and from an increased dissatisfaction with abstract archaeological concern that were often far removed from indigenous notions of their own histories. These changes were partly connected to a retreat from the more extreme positions of processual approaches to archaeology. Archaeologists became increasingly aware of the value of multiple perspectives and perceptions in the study of the past.

Sourcing studies was a concept that developed from the 1960s onwards and was perhaps best surmised by Renfrew who argued that:

“...social change often occurred simultaneously over wide geographical expanses, necessitating a focus not just on individual places but on relationships between places in systems of peer polity interactions.”
(outlined by David & Thomas 2008, 32; original paper Renfrew 1975).

This was a new impetus for a socially oriented economic archaeology with a particular emphasis on trade.

Stylistic studies made it quickly apparent that geographical barriers are as much social as they are environmental. Through the study of style there was a move *“...toward an understanding of the past that focused more on social relationships within and between communities of people through the way they decorated items of material culture...”* (David & Thomas 2008, 34). The application of ethnoarchaeological and ethnohistorical research refashioned landscape archaeology as a new social form of archaeological investigation. This resulted in the re-emergence of the notion that landscapes included social aspects as well as economic imperatives.

The result of these four critiques on landscape archaeology, as suggested by David and Thomas (2008, 35), was that *“...the landscape increasingly began to be seen as engaged socially and culturally as much as it is engaged environmentally, and it is this engagement that defines the lie of the land, what a landscape look like...Landscapes are topographies of the social and cultural as much as they are physical contours.”*

Having discussed the emergence and development of landscape archaeology, a brief outline of what comprises landscape archaeology today will be given here. This summary is drawn from David and Thomas (2008). The terms ‘landscape’ and ‘archaeology’ were not put together until the late twentieth century for three reasons: the recent emergence of landscape

as more than environment; the recognition that existing in the world is entangled in social process and cannot be entirely reduced to notions of environmental adaptations, and a change in understanding that puts people and culture at the core of engagements with the physical world.

Landscape archaeology today is a multi-disciplinary, multi-concept approach to the study of the past. It suggests that landscapes are ecological (people constructing frames of knowledge in order to know the world they live in), institutional (space is structured and behaviour normalised throughout codes of social practice), moral codes (landscapes concern the ongoing reassessment of social rights and wrongs), territorial spaces (landscapes are always controlled and contested in social and political practices), ontological (they are always known through historically emergent world views), and landscapes are the experience of a location or place (they are always engaged as the location of social and personal experiences). Landscapes concern how people organise their daily routines which are affected by the seasons with social time being implicated by the daily rhythms of life, in this sense landscapes can be viewed as taskscapes (Ingold 1993).

Archaeology of landscapes began with a focus on economic, environmental and ecological concerns but the current discipline has become more about the archaeology of socially and experientially engaged places, being an archaeology of the causes and consequences of environmental conditions on human behaviour (David & Thomas 2008, 39).

This section has outlined how the discipline of landscape archaeology emerged in the 1970s with a focus on environmental, ecological and adaptive notions of human behaviour studies through spatial distributions. This was very much a processual approach to the study of landscapes. Postprocessual thinking saw change towards a more social view of landscapes. Landscapes engaged socially and culturally as well as physically. Today, landscape

archaeology is a multifaceted discipline, it is the archaeology of place in all its lived dimensions, not just physically. Place and emplacement are as much concerned with social identity as they are the economic and environmental aspects of life.

Landscapes and Roman Britain

Studies of Roman landscapes in Britain have developed with a heavy social and political bias. This section examines this development by using the motif example of villas. However, it must be recognised that landscapes in Roman Britain were complex and that their study has, for the most part, simplified their nature. There is a persisting question surrounding the definition of the villa. Percival (1976, 13) suggests there are at least two answers to this question: the first describes villas as economic and social phenomena, the second encompasses what the word means in relation to what it should be applied to (e.g. can we describe villas as farms). The latter tends to list what structures and assets (such as hypocausts) that come along with ‘villas’. This will be discussed throughout the remainder of this section, villas being used to illustrate the changing approaches to Romano-British landscape studies.

As already discussed earlier in this chapter, the culture historical approaches to the study of Roman Britain had a distinct focus on the elite aspects of society. This was also applied to the consideration of landscapes in the province. Villas were targeted for excavation for their wealth of material culture and their visibly impressive architecture. The antiquarian archaeologists saw the inhabitants of such sites, along with those in the military and civil administration establishments, as their social equivalents. Villas were seen to be important to the nature of Romano-British society and were excavated in large numbers with other less impressive settlement forms being largely ignored (Hingley 1989, 2). They were thought to be widely dispersed in isolated places, surrounded by hordes of uncivilised natives (Hingley

1989, 1). This view reflects the impact of colonialism on the study of Romano-British landscapes. This view was echoed by influential figures of the time such as Haverfield (1912) who typifies the view of villas as the homes of Italian elite in Britain, and Collingwood (1923) who encompasses the view that villas were the establishment of the Romanised British Iron Age elite. Unfortunately works in the culture historical view set a precedent for the interpretation of landscapes in Roman Britain.

The impact of processualist thinking resulted in the application of a range of new techniques to the investigation of landscapes across Roman Britain. However, the interpretations did not lose their hierarchical nature acquired through culture history. Villas were considered as centres of economic functions in the landscape and were examined on the basis that subsequent activity revolved around them (e.g. Rivet 1969, 173-216). Some other, non-villa, rural sites were considered but the overall focus had not changed, remaining on the elite social standing of the villas. The villas were viewed through an economic lens. They were studied in terms of their landscape setting, and their carrying capacity as well as the resources they could draw on and the areas they serviced. The critique of this centred on the idea of the fragmentary landholding process, that the villas weren't always physically in the centre of the land they held, this often being far more spread out than the economic notions of the villas suggested. These 'estates' were interpreted in terms of their social and political standings within society resulting in a focus on their cultural control over a landscape and the dominance of the rural Romano-British economy.

Postprocessual thinking brought the application of phenomenology and more holistic approaches (e.g. Branigan & Miles eds. 1987). There was an increase in the number of other rural sites investigated with some variations in their interpretations away from the tradition hierarchical views. There was also a growing awareness of the complexity of settlement patterns although culture historical thinking retained some influence. Villas came to be

studied for their ideological aspects. Why were they placed where they were, what did they mean to the local population, where could they be seen from? Such questions resulted in the application of GIS based viewshed analysis to examine lines of sight and movement across the landscapes (e.g. Ingold 1993; 2012). Villas were considered, not only for their social and political importance but also in terms of their environmental impact. Scott's gazetteer of villas in Britain highlights the ongoing issues with defining the nature of the rural settlement sites that have being designated as 'villas'.

The application of landscape studies to the investigation of Roman Britain has resulted in an increase in the number of non-villa sites that are excavated coinciding with a decrease in the villa and military sites that were the traditional focus of such excavations (Figure 4). This is a result of the impact of rescue archaeology creating a change in focus in the discipline. Recently, the Roman Rural Settlement Project⁶ and Rippon et al's recent work have greatly broadened the opportunity to study a wide range of Romano-British settlements in the countryside. This holistic approach lays the foundation for a much deeper understanding of the relationship between settlements such as villas and their surrounding landscapes.

⁶ <http://archaeologydataservice.ac.uk/archives/view/romangl/>

Table 10.3 Numbers and proportions of archaeological sites of differing types excavated by 5-year period from 1921 to 1995

Year	Military	Major town	Villa	Small town	Non-villa
1921–25	51 (38%)	16 (12%)	34 (25%)	24 (18%)	10 (7%)
1926–30	69 (44%)	27 (17%)	28 (18%)	28 (18%)	6 (4%)
1931–35	65 (48%)	30 (22%)	18 (13%)	13 (10%)	9 (7%)
1936–40	53 (36%)	31 (21%)	27 (18%)	20 (14%)	15 (10%)
1941–45	15 (33%)	14 (30%)	14 (30%)	1 (2%)	2 (4%)
1946–50	52 (39%)	28 (21%)	31 (23%)	15 (11%)	6 (5%)
1951–55	86 (51%)	33 (19%)	22 (13%)	15 (9%)	12 (7%)
1956–60	103 (43%)	39 (16%)	46 (19%)	36 (15%)	18 (7%)
1961–65	92 (33%)	43 (15%)	70 (25%)	51 (18%)	20 (7%)
1966–70	143 (32%)	52 (12%)	107 (24%)	85 (19%)	62 (14%)
1971–75	148 (26%)	61 (11%)	132 (25%)	95 (18%)	102 (19%)
1976–80	177 (35%)	64 (13%)	91 (18%)	86 (17%)	90 (18%)
1981–85	161 (38%)	80 (18%)	76 (17%)	70 (16%)	57 (13%)
1986–90	179 (34%)	137 (26%)	88 (17%)	61 (12%)	64 (12%)
1991–95	154 (36%)	92 (22%)	42 (10%)	40 (9%)	96 (23%)

Notes: Military = all military sites.

Large town = London, *colonia*, *civitas* capitals, provincial centres.

Villas = villa buildings and associated structures.

Small towns = small town sites with walls and without.

Non-villa = non-villa settlements – various 'villages', 'farmsteads', hillforts with Roman-period domestic occupation, etc.

Figure 4 The number and relative percentage of different site types excavated 1921–1995 (Hingley 2000, 150, Table 10.3).

Despite this, landscape studies have had an ultimately limited impact on analysis of Romano-British pottery. In so far as landscapes have been applied to pottery they are brought to light through a comparison of Crambeck to other contemporary industries (Chapter 7). There is a lack of application of landscape to anything other than settlements of Roman Britain. That said, their potential for furthering understanding of pottery industries is great – a fact that is explored throughout this thesis. It is acknowledged here that there are many varied approaches to landscape studies with some persisting foci in relation to Roman Britain. However, this thesis approaches the Crambeck landscape with a focus on pottery studies. This is in contrast to many studies of the rural Roman landscape in Britain which concentrate on varied settlement patterns. It explores a landscape of production with an emphasis on the social as well as economic aspects of the industry.

Chapter 2 Previous Investigations of the Pottery Production Landscape at Crambeck

This thesis is by no means the first study of the Crambeck ware industry. A number of people have taken an interest in the industry and have conducted research furthering understanding of it. This chapter will consider these studies and their contributions to the knowledge of Crambeck ware.

The chapter will first discuss the location and geology of the known production site at Jamie's Craggs and its proximity to clay outcrops and trade routes (2.1). A brief description of the fabrics and typical forms produced by the industry will be given in 2.2. The results of P. Corder's excavations at the Jamie's Craggs site in the 1920s will be re-assessed and set into the context of work conducted in the following decades (2.3). The 1950s and 1960s saw work on ditch sections revealed by the quarrying at Jamie's Craggs as well as the discovery of a Romano-British settlement contemporary with Crambeck production at nearby Crambe (2.4). Attempts were made to set Crambeck into its wider setting along with some survey work at the Jamie's Craggs site in the 1970s and 1980s (2.5). Section 2.6 will examine recent investigations from the 1990s to the present. The chapter will end with a discussion of the issues future investigations of the Crambeck industry might focus on (2.7). Much of the work undertaken from the 1950s to the 1980s, along with Corder's site reports, is included in a publication edited by P.R. Wilson (1989).

2.1 Location and Geology

Crambeck village is situated between York and Malton to the east of the A64. The majority of the known pottery kilns are located in a field to the south-west of the current village (Figure 5).

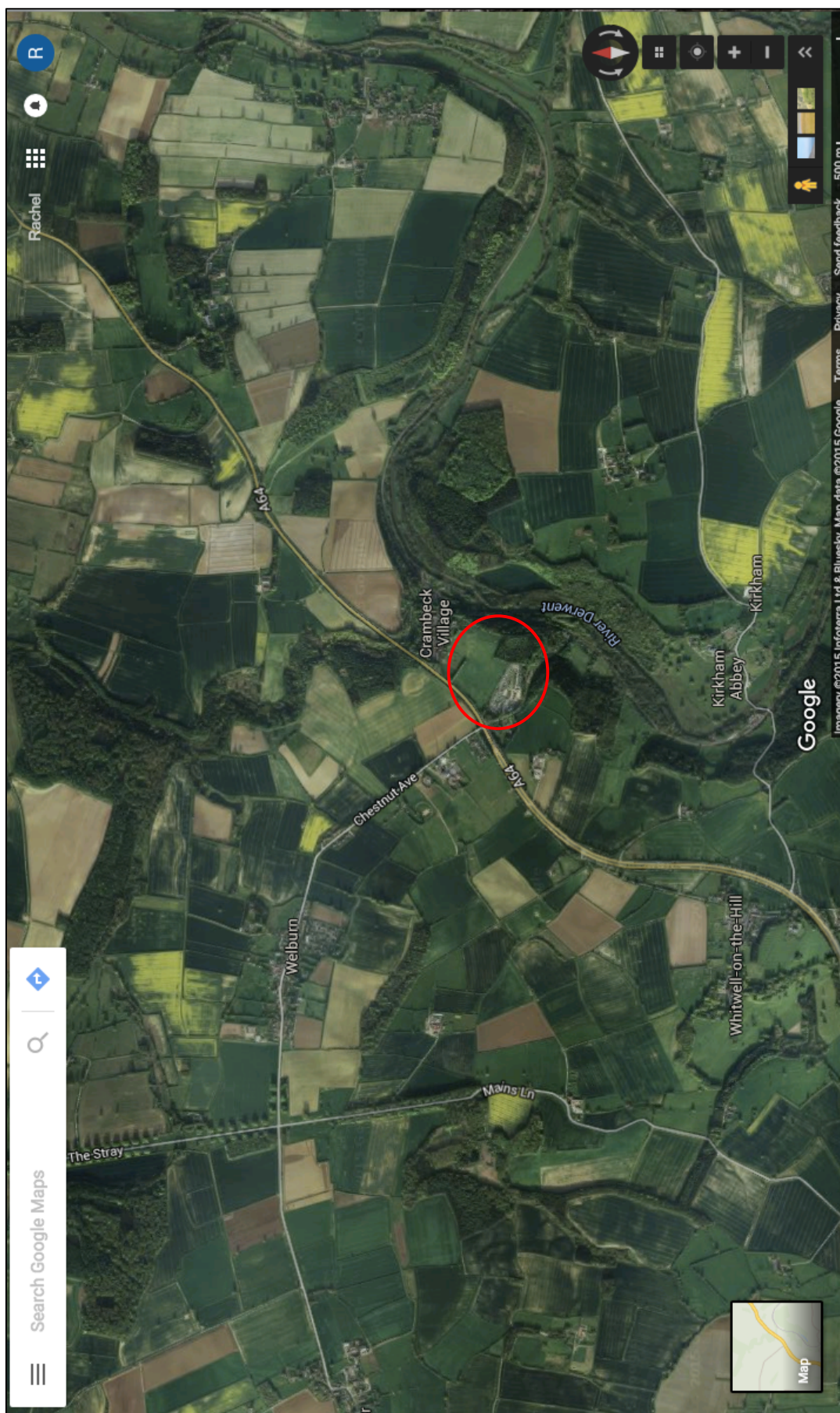


Figure 5 The location of Crambeck village and the pottery production site to the south-west (circled).

Evans (1989, 43) suggests that the Crambeck potters had access to two clay sources, one about a kilometre to the north where there is an outcrop of Oxford Clay at Hutton Hill, and the other a source of boulder clay at the village of Crambe. The bands of clay running along the Crambeck gorge can be seen as cropmarks in Figure 6 and Figure 7. The site must have also had ready access to a supply of wood for fuel and water from the River Derwent, although the location of any nearby woodland is not currently known. It appears that the Crambeck industry was well placed in terms of trade and distribution opportunities. The Derwent, boarding the site on the east, would have been navigable possibly as far as Malton during the Roman period and this would have allowed access to York, North Lincolnshire, and the North Sea (via the River Humber) (Evans 1985; 1989, 43). Furthermore, the site is next to the Roman road between the settlements at York and Malton allowing easy distribution to these places and the northern frontier.



Figure 6 Cropmarks showing the bands of clay along the Cram Beck gorge. Crambeck village is to the left of the image.
(Image credit: Peter Addyman 1984)



Figure 7 Cropmarks showing the bands of clay along the Cram Beck gorge. Part of Crambeck village can be seen to the right of the image.
(Image credit: Peter Addyman 1984)

As well as being able to distribute their products geographically, the potters at Crambeck had placed themselves on the market border of the three largest settlements in the area, York, Malton and Shiptonthorpe (Evans 1989, 43) (for a discussion of Roman Yorkshire, including its urban centres, see Chapter 6). Most pottery industries in later Roman Britain supplied one main distribution market – Crambeck appears to have had access to three. Added to this advantage was the fact that the Crambeck industry seemingly straddled the boundary between the Iron Age tribes of the Parisi and the Brigantes (Evans 1989, 43), thus making Crambeck ware accessible to two tribal markets.

This location no doubt contributed, at least in part, to the success of the Crambeck industry. The distribution of its wares extended up to Hadrian's Wall and there is no evidence for a reduction in supply over distance, as with most industries. This has fuelled the theory that Crambeck's success was aided by the existence of a military contract (Evans 1989, 43).

Although likely, this has yet to be proven. For a detailed discussion of the economics of the Crambeck industry see Chapters 5 and 7.

The bedrock geology of Crambeck is primarily sandstone and limestone with patches of sandstone/siltstone/mudstone. This geology created anomalous responses on geophysics surveys conducted by the author in 2013 and subsequently confirmed through excavation (see Chapter 5). There is also a superficial deposit consisting of an outcropping of clay running along the River Derwent. This is likely to have been the source of the potters' raw material.

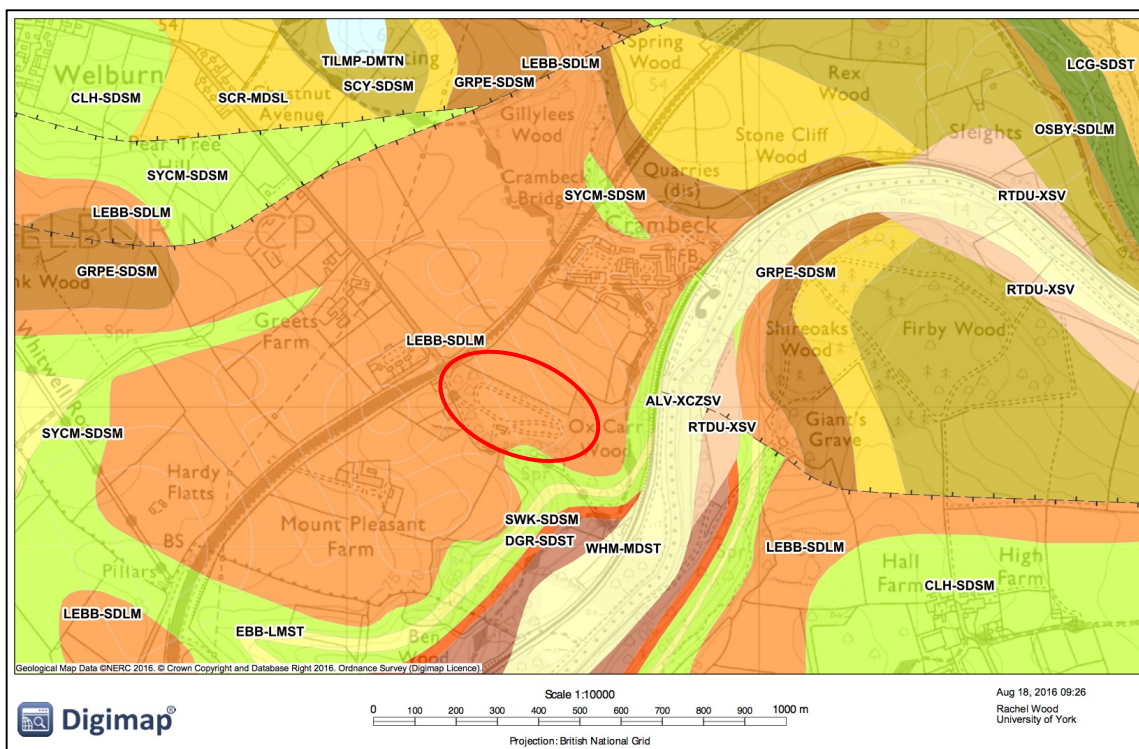


Figure 8 Bedrock and superficial geology in the area of Jamie's Craggs. (accessed through Digimap). The main pottery production is outlined in red.

Selected Key:

- LEBB-SDLM: Lebberton Member - sandstone and limestone interbedded.
- SYCM-SDSM: Sycarham Member – sandstone, siltstone and mudstone.
- ALV-XCZSV: Alluvium – clay, silt, sand and gravel.

Palaeoecological data could add much to the knowledge of the Crambeck landscape over time. Soils, fauna, hydrology and drainage could be assessed to build a picture of the changing physical landscape throughout prehistory, the Iron Age and the Roman period. This may reveal unknown information regarding the location of some of the raw materials required by the Romano-British potters and may further explain the prehistoric and Iron Age use of this place. Unfortunately, this data is not currently available. Such information is essential for comprehensive landscape analysis and as such is necessary to complete our understanding of Crambeck.

2.2 The Crambeck Fabrics

Dore and Tomber (1998) distinguish between four different Crambeck fabrics: parchment, white, reduced and oxidised. The white and parchment wares tend to be discussed together when considering the Crambeck fabrics and no distinction has been made between them throughout this thesis. Dore and Tomber (1998) separate them as they suggest the whiter fabric seems to have only been used for mortaria whereas the parchment fabric was also used for bowls and dishes. The oxidised ware is a red or orange fabric that is rarely found and Dore and Tomber (1998) do not give a description of it. No examples of the oxidised or white fabrics were identified in the assemblage from a recent excavation at the Jamie's Craggs site (see Chapter 5).

The two main fabrics of the industry were the parchment and reduced wares. Parchment ware vessels often had red-brown painted decoration in a varied linear and curvilinear designs. Similar decorations can be seen on the reduced wares but are incised or burnished. The most common forms identified by Corder (1989a & b) are a large range of bowls, various dishes or platters, and various mortaria including hammerhead and wallside types. Jars, beakers, jugs and flagons were also produced. Face vases have been identified in the

Crambeck parchment fabric, often with painted decoration, but fragments of these are rare. There is a distinct comparison between some of the Crambeck forms and those produced at Throlam (Corder 1930). It has been suggested from this that some of the potters from Throlam moved to Crambeck to establish the industry there (Corder 1930). The industry at Throlam is similar in other ways with a nearby military establishment at Brough which it supplied (Corder 1930). The Throlam industry ended production in the late third century, a fact that supports the suggests potters moved to Crambeck. Sherds in a calcite-gritted fabric are commonly found at the Jamie's Craggs site, usually in the form of cooking pots. The suggestion is made later in this thesis that these vessels may also have been made on site, possibly in the same kilns, as at Norton (see Chapter 7).

The figures below depict the various fabric types produced by the Crambeck industry (Figure 9, Figure 10, Figure 11, and Figure 12).



Figure 9 Sherds of Crambeck parchment (left) and reduced (right) ware from an excavation in 2014 (photo author's own).



Figure 10 Various painted Crambeck parchment ware vessels and a calcite-gritted cooking jar on display in the Yorkshire Museum (photo author's own).



Figure 11 A decorated and flanged Crambeck reduced ware bowl (held at Malton Museum, photo author's own and included here with permission from the Museum).



Figure 12 Some sherds of calcite-gritted ware from an excavation in 2014 (photo author's own).

2.3 Discovery and Original Excavations, 1920s – 1930s

The original discovery and initial study of the Crambeck industry was conducted by Phillip Corder in the 1920s. Corder uncovered four kilns in total along with an array of related pottery and the following discussion is taken from his excavation report in the Wilson edited volume (Corder 1989a, 3–24).

Fragments of Roman pottery had been found on the surface in the decades prior to Corder's excavation at the Jamie's Craggs site as well as during the late nineteenth century. The *'Malton Messenger'* (13th February 1858) contained an article describing two empty cist burials that were found close to the quarry along with "...a mass of pottery with traces of fire and unburnt clay." (Corder 1989a, 4). Other relevant discoveries recorded in the *'Malton Messenger'* are discussed and placed into the context of the wider Crambeck landscape in Chapters 4 and 5. The 1912 six inch Ordnance Survey Map marks *'Supposed Roman Burial Place (site of)'* at the bottom of the hill leading down from the quarry to what is now Crambeck village; *'Supposed Roman Pottery'* is also recorded on the map about half-way between the quarry and the village (Figure 13).

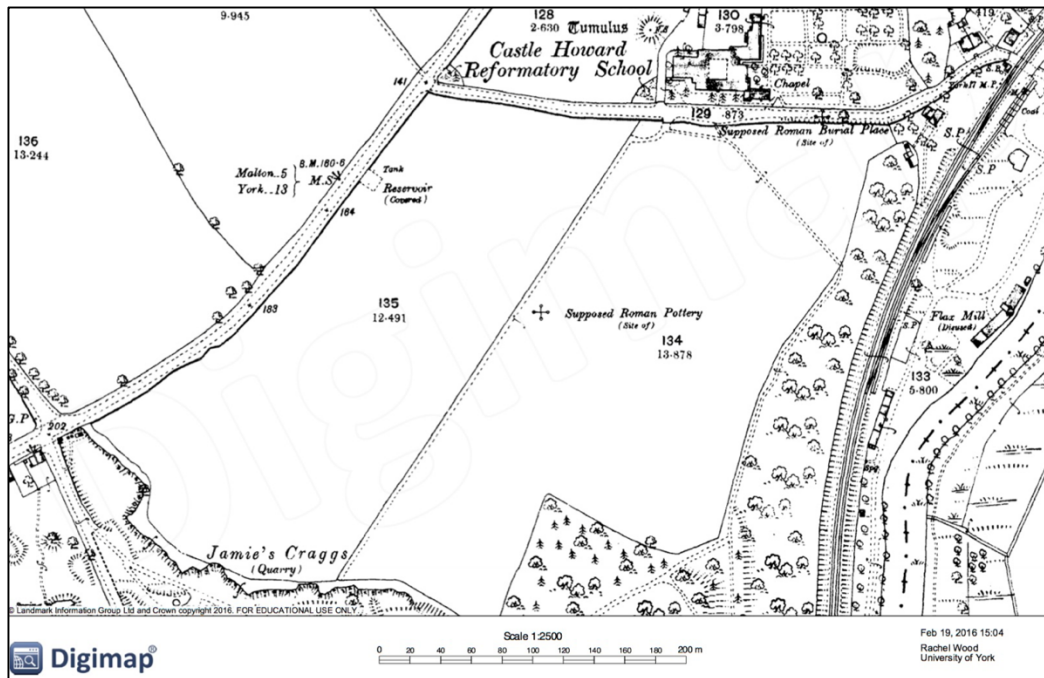


Figure 13 Six inch OS Map showing the location of remains and coins found 1858 as well as Roman pottery.

Corder notes the location of a probable '*Roman Camp*' in Ox Carr Wood to the east of Jamie's Craggs. Later thinking labelled the 'camp' as a Roman holloway leading down to the River Derwent (see the HER Record for the Crambeck production site⁷). However, a recent earthwork survey identified the earthworks as promontory fort likely dating to the Iron Age (for further discussion see Chapter 4). Part of the south facing boundary of this fort in Ox Carr wood has been damaged by sporadic limestone quarrying. The same boundary appears to continue in a north-westerly direction up to the edge of the A64. Rather than being truncated by the A64 the earthwork turns north, running parallel to the road for a short distance. Visible trace of the earthworks is lost in the Jamie's Craggs field but it is clear from subsequent investigations that the northern section ran through the field (see Chapter 4). Corder makes note of these as well as several other examples of sightings and discoveries of Roman pottery in the Crambeck area in the late nineteenth century in his excavation report.

⁷http://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=1016347&resourceID=5

Therefore, prior to Corder's excavations, it must have been known locally that the area around Crambeck village had been occupied in the Roman period due to the pottery and cist burials found.

Armed with what little knowledge these previous accounts gave, Corder undertook the first excavation of the Jamie's Craggs kiln site in 1926/1927. The specific location of the first four kilns excavated by Corder has since been quarried away and is now occupied by Jamie's Craggs Caravan Park. Furthermore, Corder's site diary⁸ locates his trenches in reference to a red fence post which unfortunately no longer exists, preventing a spatial reconstruction of his excavation. Corder undertook quite a thorough investigation of the kilns for the time, photographing the features and the pottery as well as making detailed plans and section drawings of the kilns (for example, see Figure 14). His work was very much part of the culture historical approach to archaeology and the organisational methodologies of pottery studies. Corder's work was not limited to kilns. Two cist burials were also uncovered, one of which cut into Kiln A with a second close by (Figure 14). These are discussed in greater detail in Chapter 5.

⁸ Corder's excavation diary and photo album are held by Malton Museum at the time of writing.

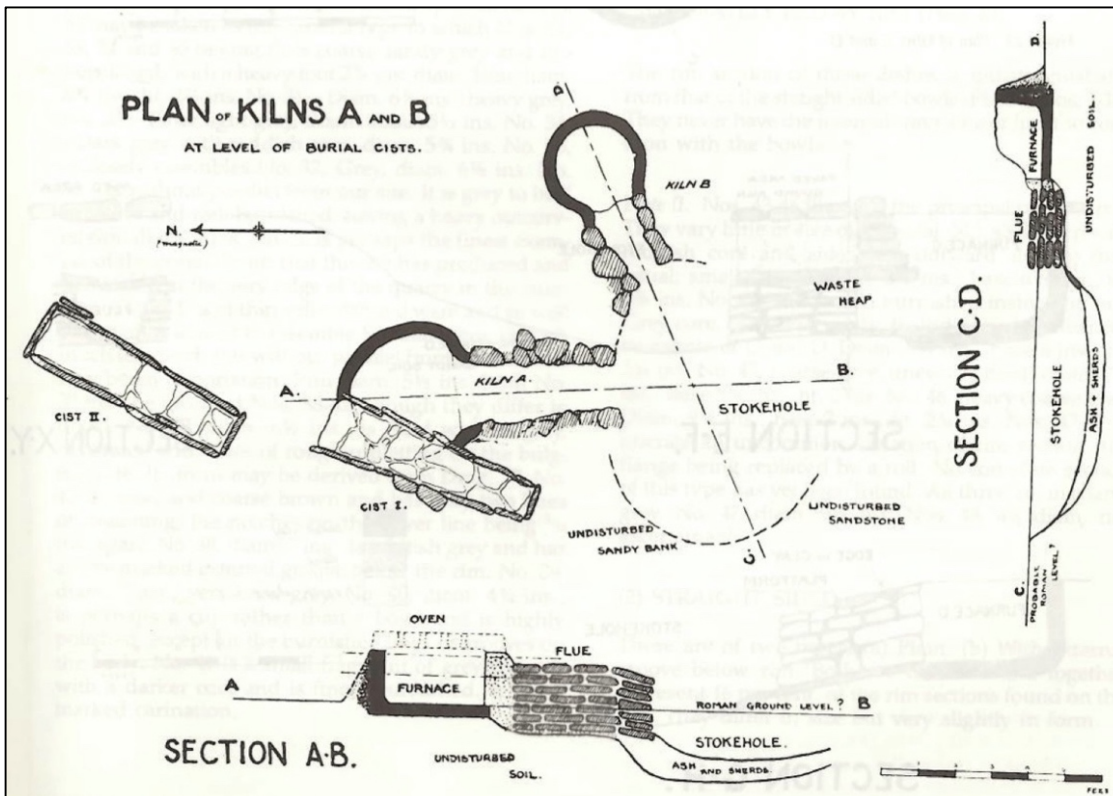


Figure 14 Plan and section drawings by Corder of Kilns A & B showing the position of Cists I & II (Corder 1989a, Fig. 22, 13).

From these initial excavations, Corder was able to produce the first catalogue of Crambeck forms and fabrics. He uncovered a range of reduced and parchment ware material including: bowls, dishes and platters, jars, small beakers or handle-less jars, mortaria, wide-mouthed jars or deep bowls, a cheese press and two burial pots from Cists I and II. Corder also recovered various pieces of clay kiln furniture, although none of it in its original position inside a furnace. A comparison between Corder's assemblage and that recovered from Jamie's Craggs in 2014 can be found in Chapter 5.

Numerous other features were uncovered during the 1926/1927 excavations. There were two potential buildings consisting largely of stone footings with no mortar present. Corder decisively established the footings as belonging to a building, perhaps a workshop or storehouse rather than a dwelling, but it is difficult to ascertain for certain the function of the structure. Neither building appears to have had a substantial floor. A spindle whorl and part

of a jet bracelet were found in rubble from the first building and a rubbish pit was located outside one of the corners of this structure. This pit contained various finds including Samian ware, a bronze finger ring, a dog's skeleton, various pottery sherds and a handle of a large amphora. The second building had footings similar to the first and contained a large flat stone that appeared to have been used as a hearth, showing signs of extensive burning. Corder took a handful of photographs of these buildings, containing only part of the footings and the hearth from the second (Figure 15 and Figure 16).

The kilns at Crambeck were arranged in pairs, sharing a stoke hole (Figure 14). Kiln A was cut by Cist I (Figure 17 and Figure 18), which was lined with limestone slabs. Kiln B was smaller but otherwise identical to A, although it had not survived as well. The cists, their presence in the Crambeck landscape and the analysis of Cist II are discussed in detail in Chapter 5. Part of a human skeleton was found in Cist I (Figure 20), including the leg bones and the right part of the pelvis, the calvarium was found in the furnace of the kiln. A small grey spherical pot was also recovered from the cist. Corder noted that '*...it is evident that some time must have elapsed between the abandonment of the kiln and the interment.*' (Corder 1989a, 8).

Cist II was around 0.7m (2.5ft) north-east of Cist I (Figure 17). It was also lined with limestone slabs and contained most of the skeleton of a female (for AMS dating and osteological discussion of this individual see Chapter 5). Part of a broken calcite-gritted cooking pot was found by the left hip and a tumbler shaped vessel in an unknown Romano-British fabric was lying next to the right side of the skull (Figure 19 and Figure 20).

The apparent Roman ground level around Kilns C and D was roughly paved. A copper-alloy Roman *as* of Nerva dating to the period AD 96 – 98 (LIBEERTAS PVBLICA S-C reverse

type, depicting Liberty standing left, mint of Rome⁹), was found on this rough surface. Kiln C was the best preserved of the four and remained, for the most part, in the state in which it had been abandoned. Kilns C and D were identical in their construction to A and B.

The dating of the kilns was a complicated issue for Corder (1989, 23-24). The pottery recovered suggested the site dated to the late fourth century with the earliest pottery being later than the middle of the third century. There is a gap of more than one hundred years between the coin of Nerva and the Samian ware (A.D. 96-98 and A.D. c.100-c.150 respectively) and the late third century pottery. It is possible that the coin and Samian are representative of an earlier phase of occupation (Evans 1985). Corder (1989a) made the tentative conclusion that production began at Crambeck at the end of the third or early in the fourth century.



Figure 15 Corder's close up of the hearth stone (included here with the kind permission of Malton Museum).

⁹ Identified from Corder's description (1989a, 9) by Richard Henry, Finds Liaison Officer for Wiltshire.



Figure 16 Corder's photo showing the hearth stone and part of wall footings (included here with the kind permission from Malton Museum).

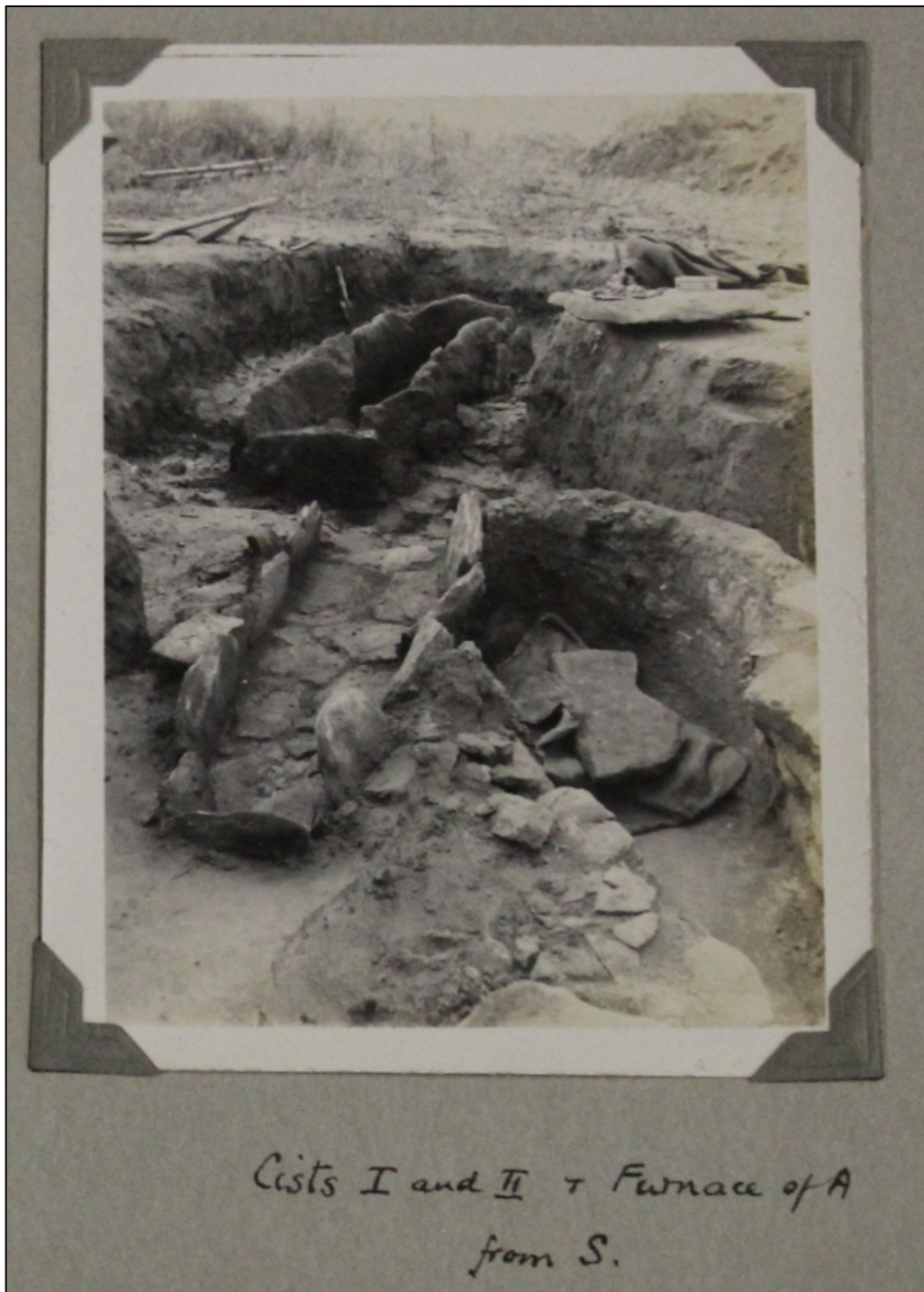


Figure 17 Corder's photograph of both Cists in situ and the furnace of Kiln A (included here with the kind permission of Malton Museum).

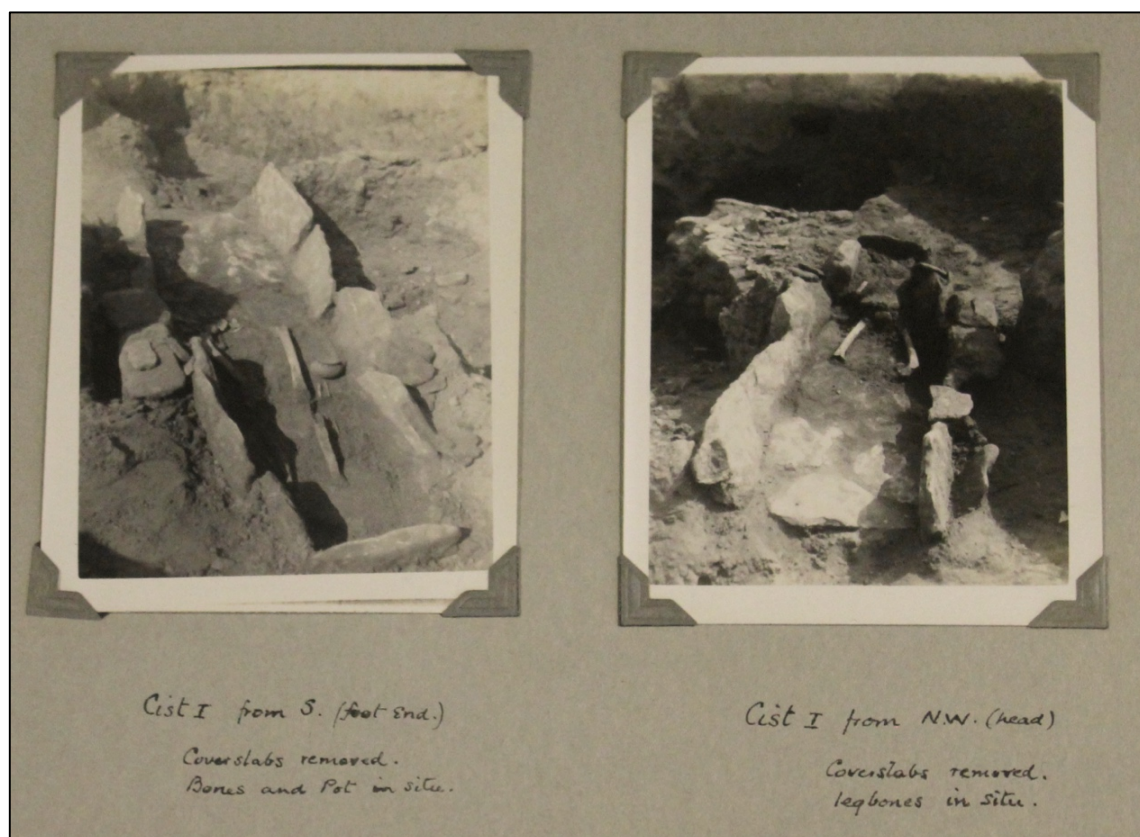


Figure 18 Corder's photographs of Cist I in situ (included here with the kind permission of Malton Museum).

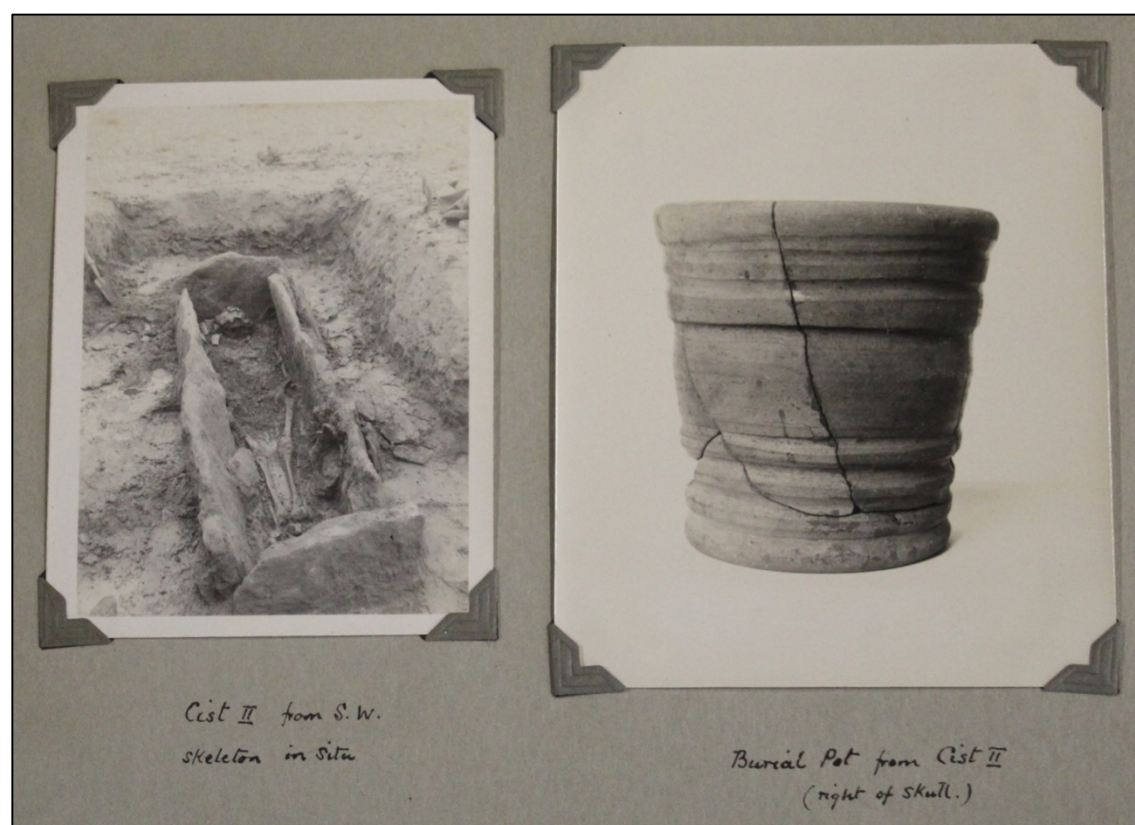


Figure 19 Corder's photographs of Cist II in situ and the ceramic vessel found at the right side of the skull (included here with the kind permission of Malton Museum).

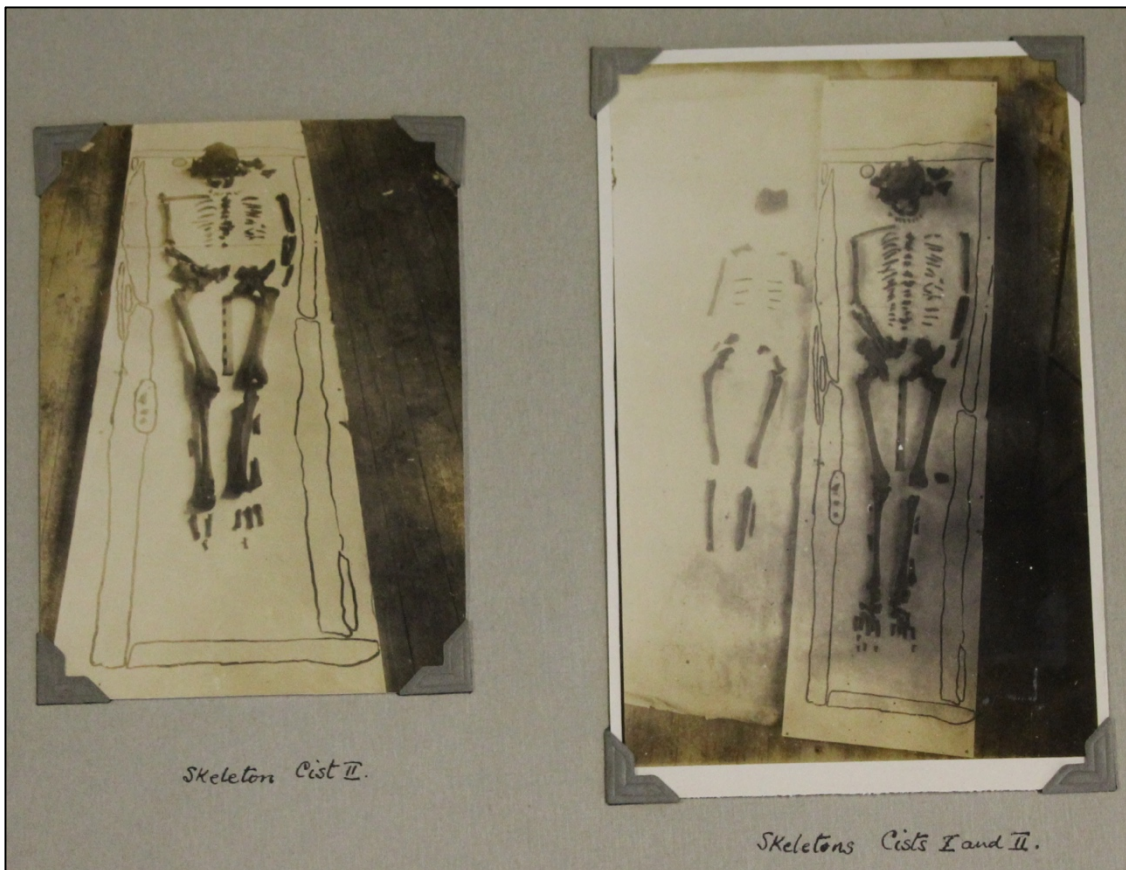


Figure 20 Corder's photographs of the skeletons from both Cists (included here with the kind permission of Malton Museum).

In 1936 Corder excavated two further kilns around half a mile south of those at Jamie's Craggs (Figure 21). The following discussion is taken from his excavation report which is included in the Wilson edited volume (Corder 1989b, 25-35). These kilns were under threat of destruction from works undertaken on the York to Malton road.

Kilns I and II were identical in their construction to Kilns A-D and Corder noted that the method of grouping kilns into pairs sharing a stokehole seems to have been the common structure for the Crambeck industry. The construction of the road had destroyed half of the furnace and part of the flue of Kiln I. The furnace of this kiln showed signs of reconstruction or repair and it is likely this represents general maintenance undertaken by the potters. The kiln as a whole must have been in use for a fairly long period before it was abandoned, although it seems that its final phase was not in use for any length of time: "...the outer

layers of clay in the furnace wall, although burnt red, were still soft, which may indicate that the reconstructed furnace had not been used for long before the abandonment of the kilns.”

(Corder 1989b, 26).



Figure 21 Map showing the location of the kilns excavated in 1936 (blue) in relation to those at Jamie's Craggs (red) (Corder 1989b, Fig. 1, 25).

Kiln II was the largest of those excavated in the 1920s and 1930s. It clearly showed two periods of construction with furnace and flue both having been rebuilt. Corder (1989b) suggested that this rebuilding may date to the reorganisation of the defences of the North under Count Theodosius in the middle of the fourth century. He did acknowledge that this theory strained the evidence somewhat, as it is likely that small and roughly made kilns such

as these would have needed constant repair. Corder was unable to find any certain evidence for the final abandonment of the kilns.

Corder (1989b) included a typology of the forms of Crambeck ware in the 1936 report. Sixteen separate forms are recorded along with some face vases. The forms include various bowls and dishes, mortaria, jars or beakers, dishes or platters, flagons or bottles and jugs. Type 16 are calcite-gritted cooking pots. This typology remains the most complete record of the Crambeck forms with no new additional types identified in the succeeding decades.

The peak production period for the Crambeck industry, as suggested by Corder, is likely to have been over the last thirty years of the fourth century when the northern defences were being re-organised by Count Theodosius, leading to a greater demand for these wares. Although, this has come under some criticism (e.g. Mattingly 2007, 237), the most likely and logical explanation for the distribution of Crambeck wares is the existence of some form of military contract (e.g. see Evans 1985). Corder's intimation is that the reorganisation sparked a peak period of production at Crambeck but the kilns were in use both before and after 370AD.

Corder's reports by no means present a complete picture of the Crambeck industry. His excavations, while they perhaps remain the most extensive to date, raise more questions about the industry than they answer. It is only through a combined consideration of all the evidence that a comprehensive picture of the Crambeck production site can be established.

2.4 Ditches and a Later Romano-British Settlement at Crambe, 1960s – 1970s

In the 1960s and 1970s work was undertaken to prepare the Jamie's Craggs quarry for transformation into a caravan park which led to the discovery of a handful of ditch sections in the quarry face. The reports for these are collected in the Wilson edited volume (1989).

For a discussion of how these features fit into the Crambeck landscape in light of recent evidence, see Chapters 4 and 5.

H.G. Ramm recorded a “...large ditch in section in the newly cut E. face.” (1989a, 37). He suggested that this ditch would have extended west and “a slight bank and hollow could be traced eastwards into [Ox Carr Wood].” (Ramm 1989a, 37). The ditch bears some resemblance to the section of promontory fort ditch excavated in 2014 (see Chapter 4), being c.0.71m wider and c.0.65m deeper and also cut into the natural bedrock. It seems unlikely a ditch of this size and scale, presumably along with its corresponding bank, formed an internal boundary within the fort. Ramm suggested the ditch could have been the southern boundary of the area occupied by the potters and the kilns. This is plausible but Ramm failed to identify the original function of the earthworks. Below is Ramm’s section drawing of the ditch (Figure 22). It is unclear how this feature relates to the earthworks of the promontory fort identified by a recent earthwork survey (see Chapter 4). While it is similar to the external ditch in form, its location is cause for some confusion.

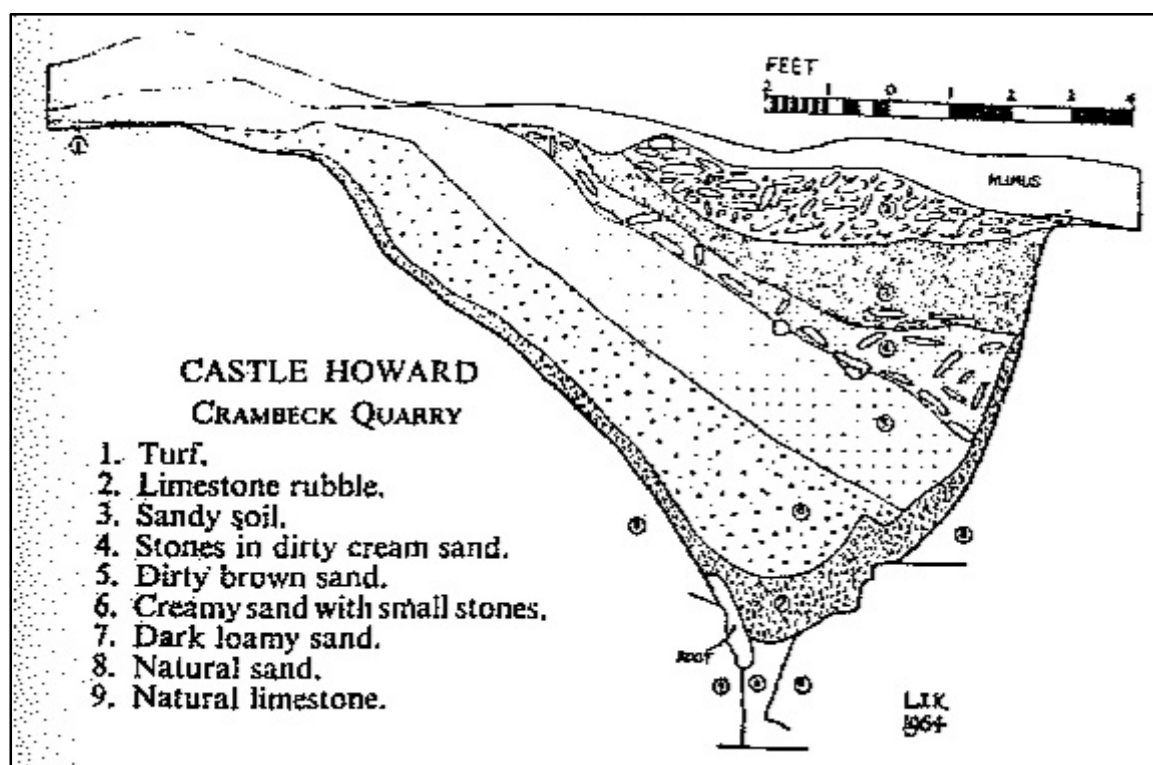


Figure 22 Section of the ditch reported by Ramm (1989a, Fig. 1, 37).

Ramm went on to state that *“Crop marks of numerous kilns were visible in the eastern of the two fields north of the quarry, and when ploughed, building debris including fragments of tegulae, and broken limestone was visible in the north end of the west field.”* (1989a, 37).

This suggests the kilns were situated in the eastern half of the Jamie’s Craggs field with the potter’s living quarters and/or storage buildings in the western half. Current understanding neither proves nor disproves this theory.

A second report by Ramm gives more detail (1989b, 39). This placed the ditch 300yards (274.3m) south-east of the A64, and 250yards (228.6m) east of the ditch recorded by Hayes (discussed below). Ramm (1989b 38) suggested these ditches belonged to the same system, most likely defining the pottery working area(s). He proposed that the stratigraphy indicated the ditch was deliberately refilled, most likely using the material from the bank on its north side. Ramm suggested this and the ditch identified by Hayes could be the same one, or at least part of the same system, and suggests that the ashy layer and the backfilling seem to have happened at the same time. Ramm concluded:

“If the two sections belong to the same ditch or even the same system the implication would appear to be that the south side of the enclosure or east-west ditch was deliberately filled in Roman times before kiln working had reached near enough to leave any debris in the ditch, whilst the west side of the enclosure or north-south ditch was left open until pottery working came sufficiently near to the ditch for it to receive a deposit of kiln debris. If the ditches did define a pottery working area then the south side of the enclosure was abandoned fairly early in the history of the expansion of the site.” (Ramm 1989b, 39)

Ramm ended his report by noting that the ditch had no relation to the earthwork in Ox Carr Wood and agreed with Hayes’ interpretation of the earthworks as a holloway representing an earlier line of the York to Malton road and leading to the ford across the Cram Beck (Ramm 1989b, 39). As previously indicated, this interpretation of the earthworks is now out-

dated by a recent survey identifying the original function of the earthworks as a promontory fort (for a detailed discussion of this feature see Chapter 4).

A further report records the ditch section excavated 1952/1953 by Hayes (1989, 37-38). Hayes noted that it ran north-south, was approximately 2.4m – 3m wide and 1.7m deep, and had a fairly flat base on top of a bed of limestone. The fill of the ditch was sandy soil or silt with a layer of ash, with sherds and bones towards the bottom. Hayes did not state whether the bones were human or animal although it seems reasonable to assume they were the former and that Hayes would have discussed these finds more explicitly if they had been human. This layer also contained “...broken pieces of clay firebars, broken kiln lining and burnt stones.” (Hayes 1989, 37). Below this was another thin layer of sandy silt. The section drawing of this feature can be seen in Figure 23.

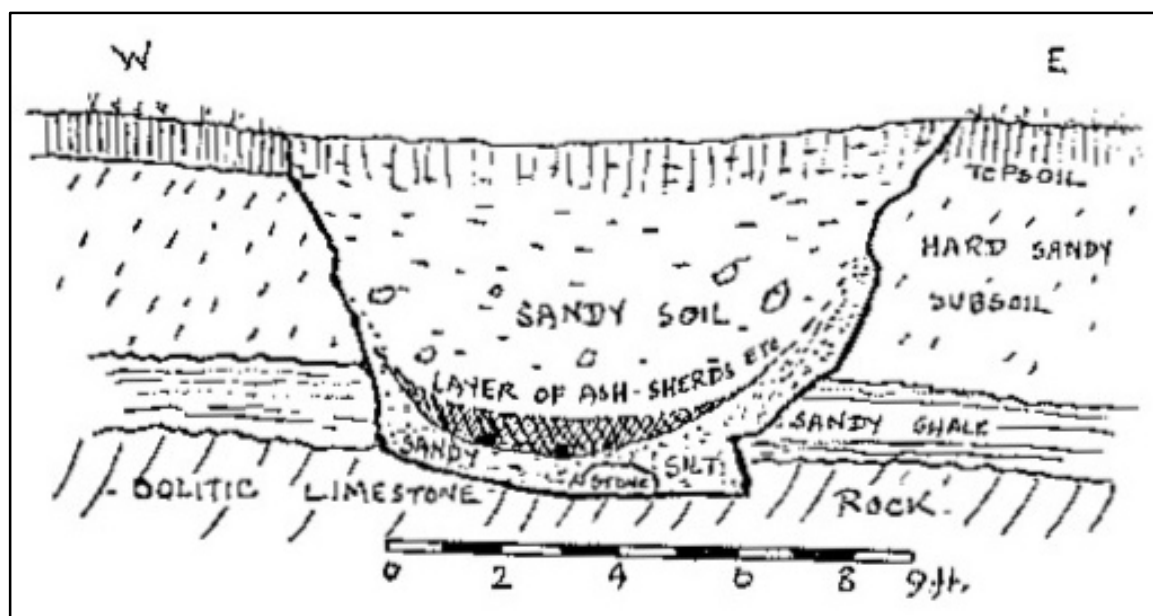


Figure 23 Section of the feature excavated 1952 / 1953 by Hayes (1989, Fig. 1, 37).

The layer of ash led Hayes to believe the feature was a stoke hole of a kiln, a view, he notes, that was shared by Corder (Hayes 1989, 37). This theory seems to have been subsequently discarded as Hayes suggested the ash layer was too wide to belong to a stokehole. He proposed instead that the ditch was a boundary related to either the pottery kilns or was the

western boundary ditch of the earthworks in Ox Carr Wood. In the light of recent work, the latter is clearly incorrect (see Chapter 4). The identification of the feature as a ditch aligned approximately north–south seems correct and the suggestion that it subdivided the internal area of the promontory fort for use by the Roman potters is reasonable.

A large amount of pottery was excavated from this ditch including, “...325 rims and several hundred body sherds...All but 12 were common Crambeck types..” (Hayes 1989, 37). Two sherds of Nene Valley Colour Coated ware (referred to by Hayes as Castor ware), the industry dating from the second to fourth centuries AD, could indicate a phase of occupation earlier than that of Crambeck production at the site. For a detailed discussion of the pottery and how it fits into the collective assemblage of the site see Chapter 5. Some clay firebars were also recovered which Hayes separated into four types, suggesting that, “*This excavation proves beyond doubt that some of the Crambeck kilns did use moveable firebars rather than, or as well as, a fixed platform visualised by Dr. Corder.*” (Hayes 1989, 38). This may indeed have been the case but too little is understood about the internal structure of the Crambeck kilns to state anything with certainty.

In 1964 Dent, along with two others, a J. Dagg and C. Cooper, examined the field around the quarry as well as the quarry edge (Dent 1989, 39-40). Little was found in the fields as they were under crop. The quarry edge revealed several sherds of Roman pottery with a concentration of them approximately 45 metres (50 yards) from the York to Malton road (Dent 1989, 39). The section of the ditch is described as follows:

“1.) 7ins of brown top soil with a few late third century-early fourth century sherds. 2.) A few inches of burnt oolitic limestone with a few sherds. 3.) 26ins of clean light brown sand with numerous sherds throughout. At the base of this bed were fragments of firebars and a piece of imbrex. 4.) Silt or natural.” (Dent 1989, 39)

Dent (1989, 39) suggested that on the initial examination, this feature appeared to be a pit that had been dug earlier than the kiln period, with its primary silt being free from sherds. However, Dent (1989, 39) went on to suggest that the 'pit' was actually likely to be a section through the same ditch as the one observed by Hayes (1989) which is probably related to the ditch recorded by Ramm (1989). Four pieces of kiln bars were found along with one hundred and twelve rims and several hundred sherds of pottery, all except two appearing to be standard Crambeck types (Dent 1989, 39-40; a discussion of this assemblage in comparison to others from the site is had in Chapter 5). Dent ended the report by noting the probable presence of another kiln in the southern side of a field directly west of Jamie's Craggs and next to the main road (1989, 40). This is represented by 'frequent sherds', soil 'rich in sherds and charcoal', a small complete flanged bowl of typical Crambeck type, and 'numerous fragments of defective pots' (Dent 1989, 40).

Collectively these four reports reveal the ditch network in the field to the north (made visible by a 1980s geophysics survey, see section 2.5 below) continued into the area of Jamie's Craggs before being quarried away. Overall it is hard to gain an understanding of the physical relationship between the ditches; some of them may be the same feature. The most plausible function of these features is as part of a system of ditches sub-dividing the internal area of the promontory fort, possibly dug by the Romano-British potters to organise their working area. Despite this, it is also possible the ditches belonged to a field system predating the Roman pottery production and possibly the fort. There are a similar series of ditched enclosures at the Holme-on-Spalding Moor industry, specifically Hasholme and Throlam (Halkon 2008). There are other close parallels between this industry and that at Crambeck which have been discussed in section 2.2 above.

The 1960s saw the discovery of a Romano-British site at the nearby village of Crambe with links to the Crambeck pottery industry. The report of this is included in the Wilson edited

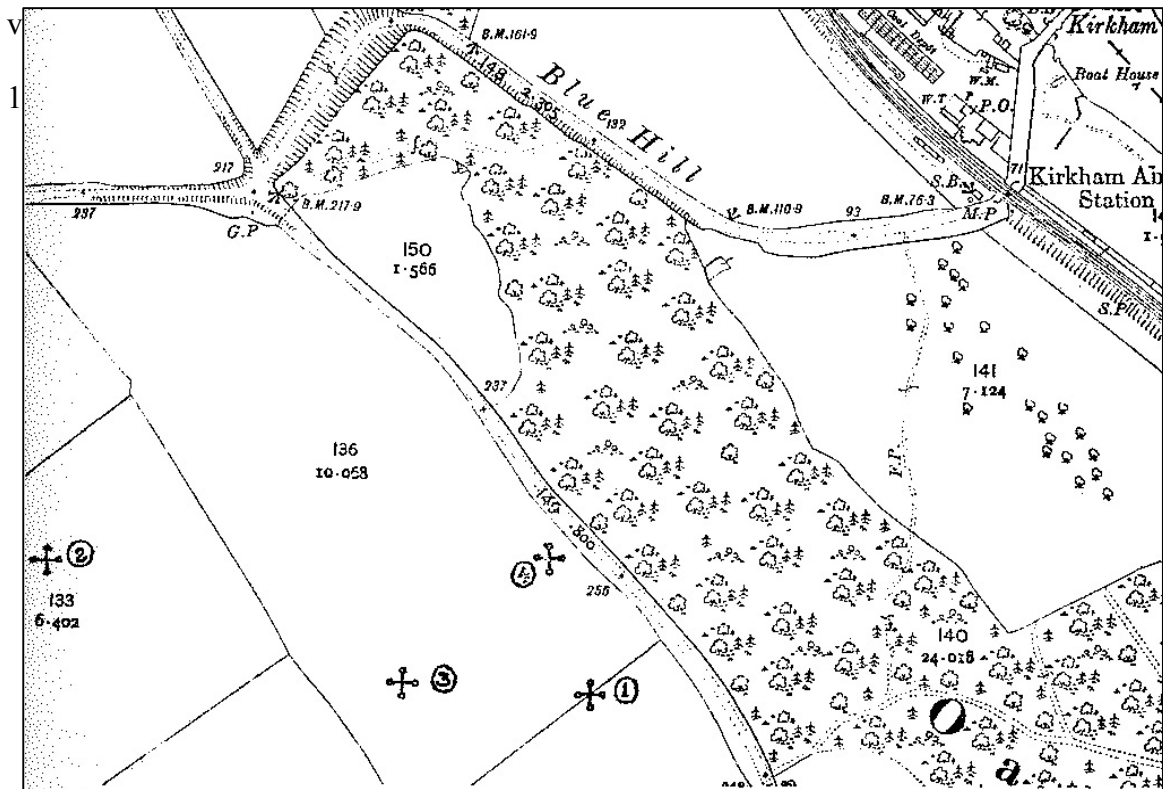


Figure 24 Location of finds reported by Wenham. 1. T-Shaped oven. 2. Hut/building. 3. Cinerary urn. 4. Cist (Wenham 1989).

Four main features were identified along with several miscellaneous finds. The first was a T-shaped grain drying oven or kiln. Wenham (1989, 99) describes this as a T-shaped trench lined with limestone, the top being c.0.2m below the surface, the trench itself being c.0.5m deep. Part of the structure of the right hand branch of the ‘T’ had been robbed away.

This T-shaped oven or kiln was c.3m (10ft) by c.0.22m (9inches) wide along the cross bar of the T, and c.4.38m (14ft 4inches) long by c.0.55m (22inches) wide along the downward branch of the T where it terminated in a stokehole c.0.60m (2ft) in diameter. Wenham notes R.G. Goodchild’s (1943) conclusion that T-shaped ovens were almost exclusively used in the fourth century (Wenham 1989, 101).

The second feature excavated in 1962 was a hut or small building. This consisted of a rough limestone and cobble floor c.2.4m (8ft) wide and at least the same long, surrounded by an

almost entirely robbed out foundation trench c.1.2m (4ft) wide and c.0.38m deep (Wenham 1989, 102). The cobbled area showed signs of burning and Wenham (1989, 102) concluded this must have been a hearth. Wenham surmised the finds as follows:

“Numerous sherds of pottery were found scattered over the floor; a few were Crambeck, but most were of calcite-gritted ware. Lying on the cobbles was a coin of Constantius II (A.D. 337-361).” (Wenham 1989, 102)

The material culture does not reveal the inhabitants of the building or indicate its function with any certainty but the presence of calcite-gritted ware and the small number of Crambeck ware sherds seems to indicate a domestic use rather than as a storage space for Crambeck products.

A cinerary urn was unearthed by ploughing a short distance away in 1960. The sherds belonged to a beaker of Crambeck ware and were around 0.25m (10inches) below the surface of the field. Wenham (1989, 102) noted that the beaker was a Corder type 12 or 12a which suggests it was in a reduced fabric. The beaker had been buried on its side with the upper half destroyed by ploughing. It contained calcined bones and fragments of burnt wood.

A second burial in the form of a stone cist was found close by. It was made of rough pieces of local limestone and contained “...black soil which included 11 sherds of pottery, 4 of calcite-gritted ware which conjoined and 7 of Crambeck...” (Wenham 1989, 102). Wenham noted that this cist bore a ‘distinct resemblance’ to the two discovered by Corder at Crambeck although no skeletal remains were found, possibly explained by the acidic soil. Miscellaneous other finds were discovered including around two hundred sherds of pottery (mostly calcite-gritted and Crambeck ware), two possible brooch tangs in bronze, and around twenty fragments of red tile, including both *tegulae* and *imbrices* (Wenham 1989, 102).

Wenham (1989, 103) concluded that all the finds follow the pattern to be expected of a rural Romano-British settlement. In terms of this site's relationship with the pottery at Crambeck, Wenham (1989, 103) stated that the Crambe site might be the settlement of the workers of the industry or an area that supplied the workers with food etc. For a detailed discussion of the role of the Crambe site and its relationship with the industry at Jamie's Craggs, see Chapter 5.

Based on the pottery and the single coin, Wenham (1980, 103) dated the site at Crambe to the late fourth century – at least in terms of the visible phase of activity. Wenham highlighted that the cremation in the cinerary urn fits into the same late Roman date bracket and its presence is further interesting as cremations ended much earlier in the towns (see Chapter 6). The cinerary urn therefore suggests that cremation practices continued in the countryside long after inhumation had replaced it in the towns. Wenham (1989, 103) ended by stating that future finds may revise this view of the site but its general character, that of a rural Romano-British occupation site, cannot be doubted.

In 1974 two kilns and a rubbish pit were discovered at Crambe. The report by E.M. King and M. Moore is included in the 1989 Wilson edited volume (1989, 105-107). Kiln I had been quite badly damaged by ploughing and, unlike the kilns at Crambeck which were built in pairs around a shared stokehole, this example consisted of a single oven with a single stokehole. Several sherds of Crambeck greyware were recovered from this kiln along with one sherd of calcite-gritted ware. Kiln II was very small and lay close to the stone floor and foundations discovered by Wenham (1989). This kiln made use of the natural limestone outcrop which formed the lip between the oven and the ash pit. The flue was absent. King and Moore (1989, 105) suggested that this second kiln was more likely to have been a domestic bread oven due to its small size and the location of the ash pit next to its oven. There were traces of secondary use in the narrowing of the ash pit to form a flue, turning it

into a more traditional pottery kiln. King and Moore suggest that due to the ‘*mass of mortarium fragments*’ in the kiln, “...*it had been used to fire a single stack of mortaria, and probably not very successfully.*” (1989, 106). Neither of these ‘kilns’ seems to have been used for commercial pottery production both being too small, indicating their use is more likely to have been for domestic purposes (see Chapter 5).

A potential rubbish pit was found a short distance from Kiln II. This was sealed by a complete mortarium (subsequently stolen before recording). King and Moore (1989, 106) describe the pit as a

“...bowl-shaped scoop in the sand, containing inly ashy soil, a few bones and much pottery. Sealing the top was a complete mortarium...The use of the pit remains a mystery. It was unlined and is presumably a rubbish pit, though it was very carefully shaped.”

The varied uses of mortaria throughout the Roman period in Britain are discussed in Cool’s *Eating and Drinking in Roman Britain* (2006). As part of this discussion Cool notes that whilst mortaria in samian or similar table ware fabrics were included as grave goods in the third century, the coarse cream ware versions were usually only included in unstratified deposits that are thought to have been created as part of graveside ceremonies (Cool 2006, 46). It is possible therefore, given the proximity of a cist and a cremation at the Crambe site, to suggest an alternative function of the pit excavated by King and Moore, as a feature relating to a graveside mortuary ceremony. Unfortunately, neither of the suggested functions of this pit can be proved without further investigation of the site.

Several sherds of pottery were found during the excavation of the kilns and rubbish pit. King and Moore conclude that “*Taken with the traces of metal-working and the previously discovered burials (Wenham, [1989] pp99-103) it seems reasonable to suggest that Crambe*

represents the workshops supplying the needs of the potters of Crambeck, and possibly even their homes.” (1989, 106). This is the same conclusion as that reached by Wenham.

There is no evidence to dispute the conclusion of a workshop at Crambe that supplied the needs of the potters. This site and its relationship to the production centre at Jamie’s Craggs is discussed in more detail in Chapter 5. Future investigation could clarify the relationship between the two sites.

2.5 Crambeck: its Wider Setting and Survey Work, 1970s – 1980s

Work in the 1970s and 1980s saw a greater focus on the wider setting and economic role of the Crambeck industry as well as survey work undertaken on the un-quarried section at Jamie’s Craggs. There were three main contributors to this work: V.G. Swan (1980; 1984), J. Evans (1985; 1988; 1989), and A. Bartlett with J. Hinchliffe (1989). Evans’ work is very much the product of processual approaches to pottery and has a determined focus on the economics of distribution. Swan wrote at the same time but is an exception to this general trend across Romano-British pottery studies. She had some focus on the economics of the process of production as opposed to distribution.

Swan discussed Crambeck as part of her wider considerations of Roman pottery industries in Britain (1980; 1984). Her 1980s work, *Pottery in Roman Britain*, is a chronological account of the various industries found across Roman Britain, with some continental comparisons given. As one could expect, Crambeck features in the chapter dedicated to the late third and fourth century industries (Swan 1980, 22-25). Swan sums up the industry in a single paragraph (1980, 24). She dates the beginning of the Crambeck industry to the first half of the fourth century and suggested that it remained a local ware until the “...reorganisation after c367 [gave it] a large share of the northern military market.” (Swan 1980, 24). Swan ended her brief account by commenting on the most common forms of

Crambeck ware: cooking pots and flanged bowls in reduced ware, and parchment ware bowls. The paragraph also noted that mortaria, flagons and some imitation Samian forms were also produced at the Crambeck site. Swan made no comment here about the production methods nor the size of the industry. Comparisons between Crambeck and other Romano-British pottery industries are made in Chapter 7.

Swan's 1984 *The Pottery Kilns of Roman Britain* went into greater detail. Crambeck is discussed alongside those at Norton in a chapter examining the major industries of Roman Britain (Swan 1984, 91-112). Swan echoed the suggested start date for the industry but narrowed it down to "*Some time during the 330s or 340s...*" (1984, 111). She suggested production began at the same time at sites in Crambeck's surrounding landscape: Crambe, Mount Pleasant, and north of Welburn village. The Crambe site has already been discussed above (2.4) and the Mount Pleasant site will be discussed in more detail below (section 2.6, Chapters 4 and 5).

Swan (1984) attempted to determine the origin of the Crambeck potters and argued that the establishment of the industry must have involved some of the potters from Norton, suggesting they were attracted to the Crambeck landscape by a seam of pure Oxford clay. She based this statement on nothing more than the fact that some of the reduced ware vessels produced at Crambeck were very similar to some from Norton. While the similarities cannot be denied, this does not necessarily indicate the presence of migrant potters from Norton establishing a new industry in the Crambeck landscape. As already noted (section 2.2), there are also some distinct similarities between the Crambeck and Throlam forms. Some Crambeck forms also bore close similarities to other industries (e.g. New Forest, Nene Valley) but there is no suggestion that potters from these moved to Crambeck and had a hand in establishing the industry, in fact, the similarities are used to suggest trade from these areas (e.g. Evans 1985).

Swan discarded the assumption made by her predecessors (e.g. Corder 1989a) that the Crambeck kilns “...each originally had an integral, self-supporting, solid-clay, vent-holed, raised oven-floor.” (1984, 111). She made the valid point that no such internal structure has been found in situ at any of the Crambeck production sites and therefore the precise internal layout of the kilns cannot be ascertained with any certainty. In lieu of this assumption, Swan (1984, 111) suggested the Crambeck kilns could have used the same type of temporary pre-fabricated floors as the Norton kilns, a suggestion supported by Evans (1985). The relative lack of evidence for the internal structures is attributed to the relatively small nature of the excavations at Crambeck up to this point, with Swan (1984) maintaining that they were insufficient in size to prove or disprove this theory. Swan (1984, 111) suggested that more extensive excavation is needed at the Jamie’s Craggs site to clarify the internal layout of the kilns as well as to answer some of the outstanding questions regarding the products and chronology of the industry, a suggestion that remains valid in the light of recent work (see Chapters 4, 5 and 7).

In 1981 Bartlett and Hinchliffe undertook a program of survey work at the Jamie’s Craggs site. The following discussion is taken from their report, *A survey of the Roman pottery production site at Jamie’s Craggs, Crambeck*, (Bartlett & Hinchliffe 1989, 91-95). Fieldwalking and magnetometry surveys were undertaken on the land immediately adjacent to Jamie’s Craggs quarry. The magnetometer survey identified a series of ditches and six anomalies each representing a possible kiln (Figure 25).

These ditches were bounded to the north by a large ditch aligned east-west with other smaller ditches branching off towards the crest of the hill, aligned approximately north-south. One ditch in-between K4 and K5/6 (Figure 25), appears to divide the space into two enclosures with smaller divisions contained within these. There is some suggestion from the

magnetometry that the enclosures continued a little way to the north of the large east-west ditch.

Fieldwalking revealed a concentration of Romano-British pottery in the southern end of the field towards the crest of the hill with no clear pattern to the distribution of fabrics and forms. Bartlett and Hinchliffe (1989, 95) do state that the proportions of forms found was comparable to those recorded by Corder.

On comparison of the results from the fieldwalking and magnetometer survey, Bartlett and Hinchliffe (1989, 95) note that the Romano-British pottery was largely concentrated within the enclosures defined by the ditches. They also ascertained that the largest concentrations of pottery do not occur near the identified kilns with the disposal of imperfect or broken vessels occurring away from the kilns themselves (Bartlett & Hinchliffe 1989, 95). The largest concentration of sherds was to the north of the field's southern boundary and within the western enclosure as defined by the ditches. Bartlett and Hinchliffe (1989, 95) suggest that this could indicate a storage area or disposal space for sub-standard or broken pottery. The fieldwalking results are super-imposed over the magnetometry survey below (Figure 26).

Bartlett and Hinchliffe (1989, 95) drew three main conclusions. First, the Crambeck production site is situated within a series of ditched enclosures at Jamie's Craggs and has been partially destroyed by quarrying; second, a number of kilns survive within these enclosures as buried features; and third, at the time the survey was conducted, agricultural activity was causing continuing damage to the site.

This revelation led to English Heritage removing the agricultural rights to the land in the 1980s. The site was first scheduled in December 1946 and the protection includes the village of Crambeck as well as the kiln site and Ox Carr wood to the east of the Jamie's Craggs field

(Figure 27¹⁰). As a result of this protection, the site remains much as it was at the time of Bartlett and Hinchliffe's survey.

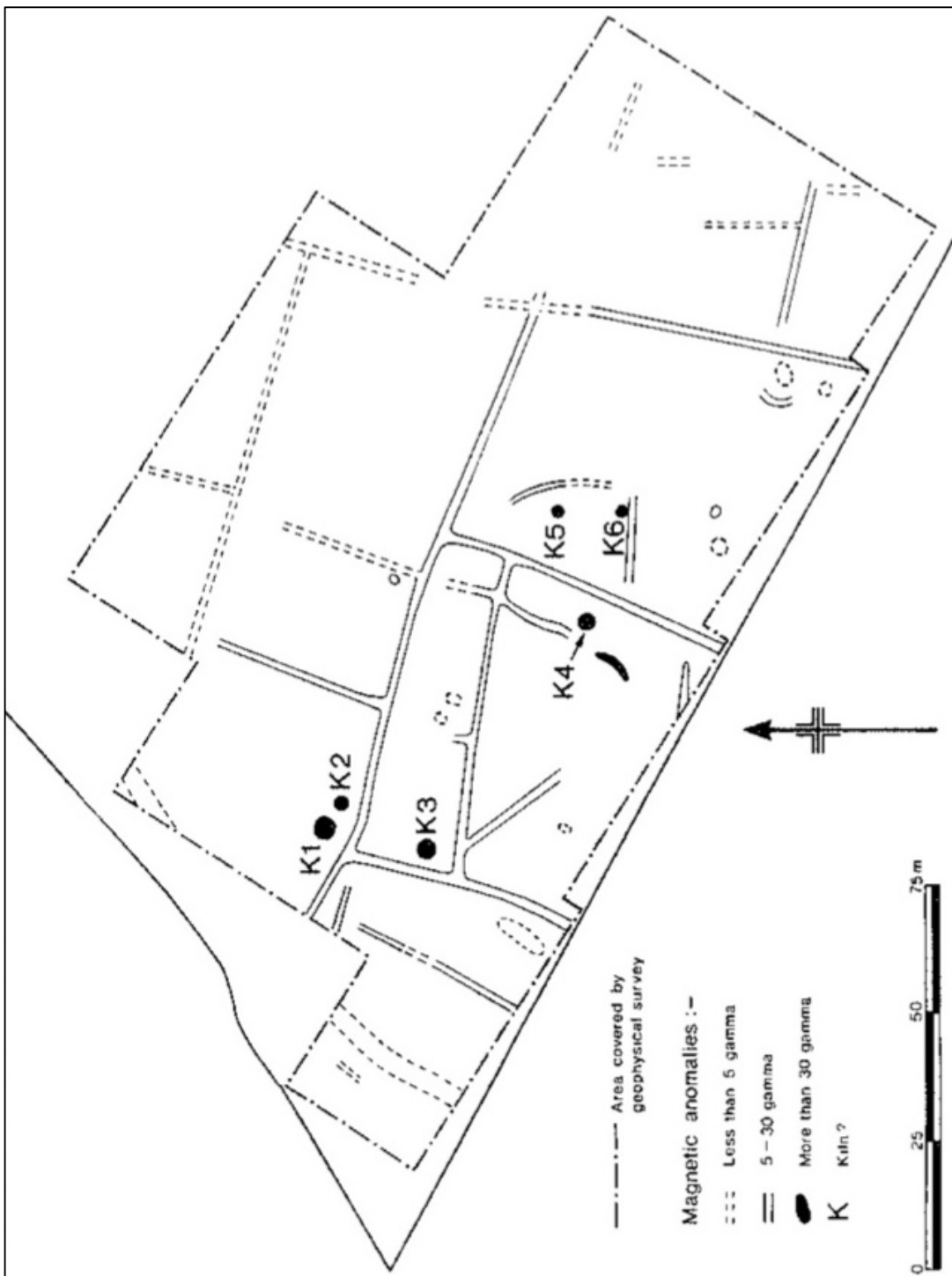


Figure 25 The results of Bartlett and Hinchliffe's magnetometry survey (Bartlett & Hinchliffe 1989, Fig. 2, 94).

¹⁰ <https://historicengland.org.uk/listing/the-list/list-entry/1016347>

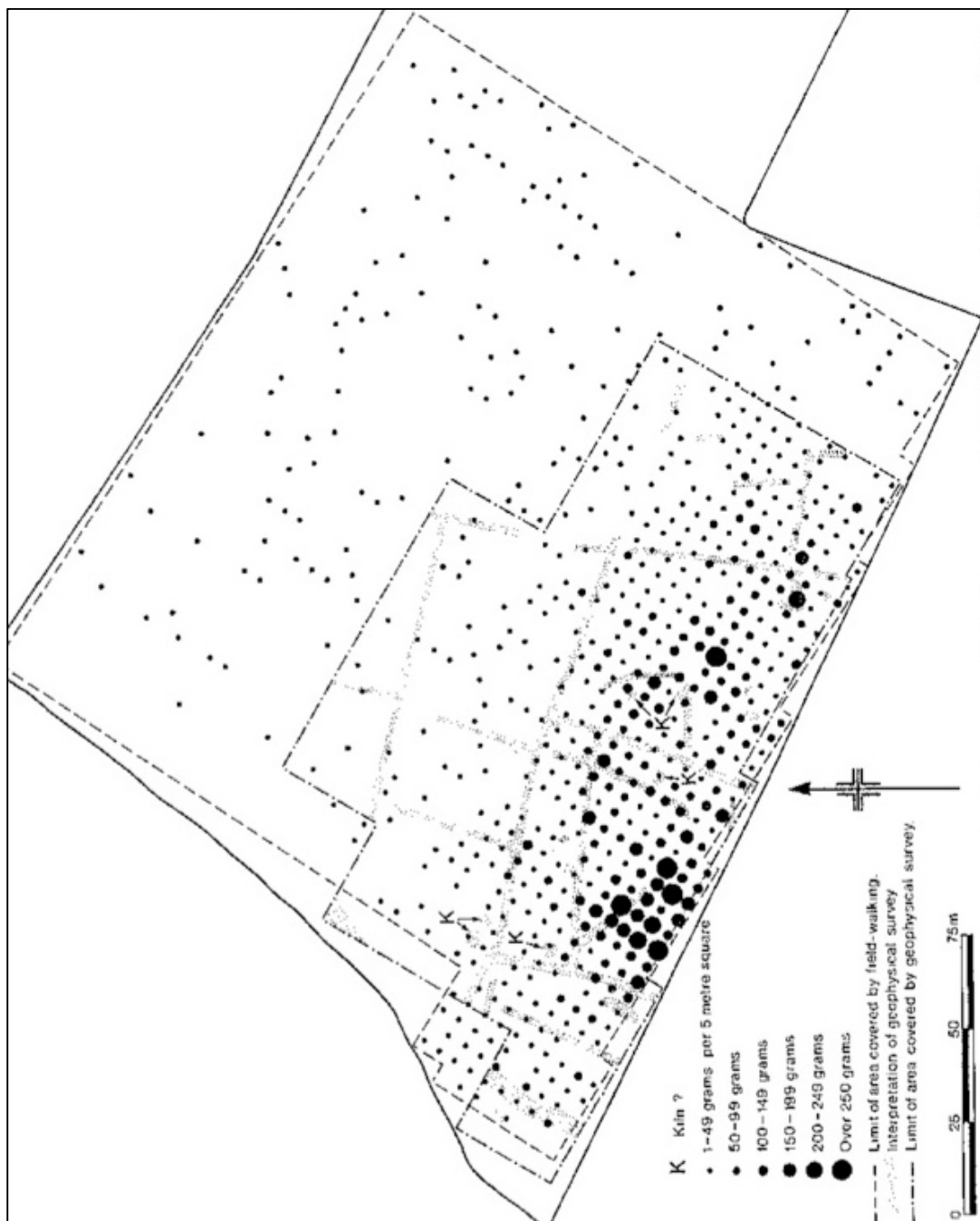


Figure 26 Fieldwalking and magnetometry results from Bartlett and Hinchliffe's survey (1989. Fig. 4, 94).

Crambeck plays a large part in Evans' *Aspects of Later Roman Pottery Assemblages in Northern England* (1985). His thesis aimed to examine the third and fourth century pottery supply in Northern England and to characterise the pottery kilns of East Yorkshire using neutron activation analysis (Evans 1985, Abstract). Evans had much to say about the Crambeck industry although he largely echoed earlier work (e.g. Swan 1984). He suggested that the main kiln site at Jamie's Craggs appears to extend to the west of the A64, thus echoing Corder's (1928, 12) assumption, with evidence of the Crambeck industry at various sites including Primrose Hill (Evans 1985, 113-114)¹¹. Whether these sites are a continuation of what Evans saw as the 'main site' at Jamie's Craggs or outliers such as that at Crambe remains somewhat unclear (Evans 1985, 114) and is discussed in further detail in Chapter 5.

Evans (1985) asserted that the north-south aligned ditches at the Jamie's Craggs site must have their origin in the first or second centuries based on the 'Iron Age style' pottery found in their fills. He attributes their function to a field system predating the pottery industry. This may indeed be the case, however, the pottery he refers to is in fact calcite-gritted ware which can date from the late Iron Age to the end of the Roman period, meaning the ditches could date to any point in roughly six hundred years. Furthermore, recent excavation work has found substantial deposits of calcite-gritted ware in association with late Roman activity on the site, making a date contemporary with Crambeck production increasingly likely (see Chapters 5 and 7). As far as can be understood without targeted excavation, these ditches had one of two functions: they were part of a field system that predated the Crambeck industry be that to the Iron Age or early Roman periods; or were dug by the potters to define various working areas, but a combination of both cannot be ruled out.

¹¹ It has not been possible to find the evidence Evans refers to here for inclusion in this analysis.

Evans (1985, 116) considered the 1981 fieldwalking and geophysics results¹² and suggested that some of the anomalies in the magnetometer survey could be ancillary buildings. Bartlett and Hinchliffe's surveys have already been discussed in detail although the excavation of some of the features identified is examined in Chapters 4 and 5. Evans (1985, 116) commented on the building foundations discovered by Corder (see section 2.3) suggesting the material culture found inside indicated a second to third century date for the structure, thus predating the pottery production phase. He went on to suggest the paving around Kiln C could be the floor of a structure (Evans 1985, 121). If correct, this bears similarities to some of the Norton kilns which may have been built into associated structures perhaps to protect them from the elements and to utilise the residual heat in the drying of vessels prior to firing (Evans 1985, 82-93). A second possibility lies in the suggestion that the building/s are part of an earlier phase of Romano-British activity at the Crambeck site. Evans (1985, 121) highlighted the fact that no structures directly related to the kiln at Jamie's Craggs have been excavated and attributed this to the limited nature of the excavations and survey.

A significant difference between Evans' work and those preceding him lies in the earlier start date he gave for the Crambeck industry. He suggested production began at the end of third century (Evans 1985, 126). In particular, he criticised Swan's date of 330s or 340s and her theory suggesting that potters from Norton were attracted to the Crambeck site by the Oxford clay that would have allowed them to produce finewares for the first time:

“This is to make an error in emphasis and chronology since parchment wares were not supplied in any quantity until the 360-370s but greywares were produced from the end of the third century...in much larger

¹² Cited in this thesis as Bartlett & Hinchliffe 1989, 91-95; cited in Evans 1985 as Bartlett, A. 1982 *Magnetometer Survey at Crambeck, North Yorkshire*, Unpub. A.M.Lab report.

quantities and finewares never accounted for anything other than a minor part of Crambeck's production." (Evans 1985, 126)

Evans' date at the end of the third or early in the fourth century is much earlier than Swan's although it is close to that suggested by Corder (1989a, 24). The unclear dating and origins of the industry are also echoed in this thesis.

Evans (1985, 325) is perhaps the first to examine the industries that influenced the production of Crambeck ware in detail, focusing on Norton, Nene Valley, and Oxfordshire. The influence of these industries appears to have been during an experimentation phase in the initial decades of Crambeck production, although no single industry appears to have been the main influence on the industry (Evans 1985, 327). This does suggest the possibility that Crambeck and other northern production sites were influenced by and had some contact with southern pottery industries.

In terms of distribution, Evans (1985, 335) suggested that York must have been a major centre in Crambeck's distribution network due to its link by road and river to other parts of the country. There is also an unusual aspect to the distribution of the two main sub types of Crambeck ware, parchment ware and greyware. For both there is little drop in distribution relative to the distance from the production site (Evans 1985, 339), contrary to the wares of most other industries. In contrast to the Oxfordshire, Nene Valley, and New Forest industries, Crambeck was a bulk coarseware supplier, "*At all times greywares are the most important part of Crambeck's output and these travel as far as the finewares and in much greater quantities.*" (Evans 1985, 388-389). Most other industries focussed on the production of finewares.

Crambeck ware was distributed across both the North East and North West of the country, but is not found in any significant quantities, if at all, south of the River Humber – Mersey

line. Evans (1985, 340) suggested that these distribution constraints to the south were not related to transport costs, if they were then distribution of Crambeck products in the North West must have been conducted at zero or negative costs.

Evans provided several explanations for the successful distribution of Crambeck ware across the North of the country. First he disregarded a free market system suggesting that, because the southern distribution boundary coincides with provincial boundary of Britannia Secunda, it is possible that competition with other industries elsewhere in the province was subjected to regional customs leading to a distorted distribution and constrained competition (Evans 1985, 343). A second explanation given by Evans suggests that social constraints restricted the distribution. This is not dissimilar to the first, and Evans acknowledged the theory that consumers in the Crambeck distribution area felt an “...*attachment for East Yorkshire products as to exclude all other suppliers...*” (Evans 1985, 346). But, he went on to state this seems unlikely as the northern region had imported ceramics from a diverse range of external sources for a long time prior to the Crambeck industry, thus such sudden attachment seems unlikely (Evans 1985, 346).

Evans’ (1985, 388) preferred explanation for the extraordinary distribution of Crambeck ware is some form of military contract for the North West, if not necessarily for the North East of the country. He stated the possibility that the military changed their supply method in the late fourth century (Evans 1985, 345). But, he went on to highlight a problem with this explanation; Crambeck wares were distributed to civilian as well as military sites, although he acknowledged that this is not an insurmountable issue (Evans 1985, 345).

In his conclusions Evans expressed a hope that rapid action would be taken “...*to schedule or otherwise protect the Jamie’s Craggs section of the Crambeck kiln site.*” (1985, 399). Such protection was subsequently provided by the removal of agricultural rights for the site

combined with Scheduled Ancient Monument protection. Evans (1985, 399) stressed that survey work would be needed at other kiln sites, e.g. at Mount Pleasant Farm, in order to establish the extent of the Crambeck production industry and establish if any are under serious threat. Much of this remains relevant as other potential Crambeck production sites have been discovered close to Jamie's Craggs (see Chapter 5).

Crambeck features in two other works by Evans in the 1980s. The first is a short piece entitled 'All Yorkshire is Divided into Three Parts; social aspects of later Roman pottery distribution in Yorkshire' (1988). The paper aimed to examine the distribution of major forms and fabrics in East Yorkshire in order to establish any anomalies. Unfortunately, Evans did not explicitly discuss Crambeck ware and its production, he only mentioned it in passing. Evans did establish that there were three pottery supply zones in Yorkshire in the third century (East Yorkshire, the Vale of York, and South Yorkshire) and three main production zones within East Yorkshire (Norton, Knapton, and Holme-on-Spalding Moor). It is suggested that a form of social constraint must be the reason behind the clear ceramic divisions in East Yorkshire in the third century (Evans 1988, 329) and Evans concluded:

"It seems likely then that irregularities in the apparent distribution of third century ceramics in relation to 'free' market forces are reflections of long standing social divisions in Yorkshire extending back into the later Iron Age. It also seems possible that the development, or lack of development, of pottery traditions in Yorkshire and northern England reflects these divisions and to some extent suggests their nature." (Evans 1988, 333)

Despite not directly discussing Crambeck ware, Evans' discussion remains relevant to the analysis of the industry. Lastly, Evans (1988, 333) noted that Romanisation in northern ceramics was clearly a civilian rather than a military development. He did not expand on this but it can be inferred that the civilians gradually began to supply the forms and fabrics that were in the highest demand, which, overtime, became the more 'Roman' types.

The discussion of Romanisation in Evans' work is very much a product of the time. As has been discussed in Chapter 1, Romanisation was not a concept held during the Roman period, it is one that has been imposed onto it in current times. Romanisation has subsequently begun to be replaced by the wider ranging concept of identity and perhaps it would be more prudent now to discuss the development of the Crambeck ware industry in terms of the latter rather than the former.

Evans' final contribution of the 1980s features in the Wilson edited volume, and is entitled *Crambeck; the development of a major northern pottery industry* (1989, 43-90). The first half of the article repeats the views outlined in the 1985 thesis. The second half is a detailed report on the chemical composition of each of the Crambeck subtypes. The article ended with a consideration of the distribution and marketing of Crambeck ware and the development of the industry (again the views here are repeated from Evan's 1985 thesis). Evans did not state much that he had not already done so previously. However, the article did draw together most aspects of the industry from the construction of the kilns, to the decoration and chemical composition of the wares, to marketing and distribution. As such the article provided a clear and concise view of the Crambeck industry as seen by Evans.

2.6 Recent Investigations, 1990s to Present

The more recent work that involves Crambeck is, for the most part, not specifically written about the industry. Crambeck tends to feature as part of projects in which it is not the main focus.

Once again we return the work of Evans. Crambeck ware is not the main focus of his article, 'The End of Roman Pottery in the North' (Evans 2000) but it does play a major part. The article does not state anything new in terms of the production and distribution of Crambeck ware. However, the view proposed by Evans for the end of Roman pottery in the North of

England as a whole is interesting. He recognises the fact that by the end of the fourth century Crambeck and calcite-gritted wares supplied ninety percent of the pottery used in the North of England (Evans 2000, 41). He attributed this to the existence of some form of military contract to supply the north-west and possibly the north-east of the province, the profits from which allowed the monopolisation of the rest of the market (Evans 2000, 41). Evans (2000, 41) also points out that there are no deposits with pottery post-dating the latest coins and it is hard to imagine how the kilns could have supplied the region without the existence of coins. He therefore attributed the end of this monetised economy to the British elite, suggesting that when they took over administration of the province they seized the chance to abolish the taxes they had always despised. This echoes the view within theories of Romanisation that the 'British' had remained separate to the 'Romans' throughout the period and took the first opportunity to return to their traditional ways, in the North this meant a non-monetised economy. Also with the absence of the spending force that was the Roman army, there was little demand to support the market in general, however, this view is not universally accepted. Thus, despite not providing any new information on Crambeck as a ware, Evans does provide an interesting insight into the demise of the industry and the reasons for its collapse.

Bidwell debates the dating of Crambeck Parchment ware in his 2005 article. An earlier date of c350AD has been suggested for the ware, particularly by an assemblage from the south granary at Birdoswald on Hadrian's Wall. The coins found with this assemblage had a latest date of c350AD. However, Bidwell argues that its irregular and scarce occurrence in Valentinianic contexts or complete absence suggests it was introduced midway or towards the end of the period 364–378AD. Bidwell therefore argues that a return to the original date suggested by Richmond et al (1930) of c370 for the introduction of Crambeck parchment

ware is justified. Bidwell's article is one of the more recent works debating the date of Crambeck wares.

Whyman's thesis, *Late Roman Britain in Transition, AD 300-500* (2001) does include new evidence for the production and distribution of the Crambeck industry. He also makes some interesting points regarding pre-existing issues around the industry. Whyman highlights Monaghan's view that the identified kilns may be a few examples of an extensive and dispersed production (Whyman 2001, 235; Monaghan 1997, 903). Whyman (2001, 241) also echoes the probability of a military contract being responsible for the wide distribution and ultimate success of the Crambeck industry. He criticises Evans, stating that although he correctly attributes the distribution to the possibility of a military contract, such wide and large distribution is hard to match to Evans' view of the production site being restricted to the immediate area around the identified kilns (Whyman 2001, 241-242). Elsewhere in the thesis Whyman appears to agree with Evan's view that the demise of pottery in general in the north of England was due to the collapse of the market economy through the cessation of a coin-fed system.

The installation of a water pipeline from Harton to Hildenley resulted in archaeological investigations conducted by Northern Archaeological Associates on behalf of Yorkshire Water in 1998 and the report was completed in 2005 (Abramson et al 2005). A geophysical survey at Hutton Hill led to the excavation of Iron Age boundary ditches with two phases of activity along with two Crambeck ware kilns with associated kiln furniture and at least two structures (Abramson et al 2005, 1; discussed in greater detail in Chapters 4 and 5). Amongst evidence for specialist greyware production, the excavation also uncovered the first clear evidence of tile manufacture attributed to the Crambeck industry. Abramson et al (2005, 33) suggest that this was a secondary activity and could also have taken place at the Jamie's

Craggs site (the numerous pieces of broken tile discovered there by Corder are noted). The tile making at Hutton Hill is dated to c.AD 300-360 (Abramson et al 2005, 34).

The Hutton Hill site also provided more information about the internal structure of the Crambeck kilns. In the 2005 report, Swan concluded the results of the analysis of the kiln furniture as follows:

“...it now seems that Crambeck-type kilns were most probably characterised by a central parallel pair of rectangular pedestals each composed of one or more prefabricated, rough, rectangular blocks, set on edge, and spanned by bars possibly of more than one type, with cylindrical rings at the bottom of the kiln chamber, occupying the segmental gaps between the pedestals and kiln wall and underpinning the stack of vessels being fired.” (Abramson et al 2005, 43)

Swan does not, unfortunately, provide an illustration of this interpretation of the internal structure of the Crambeck kilns. These parallel supports resemble those found at Bursea (Halkon & Millett 1999).

The discussion of the Hutton Hill site is provided by Evans (Abramson et al 2005, 45-53). He notes that this site has added to knowledge of the Crambeck industry. The excavation made clear that tile production was undertaken alongside that of pottery at the Hutton Hill site and, most likely, also at Jamie's Craggs. The existence of the Hutton Hill site suggests that, along with others at Primrose Hill (Evans 1985, 113-114) and Crambe, there was a scatter of dispersed kilns in the vicinity of the larger site at Jamie's Craggs. The counter argument to that proposed by Evans (Abramson et al 2005, 45-53) is that there was no 'main site' surrounded by outliers as such, it being possible that all the sites producing Crambeck wares were equal parts of the production system. Evans does not consider this alternative. The Hutton Hill site does illustrate the apparent specialisation that occurred within the Crambeck industry, the lack of parchment ware and mortaria present indicating Hutton Hill

was a specialist greyware and tile production site. The main contribution of this site was to shed further light, albeit very little, on the internal structure of the Crambeck kilns.

The work at Hutton Hill has provided a significant amount of information furthering understanding of the Crambeck industry. It highlights the need for further work on the industry in order to understand the relationship between the different Crambeck production sites – was there a main site with outliers or multiple equal parts of the same industry? It has also made clear the partial nature of the accepted understanding of the Crambeck industry.

2.7 New Directions for Landscape Research at Crambeck

This chapter has detailed a number of studies conducted since the 1920s regarding various aspects of the Crambeck ware industry. These have mainly consisted of re-examining the evidence in the case of the Jamie's Craggs site at Crambeck although new information has emerged through the installation of a pipeline. Deliberate practical fieldwork with the sole aim of investigating the Crambeck industry has not taken place since Bartlett and Hinchliffe's survey in the 1980s.

This examination of the previous work on the industry has highlighted the need for work to be undertaken, using the Jamie's Craggs site, to groundtruth survey results facilitating the search for further Crambeck production sites in the surrounding landscape. Without such work, understanding of the industry will remain stilted and confined.

It is appropriate to end this chapter with a view of where the study of the industry may go in the future. An obvious issue requiring further investigation lies in the extent of the Crambeck production area. It is clear that a study of the landscape around the 'main' kiln site and the Oxford clay outcrop that supplied it is necessary. Such a study could answer the question raised by Evans (1985) and Whyman (2001) regarding the relationship of the production

sites. Future focus should be on the landscape of the Crambeck production area, for without a full understanding of its scale, it is hard to discuss the distribution, including the possibility of a military contract, with any real certainty. Below is a list of proposed research questions for the further study of the site which range from the general to the particular:

How open was the Crambeck landscape, were there visible remains of earlier monuments, and what did the late Romano-British landscape inherit from such past activity?

Was there one main production site at Jamie's Craggs with a few small outliers (e.g. Crambe and Hutton Hill), or were there a series of 'factories' of various sizes spread across the landscape?

Were these sites contemporary with one another or do they represent different phases of production across the landscape?

What accounts for the wide distribution of the ware? Was there some form of military contract?

Did the potters live and work on the same site or was the settlement(s) elsewhere?

What was the internal structure / mechanisms of the kilns?

Investigation of these questions would lead to a range of new information regarding the Crambeck industry. It would allow the chronology of production to be clarified. It may also be possible to establish whether there was a pre-existing, albeit non-commercial, tradition of pottery production in the Crambeck landscape thereby influencing the understanding of whether there were migrant potters from Norton or other industries. It would provide the opportunity to relate the Crambeck industry to the pre- and post-Roman periods. Four of these questions form the focus of this research and are discussed in detail in the following chapter.

Chapter 3 Methodology

This chapter sets out the questions addressed by this research. It outlines the available methods of investigation along with their strengths and weaknesses (3.1). It then discusses the application of these methods to the research questions and the particular issues faced throughout (3.2). The chapter will end by summarising the theoretical methodology of the research supporting this thesis (3.3).

There are many questions surrounding the Romano-British pottery industry at Crambeck but this research focuses on four of the most pressing.

How open was the Crambeck landscape, were there visible remains of earlier monuments, and what did the late Romano-British landscape inherit from such past activity? Various forms of aerial and land-based surveys are appropriate here. These include aerial photography, LiDAR, earthworks survey and geophysics and can be used to locate possible enclosing earthworks and earlier monuments in the Crambeck landscape. Excavation is necessary as the only positive way of testing the relationship between any such features and the phase of Romano-British pottery production at Jamie's Craggs. This method, through the material culture recovered, also held the potential to inform on what, if anything, the Romano-British landscape inherited from any earlier activity in the area.

Was there one main production site at Jamie's Craggs with a few small outliers (e.g. Crambeck and Hutton Hill) or were there a series of 'factories' of various sizes spread across the landscape? Various survey methods are also applicable to this question. Aerial photography, LiDAR, geophysical survey and fieldwalking can be used to locate other production sites in the Crambeck landscape. These can then be excavated to establish their scale of production and whether they were independent factories or small subsidiary outliers to the Jamie's Craggs site.

Were these sites contemporary with one another or do they represent phases of production across the landscape? Geophysics is useful here as it can, given the correct conditions, reveal multiple phases of activity across a landscape. Excavation could then be applied to establish or confirm the nature of such activity.

Did the potters live and work on the same site or was the settlement(s) elsewhere? Various survey methods are once again useful in locating sites for further investigation. APs and LiDAR can be used to locate potential sites. Geophysics and fieldwalking can then be applied to establish, as far as is possible, the date and nature of these sites. Excavation can then be undertaken to investigate the relationship between potential settlement sites and the Romano-British pottery production industry.

3.1 Methods Available

The methods addressed in this section will range from the non-destructive and broad to the more invasive and specific methods and is split into four categories: records and archives, aerial survey and mapping, land-based survey, and excavation. A brief explanation of each method will be given followed by a consideration of the problems and limitations associated with them.

Records and Archives

The Historic Environment Records (HER) list all designated Scheduled Ancient Monuments and Listed buildings as well as all known cropmarks and earthworks. The Portable Antiquities Scheme (PAS) focuses on the recording of objects and artefacts found across the country by members of the public, with a varying degree of accuracy in spatial locations as a result. The information from each database compliments that of the other with both used

to investigate large landscape areas and provide initial indications of any remaining or likely archaeological features.

There are some issues with the use of such records. Both HER and PAS can only contain records of *known* monuments and finds. Therefore, any 'gaps' in the data are not necessarily indicative of an absence of historical activity. The HER often lists multiple yet slightly different records for the same earthwork or feature, confusing the evidence for the quantity and nature of past activities. There are similar issues with PAS records and the accuracy of their listed locational information (Brindle 2014).

Aerial Survey and Mapping

There are various forms of aerial survey, the most accessible being online satellite mapping such as Google Earth. Such software often allows the user to view their selected area in various different lights and at multiple points in time. However, the user is often only able to access the most current image and one or two additional views from the past decade.

Photography is often a more useful method of aerial survey (e.g. Carver 2009; Roskams 2001; and Banning 2002). The RAF first used aerial photography (AP) for military purposes during World War II, but its archaeological potential was quickly realised and in the post-war period its application resulted in the identification of hundreds of new sites across Britain. APs frequently show cropmarks indicating the presence of buried archaeological remains as well as upstanding earthworks. The visibility of both is heavily reliant on the correct ground and light conditions, therefore multiple APs of the same field or area over a number of years and in a variety of weather or ground conditions can reveal a range of different features.

There are a series of issues and limitations to the use of aerial photography in archaeological research. The availability of images is inconsistent, although certain projects are improving

this (e.g. Britain From Above project which is commissioned by English Heritage and collects a large number of APs taken from the Second World War onwards, making them available online¹³). Finding images of the correct piece of land, under conditions conducive to revealing cropmarks or earthworks is a challenge. When images exist, they do not necessarily always show remains of archaeological features.

LiDAR (LIght Detection and Ranging) is an alternative form of aerial survey (Carver 2009). A scan of the ground is made and the data can be manipulated to remove upstanding objects, such as buildings and trees, to reveal the topography below. It can be conducted at various resolutions and the data is available through the Environment Agency website. However, the most detailed resolutions are only usually available (for free) in high risk flood areas. It can be commissioned privately but this raises funding issues. This method can also be used to provide landscape context in terms of topography and hydrology.

Land-Based Survey

There are several types of land-based surveys including fieldwalking, earthwork mapping and geophysics. Fieldwalking can identify artefact scatters on the surface of arable fields using a grid system for recording (Roskams 2001). Patterns in this material can indicate areas of archaeological remains and give an indication of their date and function. Fieldwalking is hindered by the fact its usefulness is limited to agricultural land.

An earthwork survey can measure the extent of such features in relation to their immediate landscape and the plans produced are particularly useful in informing on the interrelationships between features (Carver 2009). Such surveys cannot accurately date earthworks as they do not recover material culture: any dating achieved is done on the basis

¹³ <http://www.britainfromabove.org.uk/>

of the shape of the earthworks with certain examples, such as Roman military camps, being easily identifiable.

Geophysical survey consists of many different methods, the most commonly used being magnetometry, resistivity and ground penetrating radar (GPR) (for a discussion of geophysics in archaeology see Gaffney & Gater 2003). All geophysical surveys are conducted using systematic gridding and can be done at a variety of resolutions over wide areas. It is the responsibility of the archaeologist to distinguish between archaeological and geological responses, although much depends on their skill and experience with interpreting such data. Geophysics is reliant on the ground conditions being conducive to revealing any buried features and with the majority of instruments being handheld, the area covered with accurately collected data relies on the skill and fitness of the person handling the machine.

GPR creates a multi-layered image of the ground. An electromagnetic pulse is sent into the ground and reflections of the signal are created at the interfaces between layers, with their depth estimated by the time taken for the signal to return to the machine (Clark 1990, 118-119). For the best results the body of the GPR unit needs to glide smoothly over the ground, creating difficulties in applying this method on uneven surfaces (e.g. ploughed fields).

A magnetometer measures the anomalies in the intensity and direction of the Earth's magnetic field (e.g. see Clark 1990; Gaffney & Gater 2003). Burning of any kind is the most easily identifiable response with bonfires, hearth and kilns producing easily distinguishable results. The usefulness of this method in the investigation of a pottery production site is therefore evident. The movement or displacement of a large amount of soil can also be visible, for example the digging or backfilling of a ditch or building foundations. A magnetometer survey is only suitable for areas of land that do not have highly magnetic geology. Metal or electric fencing, overhead wires, pipelines, and metal objects in a field

(water troughs, farm equipment etc.) can negatively impact a magnetometer survey, creating a 'shadow' within the data. Not all features identified by magnetometry will be archaeological; ploughing (modern or ancient), geology, and large animal burrows (e.g. rabbit warrens) will be visible and can distort or render invisible any archaeological remains.

A resistivity survey creates a controlled electrical current and measures the variations in how it is conducted through the soil (e.g. see Clark 1990; Gaffney & Gater 2003). This method of geophysical survey is particularly useful in identifying solid features such as the buried remains of walls. Much like aerial photography, resistivity surveys are dependent on the weather and soil conditions. The method is not suitable on waterlogged ground or in areas where there is standing water as the liquid distorts the current and creates a false data point. As with magnetometry, the size of an area and the speed at which it can be surveyed depends on the skill and fitness of the person handling the machine as well as the amount of manpower available.

Excavation

Excavation is the most destructive method of retrieving and recording archaeological data. It is identified as the "...*systematic exposure of deposits that are then taken apart.*" (Darvill 2008, 151). Once the features have been excavated they can never be returned to their original state. As such, the physical archaeological record is a finite resource. The destructive nature of excavation requires clear research questions to be established by archaeologists before they begin and the records created as a result need to be a replacement for the physical archaeological features (Carver 2011). This emphasises the need for a functional processual approach and for a process of excavation.

Excavation provides one data set from a site, with other investigative methods providing additional information (see Roskams 2001). But excavation remains the only way to identify

features remaining beneath the surface as well as their nature and function with any degree of certainty. The understanding and interpretation of the data gathered through excavation can then be debated. Other less intrusive methods can only suggest what may lie beneath the surface. The identity of features, their date and function cannot be confidently established without excavation, and subsequent analysis of the retrieved material culture and its associated contextual information. It is the primary method of artefact retrieval and can uncover all periods of activity at a site.

The reports and data created throughout the course of this research are included in Volume 2 of this thesis and will, if not already, be submitted to the ADS.

Archiving is a major issue connected to excavation (Roskams 2001). Museums and commercial archaeological companies are swiftly running out of space to store the material recovered from excavations. This forces the issue of what, if anything, should be discarded. The shortcoming of this is that it then deprives future generations of conducting further study on that particular aspect of the site, especially if the excavation report and paper archive are lacking in detail.

3.2 Application of Methods to Crambeck

This section discusses the application of the methods outlined above to the investigation of the Romano-British pottery production industry at Crambeck. Problems and issues encountered throughout the application of these methods are specified where appropriate.

I decided to undertake a series of geophysical surveys, using both magnetometry and resistivity, at the Jamie's Craggs site and in the surrounding fields. This was aimed at locating other related archaeological evidence in the landscape as well as establishing the current state of the remains at Jamie's Craggs – were the features identified in the 1980s by

Bartlett and Hinchliffe (1989) still visible? This practical investigation combined with the desk based survey work, led me to conduct a small scale excavation at Jamie’s Craggs in March – April 2014. The details of the surveys and the excavation are discussed below.

The following table outlines the methods I have applied throughout this research in specific relation to the questions they were intended to answer. The questions reflect the order in which they are discussed in the first part of this chapter.

Method	Question 1 (open landscape)	Question 2 (“factories”)	Question 3 (phases of production)	Question 4 (settlement)
HER & PAS	X	X	X	X
APs	X	X	–	X
LiDAR	X	X	–	X
Fieldwalking	–	X	–	X
Earthwork Survey	X	–	–	–
GPR	X	X	X	X
Magnetometry	X	X	X	X
Resistivity	X	X	X	X
Excavation	X	X	X	X

Table 2 The methods applicable to the investigation of the research questions.

An analysis of the information held on the HER and PAS websites informed the research of all four of the research questions. The analysis led to articles in the *Malton Messenger* newspaper, and ultimately to the fieldwork conducted by the author as part of this research, including geophysical survey and groundtruthing excavation. Consultation of the HER for Crambeck revealed a number of relevant records, several pertaining to the production site at Jamie’s Craggs. Various earthworks and cropmarks of prehistoric to Roman date were also recorded in the surrounding area. These features and their relationship within the Crambeck landscape are discussed in Chapters 4 and 5. Investigation of the HER records led to several articles in the *Malton Messenger*, which in turn furthered the application of other non-destructive survey methods in the Crambeck landscape ultimately concluding with a groundtruthing excavation. The information from PAS confirmed the location of the production site at Jamie’s Craggs but unfortunately did not provide any additional

knowledge to that contained within the HER. The HER records have been drawn together in later chapters of this research to produce a wider contextual picture of the late Romano–British pottery production at Crambeck, both chronologically and spatially. The results from these resources are included in the discussion of the prehistoric, Iron Age and Roman landscapes at Crambeck in Chapters 4 and 5.

The issues with the HER and PAS resources were evident in the results for the Crambeck landscape, with multiple records for individual kilns, barrows and cist burials, resulting in much time spent on cross–referencing the records and sources of previous investigations. Often, a listed source for a record cannot be found or is restricted to a few sentences, as was experienced with the information from the *Malton Messenger*, limiting the extent to which the location and nature of certain features could be confirmed.

The issues with the use of online satellite mapping were demonstrated with the Crambeck landscape. Use of Google Earth in this research provided a quickly accessed view of the current landscape surrounding the Jamie’s Craggs site although the application of various light and time related tools did not reveal any archaeological features.

Aerial photographs, while applicable to the investigation of most of the research questions, were not particularly useful in reality. The Britain From Above Project lists a single photo taken close to Crambeck, but this did not show any archaeological features. Aerial photographs taken by P. Addyman in the 1980s revealed the band of clay running along the Cram Beck gorge as well as the ditch system identified through a ground survey by Bartlett and Hinchliffe (1989) at Jamie’s Craggs (see Chapters 2 and 5 for discussion), both visible as cropmarks. This collection of APs also included a circular cropmark in a field immediately west of the A64, opposite Crambeck village, one theory presented in Chapter 4 suggests this is a henge. Aerial photography conducted as part of this research revealed a series of

cropmarks in a field to the north-east of Crambeck village, that are representative of a ditch system and probable trackway as well as some possible building platforms (see Chapter 5).

LiDAR is applicable to the investigation of three of the research questions. However, at its current resolution (2m, the widest available) the LiDAR for the Crambeck landscape does not show any archaeological remains. It may be that such features would be visible in a survey conducted at a higher resolution. As a result, the LiDAR data has not been included in results of this research.

Fieldwalking would be a useful form of land-based survey in relation to the questions asked of Crambeck, however, this is most successful on ploughed soil. The Jamie's Craggs site is scheduled and ploughing permissions have been removed. A fieldwalking survey conducted by Bartlett and Hinchliffe (1989) on the site, prior to the removal of ploughing permission, is included in the analysis of the Crambeck site and its surrounding landscape.

An earthworks survey was conducted in relation to the question of whether the Crambeck landscape was enclosed. This was commissioned by the author in 2014 and carried out by Alistair Oswald (then a PhD candidate at the University of York) in March-April that year. This included the Jamie's Craggs field and Ox Carr Wood to the East of the site. It revealed a number of features that are discussed in Chapter 4.

Geophysical surveys are the most widely useful methods for the investigation of the research questions asked. Magnetometry and resistivity have been predominately used as they are, particularly in the case of the former, the most suitable and easily applicable in this instance. While GPR is applicable, it was not used in this research as it would not have added anything constructive to the results of the magnetometry and resistivity surveys. If other possibly related sites elsewhere in the surrounding landscape are identified, then this method may become applicable.

Magnetometry and resistivity surveys were carried out at the Jamie's Craggs site by the author in 2013, the results of which are discussed in Chapters 4 and 5. These focused on the Jamie's Craggs field (owned by Mr and Mrs Pollard at the time of investigation), but also encompassed the fields belonging to village of Crambeck immediately to the north-east, and the garden of Crambeck House (see Figure 28 for survey areas).

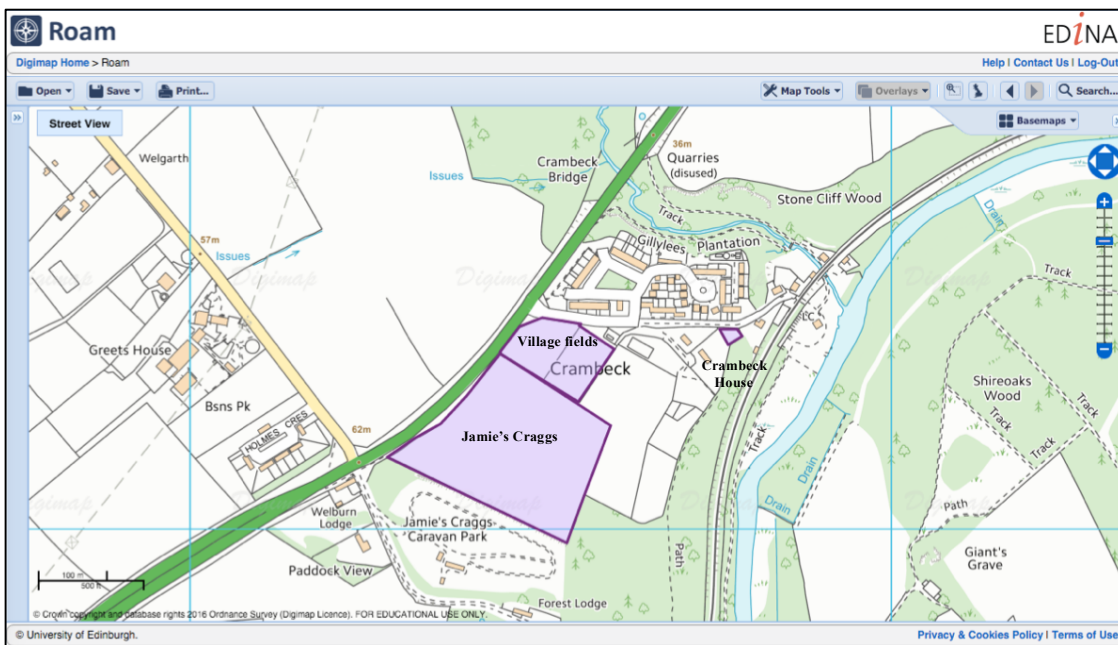


Figure 28 The three areas surveyed at Crambeck in 2013 (map created through digimap.edina.ac.uk).

The resistivity was conducted at the widest resolution in order to cover as large an area as possible. Where results indicated a possible structure or were otherwise unclear, a higher resolution survey was conducted. The garden was surveyed as the six inch 1912 OS Map listed a Roman burial and coins found on what is now the boundary between the garden and the road. Unfortunately, building material from the construction of Crambeck House obscured any archaeological remains that may still be present, although it is likely the building of the road would have destroyed any such features. Magnetometry was made impossible at this location due to its small size and metal boundary fence. The geophysical survey was conducted in the village fields in order to establish whether the pottery

production site extended down the hill in that direction and to attempt to locate the settlement that would have been related to it.

A survey was conducted at Jamie's Craggs field to establishing whether the ditch system and related features identified by Bartlett and Hinchliffe (1989; see Chapter 2) remained relatively undisturbed and to establish the extent of the production site. The majority of the field was surveyed using the magnetometer, although a comparatively small area was surveyed using the resistance meter. This was partly due to time constraints, but was largely because the resistivity meter was used at a range of resolutions within the ditch system in an attempt to identify any existing structures. This was not achieved but did highlight some anomalous features that required further investigation. The survey results are discussed across Chapters 4 and 5.

Magnetometry was also employed at the site to the west of the A64 as well as at the site to the north-east of Crambeck village where aerial photography had identified cropmarks in both cases. The results of each are discussed in Chapters 4 and 5. The reports for the surveys can be found in the appendices.

Several other smaller scale surveys were carried out in the surrounding landscape 2014–2015 with the aim of identifying other Crambeck production sites. An area to the north of Crambeck village and two to the west of the A64 opposite Jamie's Craggs were surveyed using a combination of magnetometry and resistivity. The results are included in the discussion in Chapters 4 and 5.

As a result of the inconclusive nature of the geophysics results, it became strategically necessary to conduct a small scale excavation within the ditched enclosure in the Jamie's Craggs field. This was directed by the author and involved fourteen volunteers from the University of York. It was undertaken with the permission of English Heritage and the

landowners and with the support of the Department of Archaeology at the University of York. The excavation resulted in a total of six trenches covering a total area of 100sq meters. The locations of the trenches in relation to the magnetometry results in depicted below.

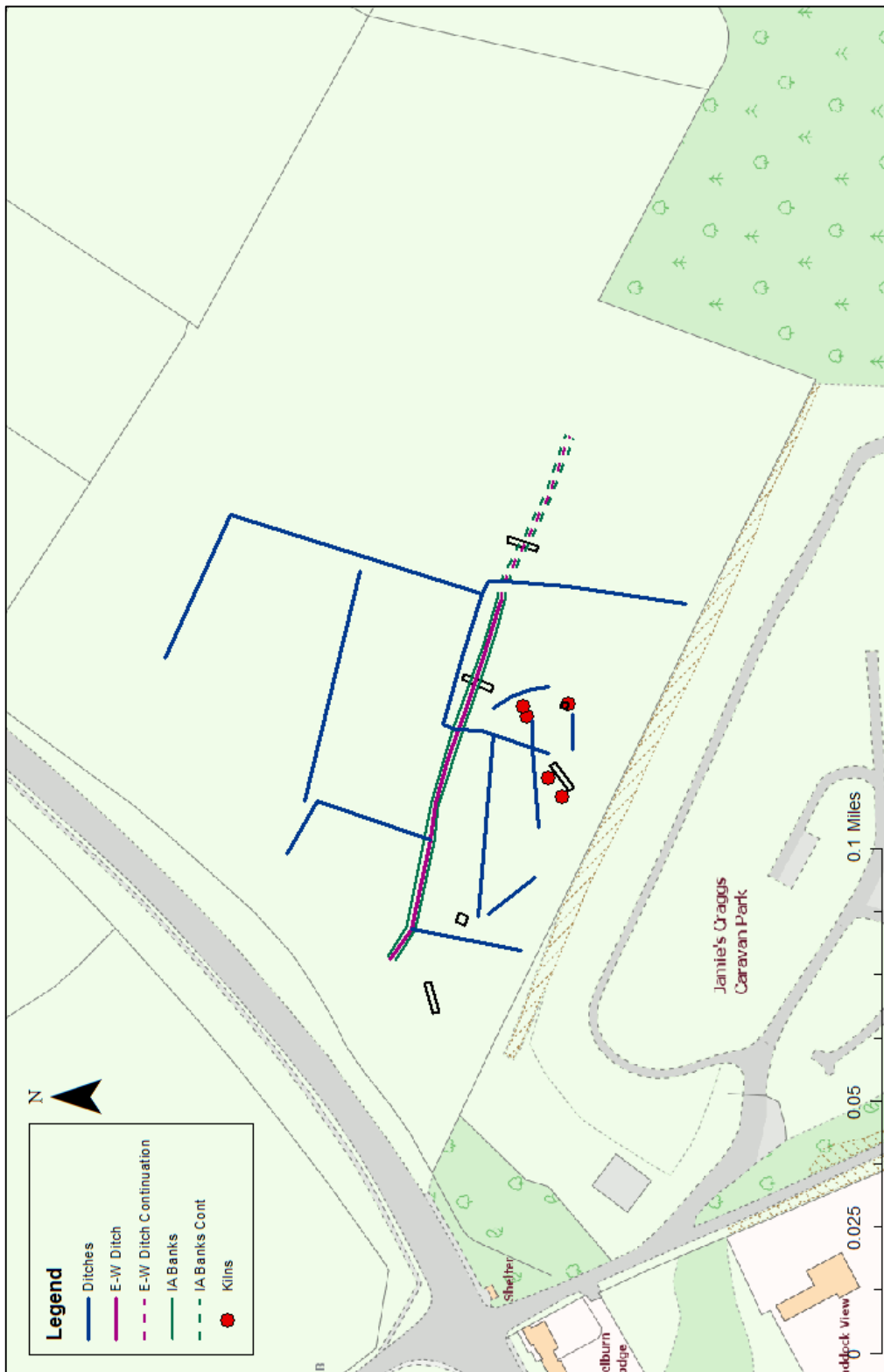


Figure 29 The location of the trenches (in black) in relation to the interpret magnetometry results.

The excavation had four main aims: to establish how the features identified through geophysics related to those surviving below the surface; to establish the character of the anomalous features identified by the higher resolution resistivity survey and how they relate to the phase of pottery production; to establish the relationship between and character of the ditches and establish how these related to the Romano-British pottery production; and lastly to establish the state of preservation of any surviving features in order to provide Historic England with information on the protection requirements of the site. The ground-truthing nature of this excavation provides an insight in to the issue of whether there were multiple production sites throughout the landscape. If the geophysical responses could be proved as Crambeck kilns, then it is plausible that a programme of geophysical survey could be conducted over a much larger area of the surrounding landscape with the aim of identifying other possible production sites. Such groundtruthing improves archaeologists' ability to identify a Crambeck production site through geophysics without the need for excavation. Discussion of the results of the excavation are in Chapters 4 and 5 and the excavation report is included in the appendices.

It is intended that the 2014 Crambeck excavation archive will be stored in the Yorkshire Museum, the only material to have been discarded was natural stone mistakenly collected by student volunteers. Copies of all reports were sent to the Historic Environment Records team at North Yorkshire County Council.

3.3 Summary

It is important for archaeologists to be aware of the shortcomings of the various methods they employ. Often, a combination of several of these methods creates the best results and the most accurate picture of a site through its phases of activity. Given the finite nature of the archaeological record, it is sensible for any archaeological field research to work through

the methods discussed here from the wide ranging and non-invasive to the more specific and destructive.

This research into the Crambeck industry focuses on four central questions. The research undertaken here provides a beginning to furthering understanding of this late Romano-British pottery production industry. The research questions investigated and the methods used provide a strong foundation for future work. This research also has important implications for the protection of individual monuments versus whole areas of landscapes. If the Crambeck industry is spread across a number of sites in the landscape, this raises the question of whether the entire area should be protected by scheduling law, or if only the best preserved sites warrant such protection. Furthermore, the central argument of this thesis, that the production context of pottery should be studied before its distribution and consumption can be fully understood, has important implications for institutional practices, providing an alternative approach to the study of pottery production industries.

The following chapters will discuss the evidence for prehistoric, Iron Age and Roman activity at Jamie's Craggs and in the surrounding Crambeck landscape.

Chapter 4 Discussion of the Crambeck Landscape in Prehistory and the Iron Age

This thesis has so far examined the theory behind the study of Roman Britain and Romano-British pottery as well as the approaches to the investigation of landscapes and the current understanding of the Crambeck industry. The previous chapter discussed the methodologies employed in the course of this research and their application to the questions asked. This chapter will present the results of these investigations and their impact on understanding the nature of activity in the Crambeck landscape in prehistory and the Iron Age.

A brief narrative of the prehistoric and Iron Age periods in the Yorkshire region will preface the evidence for the pre-Roman landscape at Crambeck (4.1). The chapter will then discuss the nature of the landscape at Crambeck throughout prehistory (4.2) and the Iron Age (4.3). A summary of the landscape at Crambeck prior to the Roman period will be given (4.4)

The evidence presented here draws on various sources of evidence from previous investigations (discussed in detail in Chapter 2) and includes the results of geophysical surveys and an excavation carried out as part of this research. The geophysical surveys carried out by the author were focused on the Jamie's Craggs field (conducted in 2013) and the surrounding landscape (conducted in 2014–2015). This led to a groundtruthing excavation undertaken by the author in the Jamie's Craggs field in 2014, which aimed to understand the nature of and relationship between the features identified by the survey. The specific aims and methods of these investigations are discussed in Chapter 3. The geophysics and excavation reports are included in the appendices (1-12).

The Bronze Age in Yorkshire saw the formalisation of movement through the ritualisation of the landscape. This was achieved through the construction of linear monuments, frequently incorporating existing earlier features, such as burial mounds, that acted as

boundary markers and route ways across landscapes. Burial in this period was characterised by round barrows, often placed in relation to routeways or flowing water to aid the dead on their journey (see Giles 2012). Division of the land occurred as a result of the increasingly agricultural lifestyle of communities which led to the need to demarcate special places (Smith & Walker 2008).

The Iron Age in Yorkshire and elsewhere in Britain saw the construction of hillforts which could have been in use individually for up to two hundred years and likely had multiple functions. There is some suggestion of continuity of activity within and around hillforts (Cunliffe 2005, Chapter 15). Many across England went on to influence the location of Roman *civitates*, while others remained the focus of industrial activities, the fort at Wappenburg for example, became the site of a Romano-British pottery production industry and eventually became a medieval settlement (Stanley & Stanley 1964) (see Chapter 7). The Iron Age in Yorkshire is characterised by the distinctive burials of the Arras culture, with a prevalence of square barrow cemeteries in the east of the county (Giles 2012). These also include rare example of cart or chariot burials which, aside from being the interments of individuals of special social standing, may have included such vehicles as an ostentatious method of aiding the dead on their journey, akin to the placement of barrows close to route- and water-ways in the Bronze Age (Giles 2012). Ultimately, prehistory and the Iron Age in Yorkshire saw the progression of societies from mobile social groups in early prehistory, to stationary communities with defined territories and increasingly complex religious traditions and burial rites in the Iron Age.

A more detailed discussion of Yorkshire in prehistory and the Iron Age can be found in Chapter 6 where Crambeck is placed into its wider regional context.

4.1 The Evidence from Crambeck: the Pre-Iron Age

The material culture evidence for prehistoric activity in the Crambeck landscape consists of a small number of worked flints. The *Malton Messenger*¹⁴ records the discovery of flint arrow heads at the Reformatory School Farm, which included the Jamie's Craggs field, although the newspaper does not specifically state when or where the finds were made nor give any further information. A second entry, equally sparse in detail, mentioned the presence of 'a quantity of flint implements' in the neighbourhood of the Reformatory School¹⁵. A further six worked flints are listed in the HER (#2279; PS #986688). These are recorded as being found during the course of fieldwalking although additional detail is lacking. It is likely that the fieldwalking referred to is that conducted by Bartlett and Hinchliffe in 1981 (see Chapter 2). Their report mentions in passing that worked flint was collected but it is excluded from any analysis and discussion, the focus being on the Roman pottery (Bartlett & Hinchliffe 1989).

A number of worked flints were recovered during the 2014 excavation in the Jamie's Craggs field (for the specialist discussion see the excavation report in Appendix 8). Twenty-nine pieces were identified, consisting of flakes, blades and cores. Two fabrics were present: the first being a till flint found in the North-East and parts of the Midlands (South Yorkshire and Lincolnshire) and was the predominantly used flint for much of prehistory across the North of England. Eight flakes and five blades were identified in this material. The second fabric was a chalk flint found in Lincolnshire and on the Yorkshire Wolds with nine flakes, three blades and three cores present in this opaque white-grey material. One blade had been subjected to burning leaving its fabric unidentifiable.

¹⁴ *Malton Messenger*, 18th December 1858.

¹⁵ *Malton Messenger*, 28th April 1866.

The assemblage has been characterised as a random scatter of largely unrelated flints, none of them being chronologically diagnostic, with a variety of technologies used. The evidence suggests some manufacture of flint blades on the site (a total of nine identified), particularly in the till flint (five identified), most likely dating to Neolithic. Some pieces show evidence of retouching, including a chalk flake and two till blades, one of which may be a scraper. Many of the pieces display evidence of damage, which most likely occurred post-deposition as a result of the weather and/or agricultural processes.

There is some patterning to the distribution of the flints recovered in 2014. The vast majority of them came from Trench 1, the eastern most trench, situated over a section of the Iron Age ditch and banks. Sixteen were found in this trench although seven of these were from topsoil/subsoil. The remaining nine were in the tertiary fill of the east-west promontory fort ditch, including two blades, the rest being flakes. The table below lists the flints found in 2014, their material, form and context.

Trench	Context No.	Context Description	Flint Material	Flint Form
1	1001	Topsoil	Till	Flake
1	1001	Topsoil	Chalk	Flake
1	1001	Topsoil	Till	Flake
1	1002	Subsoil	Till	Flake
1	1002	Subsoil	Chalk	Blade
1	1002	Subsoil	Till	Blade
1	1002	Subsoil	Chalk	Core
1	1007	Tertiary fill E-W ditch	Till	Blade
1	1007	Tertiary fill E-W ditch	Chalk	Flake
1	1007	Tertiary fill E-W ditch	Chalk	Blade
1	1007	Tertiary fill E-W ditch	Chalk	Flake
1	1007	Tertiary fill E-W ditch	Chalk	Flake
1	1007	Tertiary fill E-W ditch	Chalk	Flake
1	1007	Tertiary fill E-W ditch	Chalk	Flake
1	1007	Tertiary fill E-W ditch	Chalk	Flake
1	1007	Tertiary fill E-W ditch	Chalk	Flake
3	1201	Topsoil	Chalk	Core
3	1202	Subsoil	Till	Blade
3	1202	Subsoil	Till	Blade
3	1202	Subsoil	Till	Flake
3	1202	Subsoil	Burnt	Blade
4	1301	Topsoil	Chalk	Core
4	1301	Topsoil	Till	Blade
4	1302	Subsoil	Till	Flake
4	1302	Subsoil	Till	Flake
4	1307	Tertiary fill E-W ditch	Till	Flake
5	1122	Topsoil	Chalk	Flake
5	1122	Topsoil	Till	Flake
Unstr.	Unstr.	Unstratified	Chalk	Blade

Table 3 Breakdown of the worked flints found during the 2014 excavation at Jamie's Craggs.

Of the other flints found, eleven were from topsoil/subsoil across the site (Trenches 3, 4, and 5). One flake was found in a different section of the tertiary fill of the promontory for ditch to the west of those discussed above. Unfortunately, it is likely that the flints from Trench 1 had been disturbed from their original deposition, particularly given that the majority were located in the context thought to be late Roman (see discussion of ditch fills, section 4.2). This, along with the fact that their forms are un-datable, leaves the dating of the activity related to these flints uncertain although it is possible to state that they are most likely from Neolithic. It is not possible to state any certainties about the function or nature of the activities these flints represent.

The presence of various worked flints does suggest a certain level of activity in the Crambeck landscape sometime in prehistory, most likely dating to the Neolithic, although a later date cannot be discounted. The lack of chronologically diagnostic forms within the assemblage restricts the ability to suggest a narrower date range. It is unclear whether the deposition of worked flints resulted from occupation activity, be it seasonal or permanent, or was the result of groups of people moving through the landscape. The lack of identified structural evidence does not shed light on the nature of the activity related to these flints although discovery of such features would give some context to these finds. The only conclusion to be drawn from them presently is the existence of some level of prehistoric activity in the landscape that may have included hunting, given the presence of arrow heads.

The Crambeck landscape is not devoid of prehistoric features. In the field directly opposite the Jamie's Craggs site, on the west side of the A64, there is a series of cropmarks appearing to form a circular enclosure, visible on Google Earth (Figure 30 and Figure 31) and on aerial photographs taken in the 1980s¹⁶ (Figure 32 and Figure 33). The cropmarks appear to have an external bank and an internal ditch and the feature has been identified as a possible henge as a result.¹⁷ The combination of a ditch inside a bank is a characteristic feature of henge monuments (Harding 2003), which are discussed with their wider context in greater detail in Chapter 6.1. However, the identification of these cropmarks as a henge is only one possible theory. They may have been caused by natural elements, such as the meandering nature of the Cram Beck over time. Similar features identified by Stoertz (1997) as henges (or hengi form features) were later proven by geophysical survey to be natural.¹⁸ Further

¹⁶ By Peter Addyman, then at York Archaeological Trust.

¹⁷ This identification of these cropmarks was made in conversation by Professor Dominic Powlesland, Landscape Research Centre.

¹⁸ For example at Walkington, <http://eras.org.uk/pdf/erasnews56.pdf>, pp4-6.

investigation of the natural geology, soils and water flows would be necessary to help determine whether this feature is man-made or natural. Without such further investigation it is not possible to state the nature of this feature with any certainty.

A magnetometer survey conducted in 2015 confirmed the presence of a large circular feature in the location indicated by the cropmarks. Unfortunately, machine malfunction during the survey prevented a clear image being discernible from the results. The report and magnetometer results can be found in Appendix 4. It was hoped that this survey would shed some light on the nature of the feature, unfortunately the machine malfunction prevented any concrete deductions from the results.



Figure 30 Google Earth image (2002) showing the cropmarks identified as a henge.

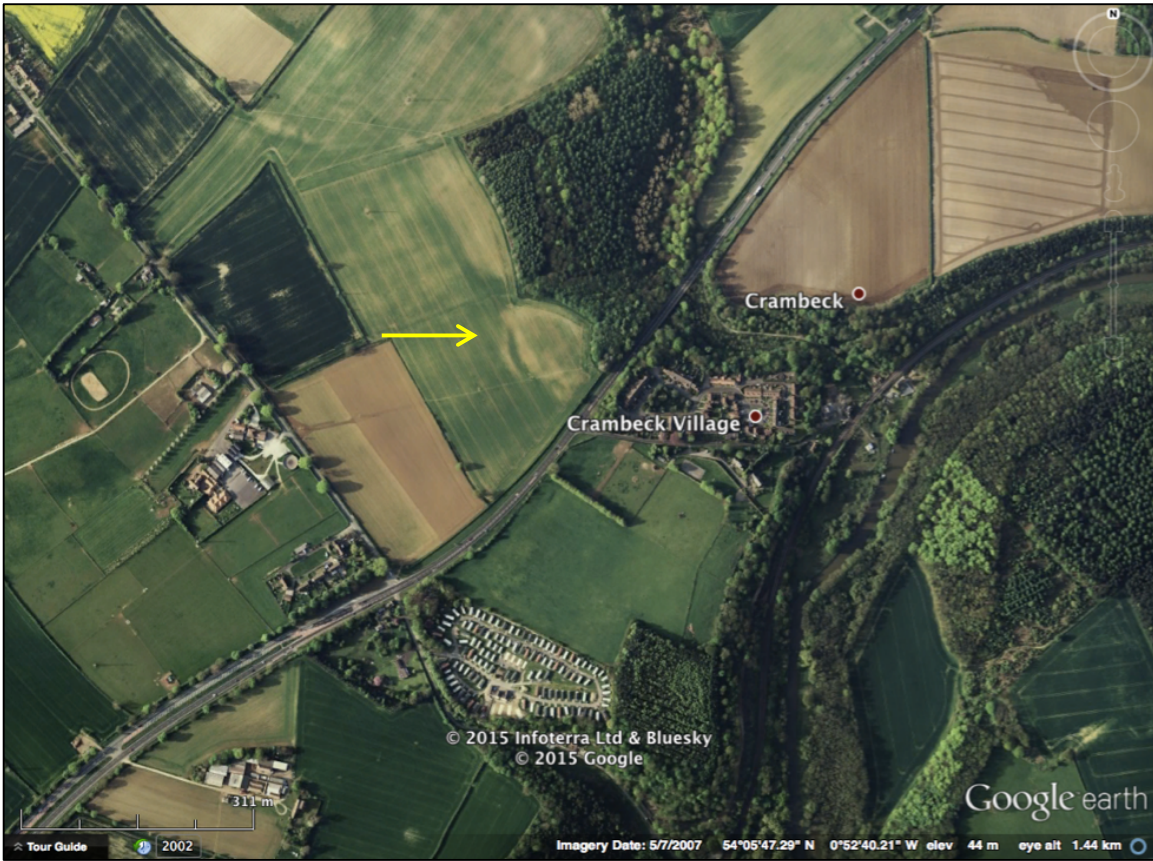


Figure 31 Google Earth image (2007) showing the cropmarks identified as a henge.



Figure 32 View of the cropmarks looking east. The Jamie's Craggs field and the caravan park can be seen in the background.

Image credit: Peter Addyman, 1984.



Figure 33 View of the cropmarks looking north east. Part of Crambeck village can be seen in the top right corner.

Image credit: Peter Addyman, 1984.

If the circular feature at Crambeck is indeed a henge, then it would seem to exist outside the usual distribution of such features in Yorkshire (Figure 34). It is also interesting to note the proximity of the feature to several Bronze Age barrows and at least one Iron Age barrow in the nearby landscape, these features seemingly continuing the apparent recognition of this landscape as a special and important place.

Henges are known to have consisted of large earthworks when not constructed of stone or wood (Harding 2003), and it is therefore conceivable that these earthworks of the feature at Crambeck were visible in the Iron Age and possibly at the peak of pottery production in the fourth century. The presence of such earthworks could have contributed to the continued attribution of particular meaning to the Crambeck landscape, although this remains conjecture. These earthworks are no longer visible and if they were ever upstanding, they

have presumably been flattened over the centuries by weathering and/or agricultural activity. Furthermore, the feature may have been ascribed value in the landscape and therefore remembered in the collective social memory for many centuries after its physical presence was lost. It may have remained a focus for activity long after its initial phase of use had ended. Giles (2012) discusses monumental features in Bronze and Iron Age landscapes in this way.

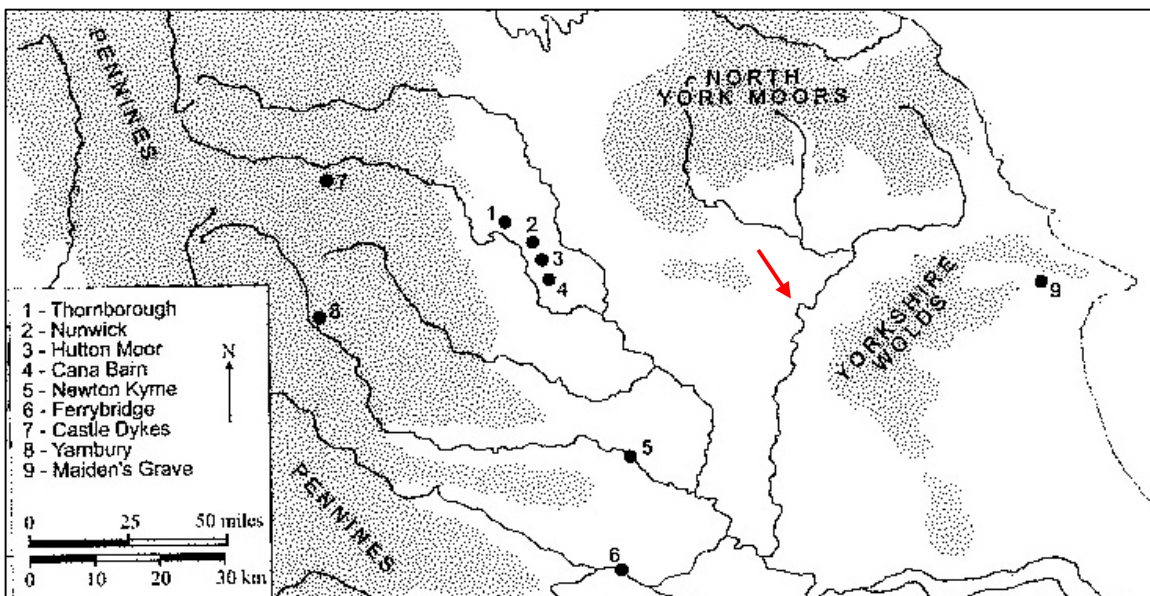


Figure 34 Distribution map of henge monuments in Yorkshire (Harding 2003, figure 63, 87). The red arrow indicates the approximate location of the 'henge' at Crambeck (author's insertion).

Prehistoric burial has been identified in the Crambeck landscape in the form of several Bronze Age round barrows, unfortunately no longer visible as earthworks. They have been recorded on PastScape and the North Yorkshire HER – the approximate location of those discussed is shown in Figure 35. Two are located under what is now Crambeck village (PS #59648, #59700). The westernmost barrow remained visible as an upstanding earthwork in the 1950s, as evidenced by historical OS maps, but had been levelled by the expansion of the modern village by the 1980s (Figure 36 and Figure 37). Two Bronze Age barrows are located to the east of the River Derwent. One is to the north of Firby (PS #982546; HER #2252) and existed as an earthwork although it is not recorded on the historical OS maps.

Another was located in what is now Shireoaks Wood (HER #2255). This was visible as a soilmark and is not included on the OS maps, most likely as it had been covered by the wood. A fifth Bronze Age barrow is recorded east of Mount Pleasant farm, less than a mile south of the kilns at Jamie's Craggs.

The majority of the known barrows seem to cluster along the route of the Cram Beck or close to the River Derwent. This appears to have been a deliberate association and, although the area cannot be described as a cemetery, it is clear it was used for a number of burials in the Bronze Age. As discussed above, although henge construction and use ended with the Neolithic period, the monuments continued to have a role in peoples' consciousness, acting as historical anchors and legitimising many of the barrow cemeteries constructed by the succeeding generations of the henge builders (Harding 2003). As will be discussed in Chapter 5, this area seems to have been remembered, or at least re-used, as one of burial towards the end of the Roman period.

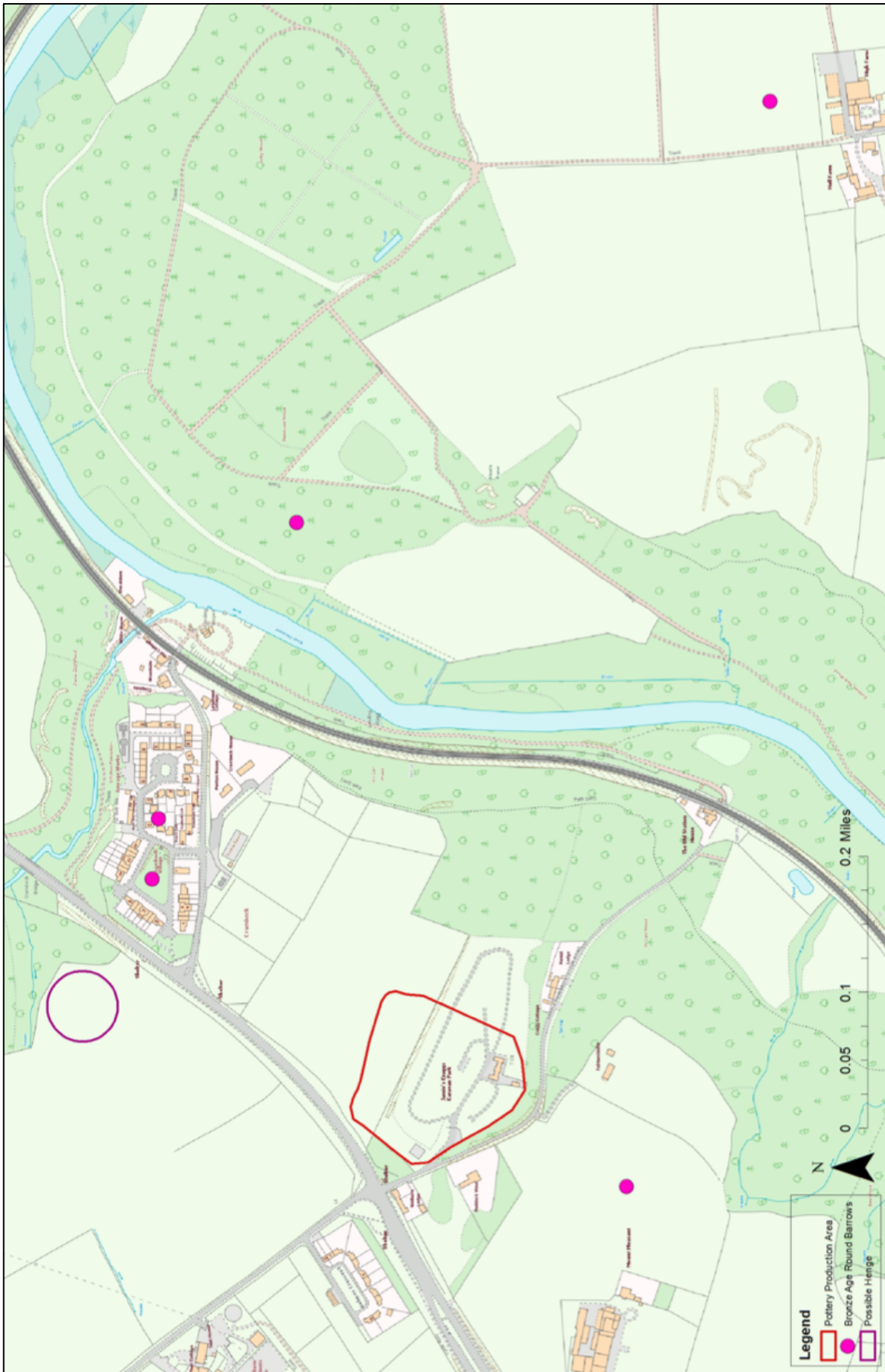


Figure 35 Map showing approximate locations of Bronze Age round barrows in the Crambeck landscape.

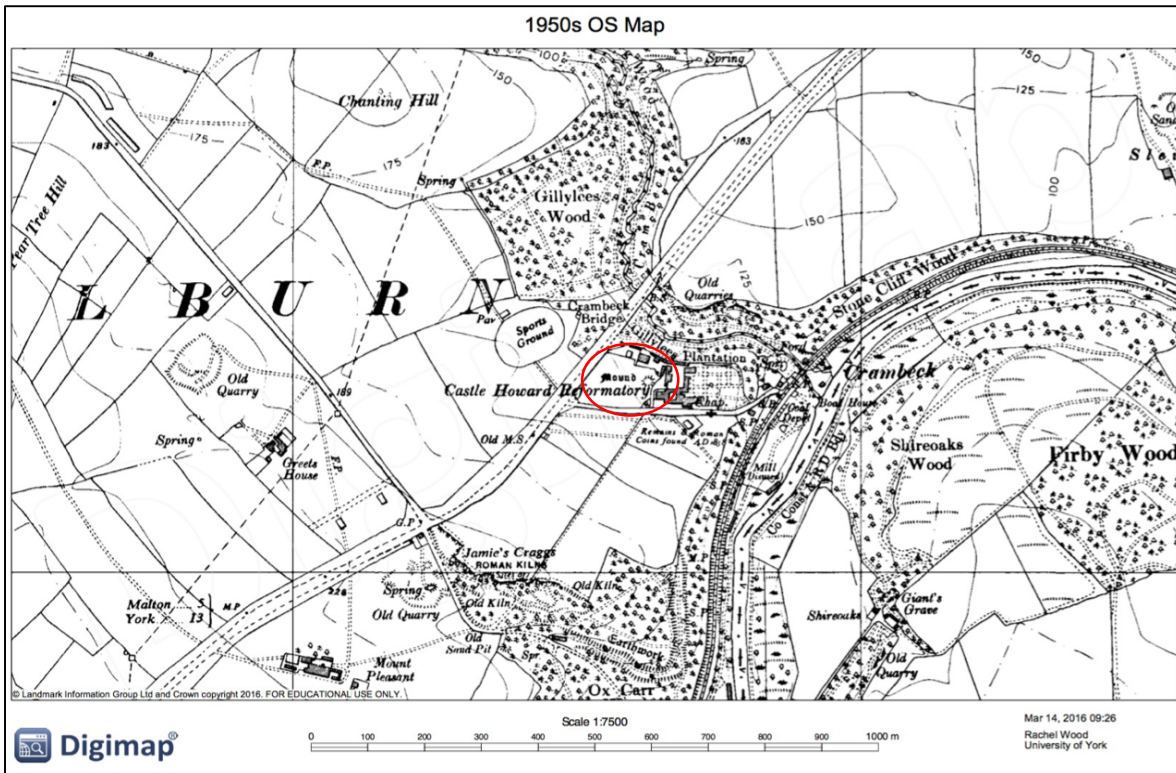


Figure 36 1950s OS Map showing the western barrow (circled).

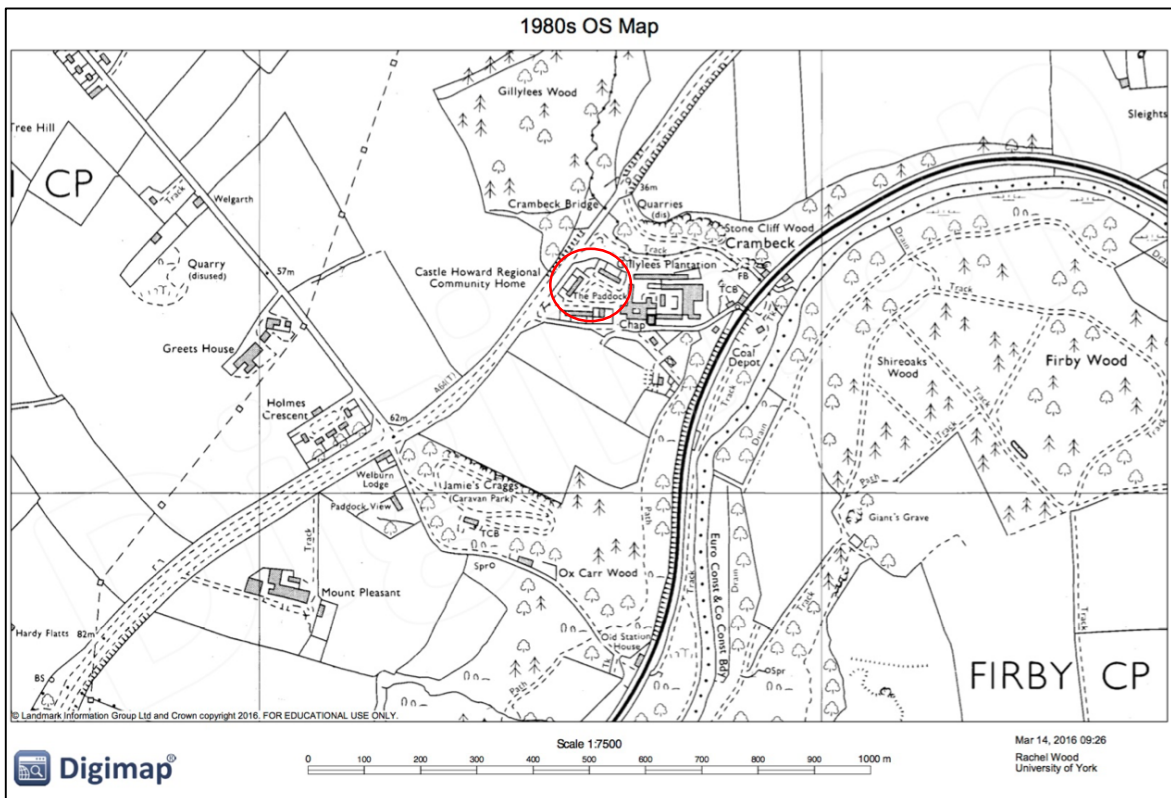


Figure 37 1980s OS Map. The location of the barrow has been covered by housing (circled).

A further set of cropmarks have been identified as a trackway of unknown date to the north-west of the henge feature. The PastScape record (#59660) for this lists it as a possible Roman road. There is a prominent ridge across the landscape, running east–south-east from this feature towards the circular cropmarks. It is possible then, to suggest a routeway running along this high point down toward the henge feature that may have originated in prehistory. A second possible trackway is visible as cropmarks at Hardy Flatts to the south-west of Crambeck on the west side of the A64 (PS #1003324) with a suggested prehistoric or Roman date. Several tracks or roads in use in the area throughout the Roman period are thought to have been constructed along the routes of their prehistoric counterparts, as may be the case in this instance.

Lastly, there is a possible prehistoric or Roman enclosure complex to the north-east of Crambeck visible as cropmarks (PS #1003331). This will be discussed in greater detail in Chapter 5 but suffice to say that, although some of the visible features may well be prehistoric in origin, initial investigations suggest a Roman date, perhaps in the first or second centuries, at least for the visible phase of activity.

A set of cropmarks have been identified as a trackway of unknown date to the north-west of the possible henge feature. The PastScape record (#59660) for this lists it as a possible Roman road. There is a prominent ridge across the landscape, running east-south-east from this feature towards the circular henge cropmarks. It is possible therefore, to suggest a routeway running along this highpoint down towards the possible henge feature that may have its origins in prehistory. A second possible trackway is visible as cropmarks at Hardy Flatts to the south-west of Crambeck on the west side of the A64 (PS #1003324) with a suggested prehistoric or Roman date. Several tracks or roads in use in the area throughout the Roman period are thought to have been constructed along the routes of their prehistoric

counterparts, as may be the case in this instance. Further research would be required to state any certain facts about these trackways.

In summary, it is clear that there were various phases of prehistoric activity in the landscape around Crambeck. Movement across the landscape is suggested by the evidence for two trackways on the west of the A64, at least one of which may be related to the presence of a possible henge. This circular feature is close to the Cram Beck and is visible as cropmarks with the edge of the current wood respecting its curve. The ditch appears to be inside the bank which, at the very least, indicates a religious or ritualistic function for the feature but is also a characteristic aspect of later Neolithic henges. It is conceivable that the earthworks stood for many centuries after the feature fell out of use and may have remained visible in the fourth century AD. However, further study may reveal this feature to be a natural occurrence.

Prehistoric burial is evident in the Crambeck landscape with at least five Bronze Age barrows in the immediate area, all near to or overlooking flowing water and some had a close proximity to the site of the Roman-British pottery works. Lastly the evidence for settlement occupation and industry in the landscape is less definitive. There is a set of enclosures to the north-east of Crambeck with possible prehistoric origins as well as various worked flints recorded in the landscape including arrowheads and blades. The flint, recovered during the 2014 excavation, provides some very tentative evidence for the manufacture of blades. It is extremely likely that this is not the full extent of prehistoric activity in the landscape around Crambeck but further evidence has either been lost, destroyed, or is not currently visible.

4.2 The Evidence from Crambeck: the Iron Age

The Portable Antiquities Scheme records a small number of Iron Age objects from the Crambeck landscape. There were several issues with the spatial information related to these

objects, a common problem with PAS data as discussed in Chapter 3. Given the uncertain dating and inaccurate or unspecific spatial distribution information, these objects do not add significantly to the understanding of the Crambeck landscape in the Iron Age. There are three objects east of the River Derwent: a button hoop fastener at Burythorpe, a Langton Down brooch at Acklam, and an unidentified object at Westow. There are five objects west of the A64: a copper alloy toggle at Thornton-le-Clay, a stud at Sherriff Hutton, two brooches one of the La Tène III period at Sherriff Hutton, and a harness fitting or probable terret ring between Thornton-le-Clay and Bulmer. All of these objects are given a date of late Iron Age or early Roman although most are more likely to be late Iron Age, that is first century BC to early first century AD.

Substantial evidence exists for activity in the Crambeck landscape during the Iron Age, the most prominent being a series of earthworks in Ox Carr Wood to the south of Crambeck village. These are on the south-east corner of the Jamie's Craggs site and have had a variety of identifications in the past. They are labelled on several historical OS maps as follows: 1850s '*Limestone Quarries*', 1890s '*Roman Camp*' (Figure 38), 1910s and 1980s '*Earthwork*' with only the north-east corner being depicted in the latter.

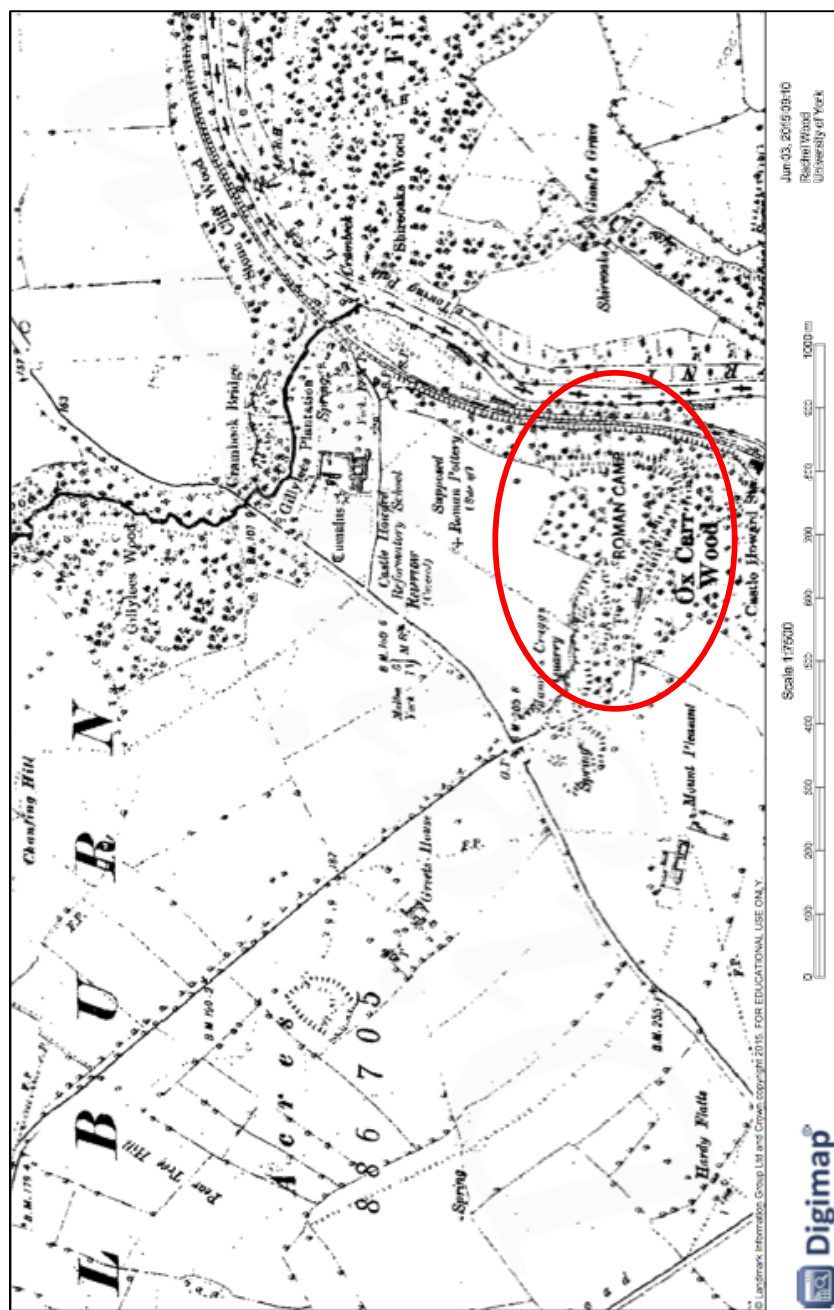


Figure 38 The 1980s OS Map depicting the earthworks in Ox Carr Wood as a Roman Camp.

Corder mentions the ‘Roman camp’ in his excavation report (1928, 11; 1989a), although they are excluded from his excavation diary.¹⁹ They are listed on the HER (#2204) and PastScape (#59667) as a Roman hollow way. These earthworks are included in the

¹⁹ Corder’s diary is held by Malton Museum at the time of this research and was transcribed by the author. Transcriptions also held by the Museum.

scheduling for the Jamie's Craggs site and are described on the Scheduled Ancient Monument (SAM) record as follows (National Heritage List for England #1016347, SAM #29515):

“At the south east corner of the monument, a 6m wide terrace with a low external bank has been constructed extending around the south and east side of the river cliff, approximately 5m below the crest of the hill. Early studies interpreted this feature as the outer rampart of a Roman camp however it is now considered to be a Roman hollow way to allow access to the ford across the Cram Beck.”²⁰

A survey of these earthworks was undertaken in 2014 alongside the groundtruthing excavation.²¹ This aimed to establish the nature of the earthworks and their relationship to the phase of Roman pottery production at the site. The survey identified the earthworks as a promontory fort, most likely dating to the Iron Age. Figure 40 below shows the results of the survey and Figure 41 shows the results in relation to the interpreted geophysics results. These earthworks are referred here as a fort however, it must be noted that their function, military or otherwise, remains unconfirmed.

The earthworks of the fort remain extant in Ox Carr Wood, although some along the northern edge are substantially smaller than those along the eastern and southern sides. They are also extant along Castle Howard Station Road which runs to the south of the caravan park roughly perpendicular to the A64. The earthworks can then be traced to the west up to the junction of the Station Road and the A64 where they turn north-east for a short distance, parallel to the A64, before turning east to enter the Jamie's Craggs field. They are not visible as

²⁰ Heritage List for England Scheduled Ancient Monument record for the Crambeck site including the earthworks: http://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=1016347&resourceID=5

²¹ The earthwork survey was conducted by Mr. Alistair Oswald, of the University of York, in March – April 2014.

earthworks in the field but the continuation of the ditch and banks is visible on the 2013 geophysics (Figure 41). This continues through the field towards the north-west corner of Ox Carr Wood where the extant northern section of the earthworks terminates.

The earthworks enclose a large area of almost ten hectares and occupied a prominent position in the landscape, high above the River Derwent which would have been navigable at least as far as Malton in the Roman period, and presumably prior to this (Evans 1985, 112). The section of the earthworks enclosed within Jamie's Craggs field appear to have been ploughed flat over recent centuries, although the geophysics revealed two sets of ridge and furrow running north-east to south-west on their northern side and north-west to south-east on its southern side (Figure 39). These do not seem to cross the line of the ditch suggesting that the earthworks for this part of the defences were visible at least in the medieval period and possibly in the post-medieval period. The section of the earthworks in Ox Carr Wood may have been used as a trackway in posterity and have certainly been disturbed by limestone quarrying, although it is clear that neither were the original function.

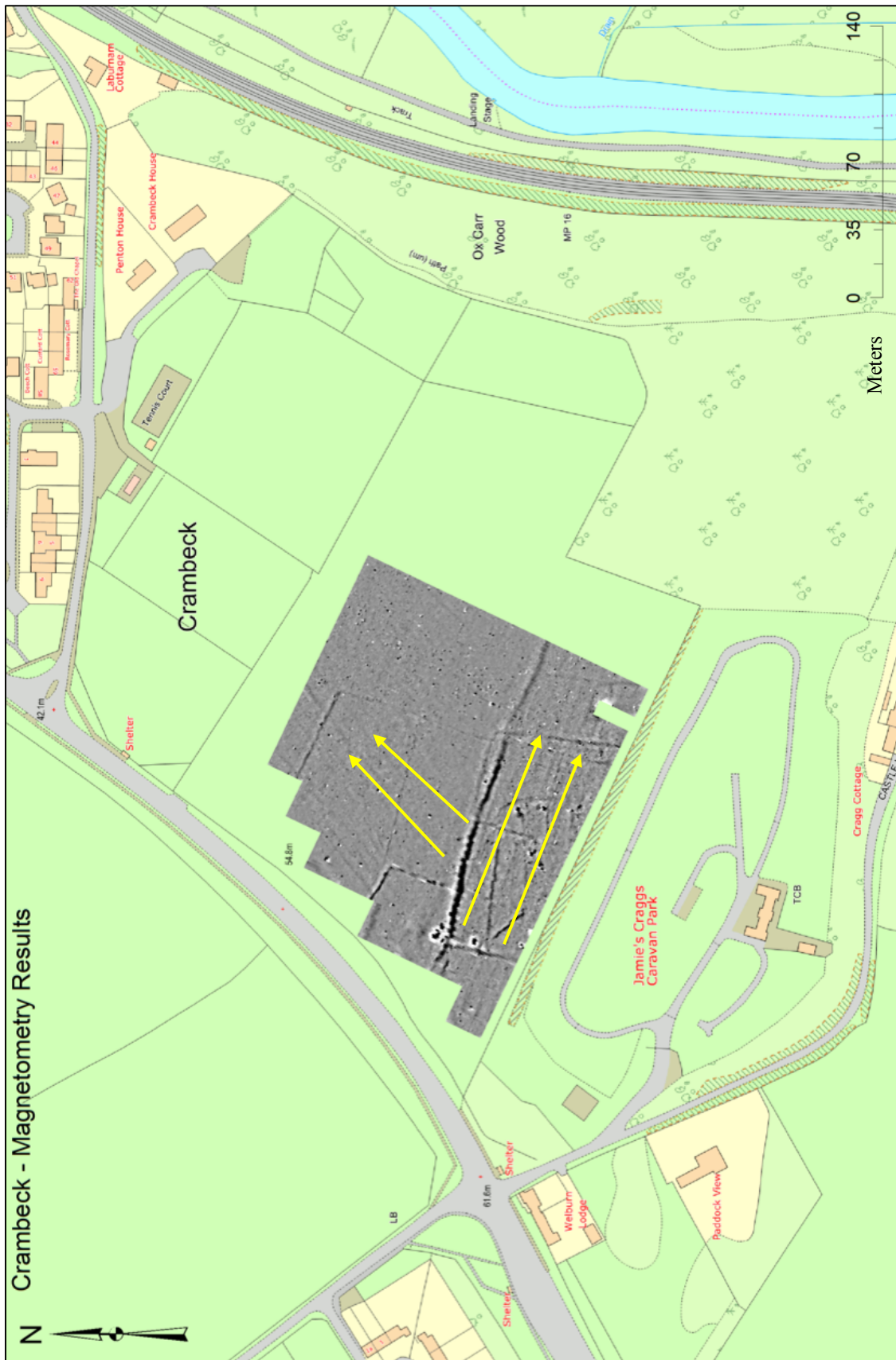


Figure 39 Map indicating the direction of ridge and furrow visible on the magnetometry results.

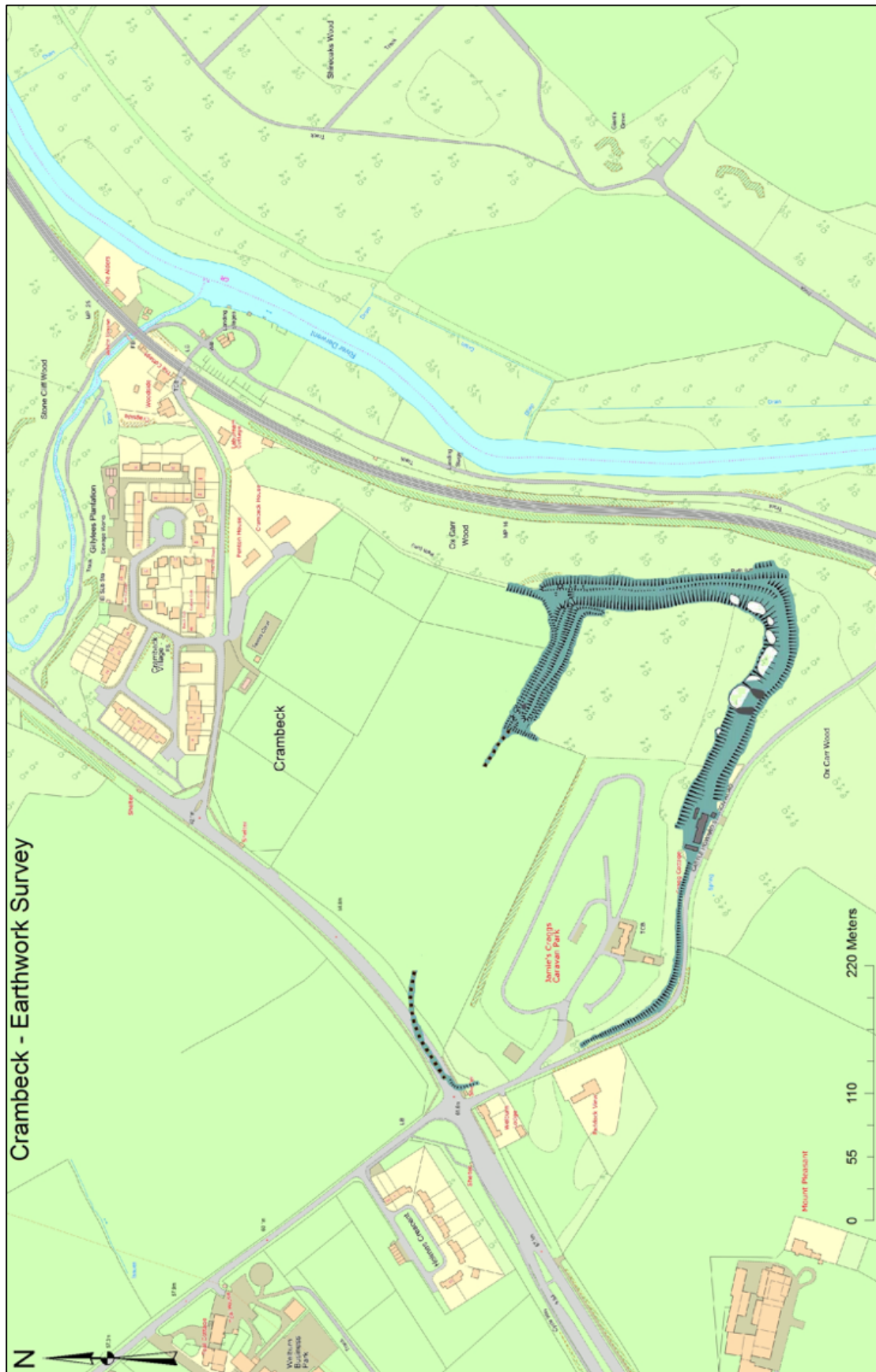


Figure 40 The results of the 2014 earthwork survey.

The 2014 excavation revealed the ditch to be 3.5m wide and 1.13m deep. It had been cut into the natural bedrock and the excavated material used to create the banks on either side (Figure 42 and Figure 43). The ditch contained three fills (Figure 44), the upper two containing some sherds of Roman pottery (often Crambeck ware). A late Roman cremation was inserted into the uppermost fill where it lapped against the northern bank. This is discussed in greater detail in Chapter 5.

It is possible that sections of the ditch, almost certainly still visible at least as a prominent dip in the Roman period, were used to dump broken sherds and cast-offs from the pottery production. Analysis of the animal bones (Appendix 9) found in the bottom of the primary fill suggest that it was allowed to grow over with vegetation before the primary fill began to accumulate. There is no evidence for this section of the ditch having being cleared out or recut at any point. The evidence suggests that after its original creation it was allowed to grow over and gradually fill by natural means in three distinct phases (Figure 44), although it would have still been visible in the Roman period and its later fills in part seem to have been utilised to discard pottery.



Figure 42 The Iron Age ditch and the edge of its northern bank.



Figure 43 The Iron Age ditch and part of its southern bank.

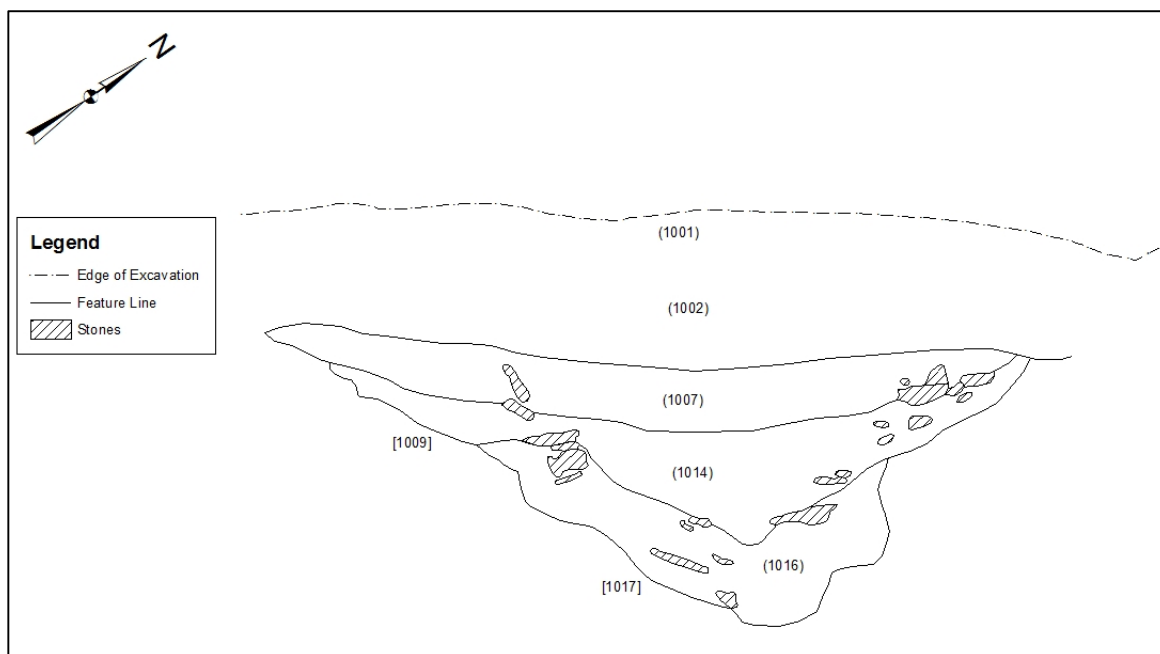


Figure 44 Digitised section drawing of the east-west ditch. Its three fills are 1007, 1014, and 1016 (Scale 1:20).

The following detailed description of the fills of the excavated section of ditch is given as a result of the pivotal nature of understanding the relationship between the fort and the late Romano-British pottery activity as well as earlier phases such as the deposition of Iron Age burials. Table 4 shows the proportions of material culture present in the three fills (data in Appendices 6-10). The fills were broadly comparable in terms of their composition (see below) and volume (Figure 44).

All of the animal bone present showed signs of weathering, some severe, indicating the slow, natural accumulation of the fills.

	Tertiary Fill (1007)	Secondary Fill (1014)	Primary Fill (1016)
FLINT:	9	0	0
ANIMAL BONE:	12	35	38
<i>Sheep/Goat</i>	3	0	2? Goat
<i>Cow</i>	0	1?	7 + 1?
<i>Horse</i>	0	0	0
<i>Misc.</i>	8	34	28
POTTERY:	22	2	3
<i>CRA Reduced</i>	5	0	0
<i>HSM Reduced</i>	1	0	0
<i>HUN Calcite-gritted</i>	3	0	1
<i>Calcite-gritted</i>	13	2	2
<i>Reduced Misc.</i>	1	0	0
TOTAL MATERIAL CULTURE	43	37	41

Table 4 The proportions of flint, animal bone and pottery in the three fills of the excavated section of promontory fort ditch.

The primary fill consisted of light grey-brown sandy silt, with occasional cobbles, less than 10% gravel, and occasional limestone slabs. It had a moderate compaction with depths of 0.15m at the south end, 0.51m in the middle, and 0.46m at the north end. The fill contained thirty-eight animal bones, the majority unidentifiable, and three sherds of pottery, one of Huntcliff calcite-gritted ware and two of other calcite-gritted ware. The primary fill began to accumulate a short time after the construction of the ditch, sometime in the Iron Age, with analysis of the animal bones at the very bottom of the deposit suggesting that vegetation grew before the accumulation of the sandy silt fill. It is interesting to note that the largest amount of cow bones was confined to the primary fill. This may be the deposition of occupational waste or may indicate the fort's use as an animal enclosure. The three sherds of late Romano-British calcite-gritted pottery in the same fill are likely to be intrusive. If the fabric of these sherds could be distinguished as the Iron Age counterpart to the late Roman ware, then they may be indicative of activity contemporary to the fort.

The secondary fill was very similar to the primary. It consisted of light grey-brown sandy silt with occasional pebbles. It had a moderate compaction and depths of 0.12m at the south

end, 0.34m in the centre, and 0.16m at the north end. The secondary fill contained the least amount of material culture, although there was only a small margin between the three layers. It contained thirty-five pieces of animal bone, the majority unidentifiable with one possible cow bone, and two sherds of calcite-gritted ware pottery. If consistent along the length of the ditch, this could indicate a reduction in or absence of activity in the immediate area. The two sherds of late Romano-British calcite-gritted wares are likely to be intrusive.

The tertiary fill was again broadly comparable to the secondary and primary, varying only in its colour. It consisted of dark grey-brown sandy silt with 5% gravel, and occasional medium cobbles. It had a moderate compaction with depths of 0.13m at the south end, 0.28m in the centre, and 0.17m at the north end. The fill contained nine pieces of worked flint (see 4.1 above), twelve animal bones (three sheep/goat, eight misc.), and twenty-two pottery sherds. The latter consisted of five Crambeck Reduced ware, one Holme-on-Spalding Moore reduced ware, three Huntcliff calcite-gritted ware, thirteen calcite-gritted ware and one miscellaneous reduced sherd. Other sections of the ditch were used as dumps for misfired or broken pottery in the late Roman period (see the reports by Ramm, Hayes and Dent in the Wilson edited 1989 volume, 37-40). It seems that, based on the pottery evidence, that the tertiary fill accumulated in the late Roman period.

There are many questions to be asked of this 'fort', perhaps the most pressing being its function and purpose. So far no evidence has been uncovered for contemporary structures within the enclosure to give an indication of its function. Chapter 6.1 discusses the varied uses of monuments such as this and it is impossible to state with any certainty which is most applicable in this instance. It is clear that whatever its function, great human effort and social organisation went into the construction of this monument and one has to wonder if this would have been undertaken simply to house livestock. It must also be considered whether the 'fort' had fallen out of use long before pottery production began or whether there was some

continuity of activity at the site; perhaps it served different purposes over time. What is clear is that the earthworks would have been an imposing feature in the Crambeck landscape, remaining so long after their primary use had ended.

Wappenbury in Warwickshire provides a comparison with a fort of similar size although somewhat squarer in shape than the irregular rectangle at Crambeck (Figure 45). Notably, Wappenbury also has a Romano-British pottery production centre immediately outside its eastern defences. Not only that, the industry is roughly contemporary with that at Crambeck. The comparisons between Wappenbury and Crambeck are discussed in greater detail in Chapter 7, with particular reference to their late Romano-British pottery industries.

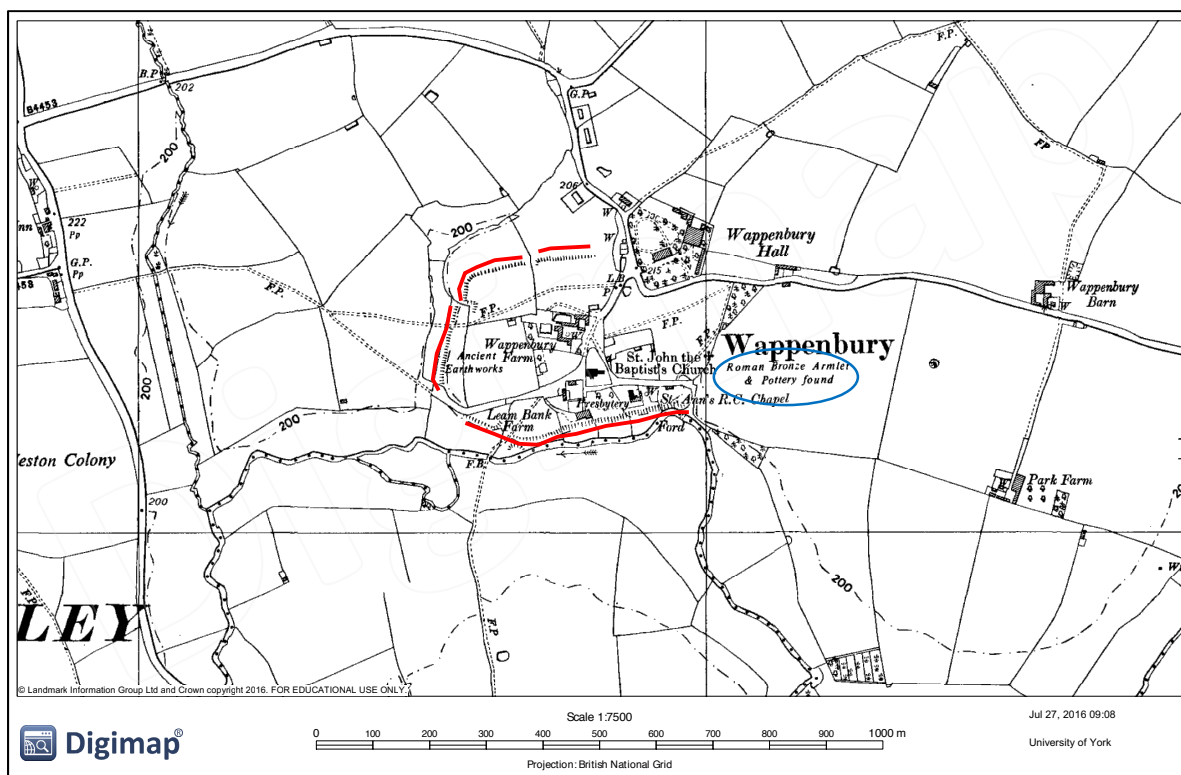


Figure 45 The plotted earthworks of the promontory fort at Wappenbury and the location of the Roman pottery production industry adjacent to the earthworks.

Evidence for Iron Age mortuary deposition has recently been identified in the Crambeck landscape with the discovery by the author of a chariot or cart burial in the Jamie's Craggs field in 2014²² (a detailed discussion of the feature can be found in the excavation report in Appendices 6 and 12). The magnetometry response for the grave was very similar, albeit slightly larger, than those proven to be kilns. The burial was located in the west of the field, inside the fort but very close to the northern ditch and banks (Figure 46). The grave cut was extremely ephemeral and could only be seen against the natural stone. The iron outer banding, parts of the nave hoop(s) and a lynch pin were found in the grave fill²³, although other finds from the topsoil/subsoil were typical of the general spread of background material across the site. Conservation of the outer iron tyre has revealed remnants of the wooden wheel which was made from ash.²⁴ Figure 47 shows a plan view of the grave and a remaining section of iron tyre. Figure 48 indicates the possible line of the grave cut.

The top of the outer iron tyre protruded into the subsoil and it was originally thought that the other cart fittings were also similarly high in the stratigraphic matrix. However, on identification of the feature and subsequent reflection, it is clear that these must have been in the fill of the grave and the subtle changes in the soil were too ephemeral to be seen at the time of excavation. Furthermore, the assemblage of finds from the top and subsoils did not indicate the presence of a chariot burial. This is encouraging as it suggests that the remainder of the burial is likely to be intact and undisturbed by agricultural activity. Certainly the

²² The initial identification was made by Dr. Mark Whyman (then of York Archaeological Trust) whilst visiting the excavation.

²³ The identification of these were made by Dr. Ian Stead on site at the time of discovery and later confirmed by conservation.

²⁴ Conservation and analysis undertaken by Margrethe Felter, York Archaeological Trust.

bottom of the grave is expected to be quite deep below the surface. Figure 49 and Figure 50 below show the lynch pin and part of the iron tyre.

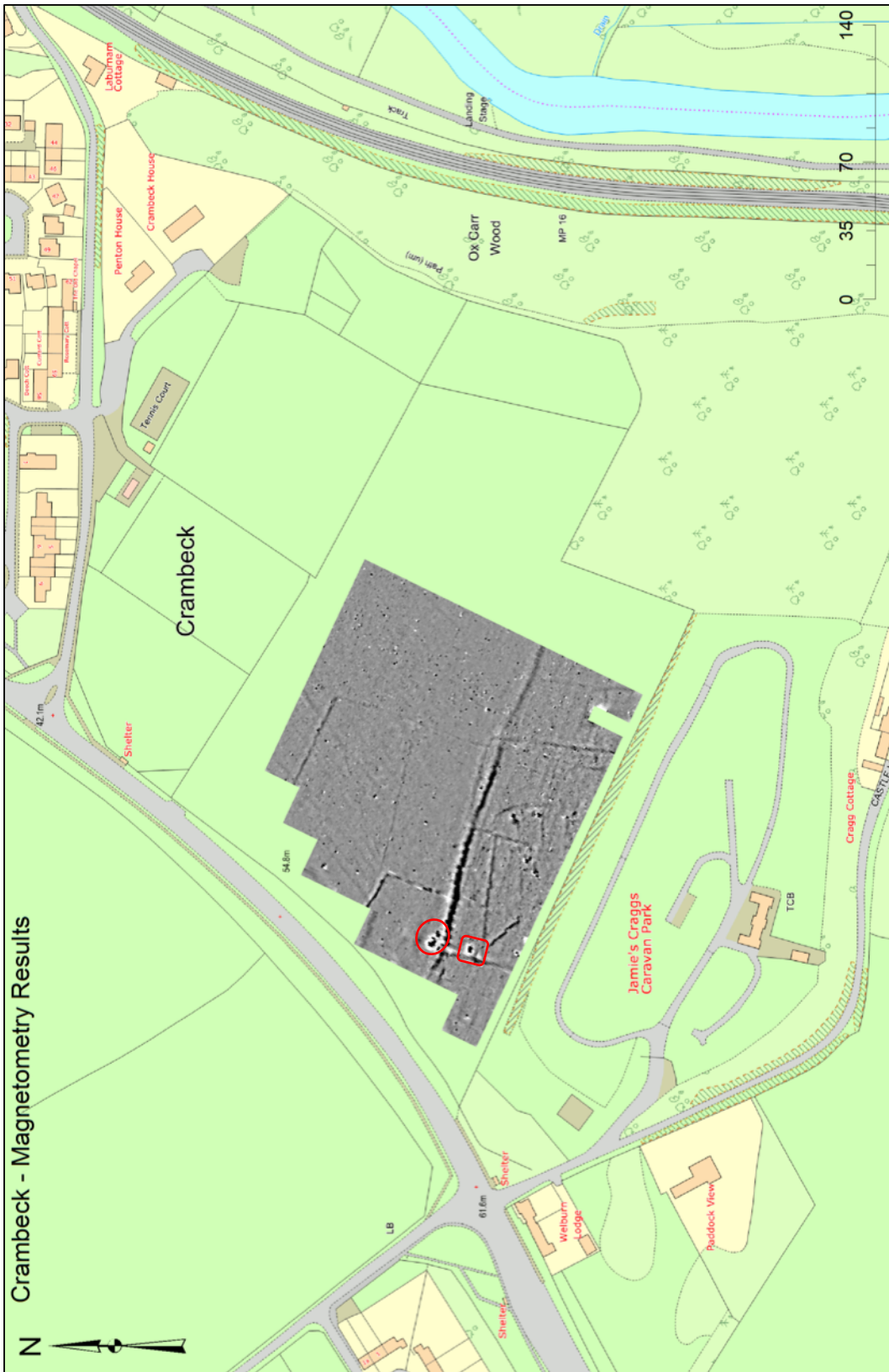


Figure 46 Map indicating the single known chariot burial on the magnetometry data and the two similar results to the north.



Figure 47 Plan view of the Iron Age grave. The remaining section of iron banding can be seen centre left and the stone visible to the right appears to be natural geology.



Figure 48 Showing the line of the possible grave cut.



Figure 49 The lynch pin before and after iron conservation.
Image credit: York Archaeological Trust.



Figure 50 Part of the iron tyre after iron conservation.
Image credit: York Archaeological Trust.

There are two magnetometry responses located a short distance from the identified chariot burial, on the northern side of the Iron Age ditch and banks (Figure 46). These are too similar in form to that of the identified grave and too large to indicate kilns. Figure 51 shows the location of the known chariot burial and these similar features to the north, in relation to the Bronze Age barrows, the possible henge, and the pottery activity in the landscape. The responses are close enough to form a figure of eight and it has been suggested that they could be two adjacent chariot burials²⁵, such as at Wetwang Slack (Dent 1985). The identification of these responses as a double chariot burial, or indeed as chariot burials at all, is purely conjecture and could only be confirmed through further investigation. Based on current evidence, it appears there are no more than three chariot burials at the Jamie's Craggs site.

The wheel of the identified burial was upright in the grave and it stands to reason its partner is the same, although whether niches were cut into the natural soil to accommodate them is unknown. The burial at Crambeck conforms to Cunliffe's (2005, 84) suggestion that chariot burials with upright wheels are found on the limestone hills of Yorkshire, and those with their carts dismantled being restricted to the chalk Wolds. Despite Crambeck's proximity to other known chariot burials, for example at Wetwang and Garton Slack, there was no prior indication that such a grave existed in this landscape. Chariot burials are usually associated with large numbers of square barrows and, despite the presence of several Bronze Age examples, a contemporary Iron Age cemetery does not exist at Crambeck. Indeed, the chariot burial is the only identified grave of Iron Age date in the landscape.

²⁵ This possibility was raised during a meeting to discuss the discovery with a panel of experts. This was held at the Dept. Archaeology, University of York 24th April 2014 and was attended by the author, Mr Steve Roskams (University of York), Dr. Keith Emerick (English Heritage as was), Dr. Pete Wilson (English Heritage as was), Dr. Ian Stead, Dr. Sonia O'Connor (University of Bradford), Dr. Melanie Giles (University of Manchester), Dr. Mark Whyman (then of York Archaeological Trust), Dr. Dominic Powlesland (Landscape Research Project), and Dr. Cath Neal (University of York).

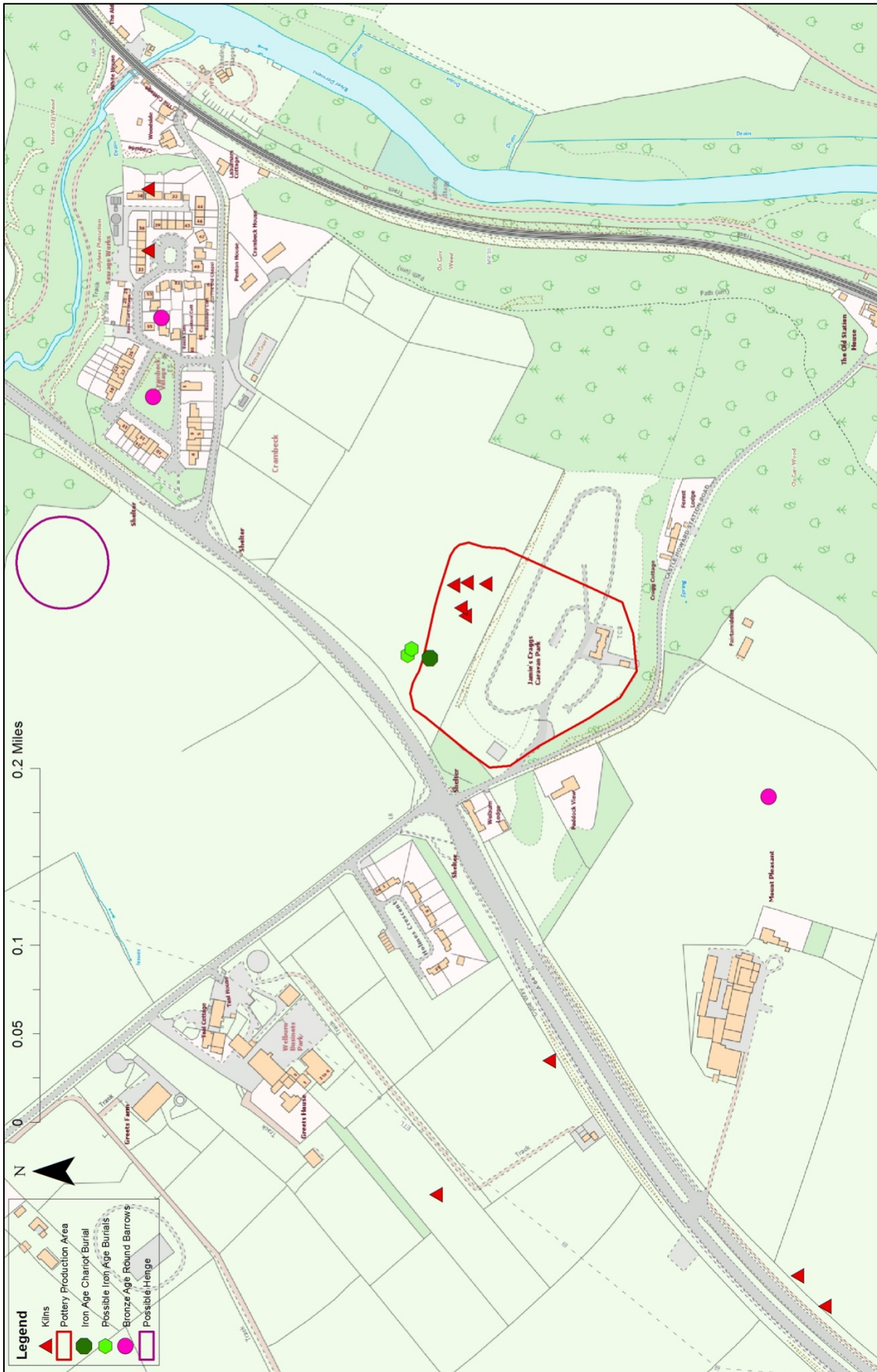


Figure 51 Map showing the location of the Iron Age chariot burial and the two similar responses a few metres to the north.

The dating of these unusual burials is far from clear. Stead (1965, 82–84) suggested the known chariot burials across Yorkshire could be split into two phases. Phase 1 covered those at Cowlam and dated from the fifth to fourth century BC. Those at Arras, Danes Graves and Eastburn were roughly contemporary, dating to the period of the second to first century BC. Stead acknowledged the certain occurrence of overlapping and gaps within this generalised chronology. He also acknowledged the cultural continuity between those at Cowlam and Arras although his dating creates a gap of at least two centuries between the two sites. Giles (2012, 202) suggests the chariot burials in Yorkshire began sometime in the fourth or third century BC and continued until the third or second century BC with a possible cluster around 200BC.

The discovery of an Iron Age chariot burial at Jamie's Craggs site was unexpected. There are twenty-one such burials in Britain, all but two of which are in Yorkshire (Giles 2012, 190). They are therefore unique to the Yorkshire region within Britain. The closest known examples to Crambeck are at Wetwang and Garton Slack, approximately 20 miles south-east (Figure 52).

The chariot burial at Crambeck resonates with that found at Ferry Fryston in terms of its location and features in the surrounding landscape. The Fryston chariot is discussed by Boyle et al (2007) and is an outlier to the concentration of such burials on the Wolds in East Yorkshire (Figure 52). Crambeck is less of an outlier but is certainly further west than the main concentration (Figure 52). It is also the closest intact (whole chariot with upright wheels usually on limestone hills, Stead 1979) burial to the concentration of dismantled burials (deconstructed chariot, not necessarily whole, wheels laid flat, usually found on the chalk Wolds, Stead 1979).

The Fryston burial, unlike others in East Yorkshire, was not part of an Iron Age cemetery and the surrounding area displayed a distinct absence of other contemporary graves. The chariot burial was deliberately sited away from other Iron Age settlements and activity, yet was placed in a prominent position in the landscape with geographical, cultural and historical significance. Boyle et al (2007, 157) suggest that this marginal part of the landscape was perhaps still remembered or revered even though it had not been used as a place of burial for around a thousand years. The burial at Crambeck does seem to be isolated with no other known contemporary burials in the landscape (there is a possibility of two other chariot burials a few metres to the north). There are several Bronze Age barrows in the landscape as well as late Romano-British cists (Figure 53). The other notable feature of the Fryston landscape is the presence of a nearby henge. Crambeck is similar with a circular feature to the west that seems likely to be a henge.

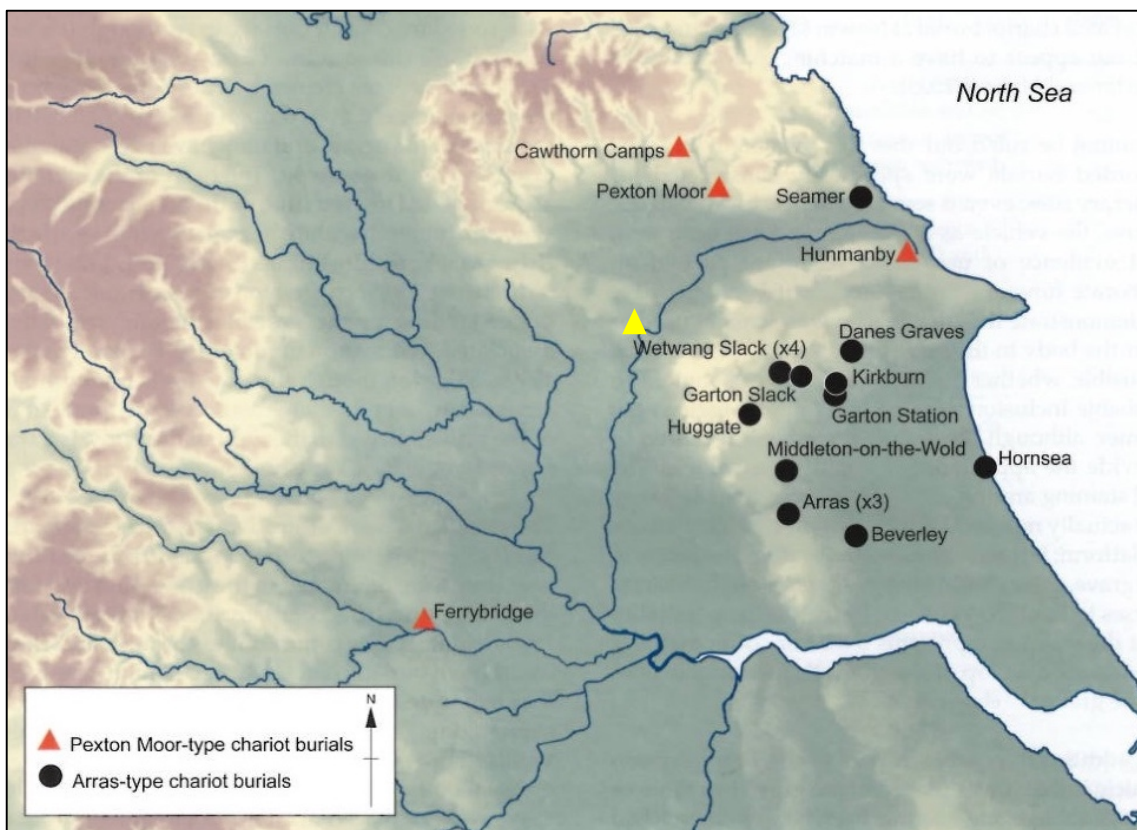


Figure 52 Map of chariot burials in Yorkshire (Boyle et al 2007, Fig. 107, 158). The approximate location of Crambeck is indicated by a yellow triangle (insertion author's own).

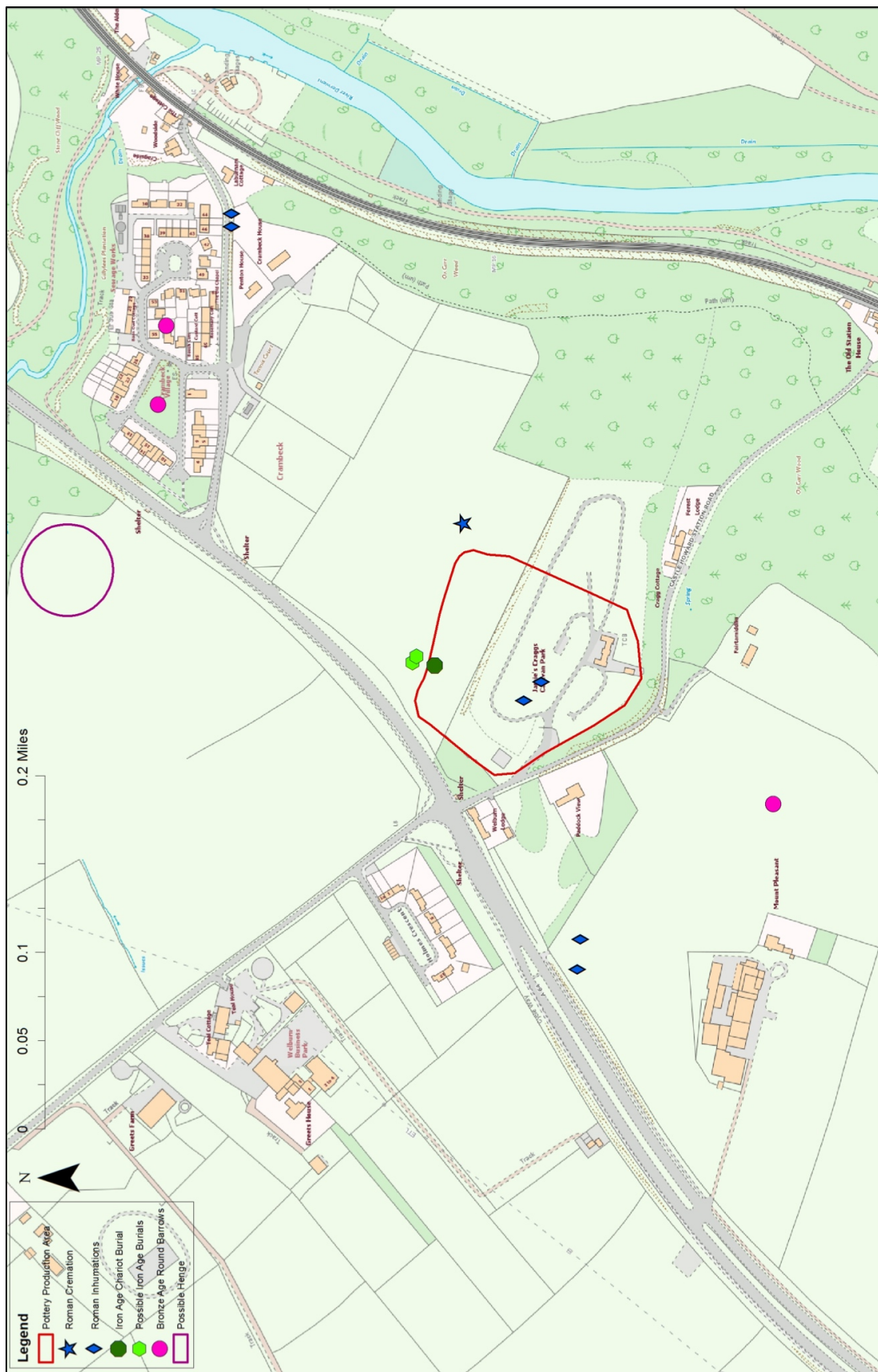


Figure 53 Burials in the Crambeck landscape.

Burial mounds tended to be situated in highly visible parts of the landscape. The Crambeck chariot burial is unusual in that it was placed just inside the northern boundary of the fort. The banks would have been large enough (based on those still visible in Ox Carr Wood) to block the view of the chariot burial mound from the track to the west and the river to the east, making its placement strange to say the least. It is reasonable to assume the use of the fort was not contemporary with the deposition of the burial(s), however, the relationship between the two features remains unclear.

Chariot burials are often found as part of the square barrow cemeteries characteristic of the Arras culture in Yorkshire. This is not the case with that at Crambeck. There are five Arras cemeteries identified in the Howardian Hills to the north and west of Crambeck, at Bonnygate, Hovingham, Caulkley's Bank, Cawton, and Slingsby (Carter 1995), although no chariot burials have as yet been identified at these sites. Cunliffe (2005, 84) notes that burials containing intact chariots with upright wheels seem to have been restricted to the limestone hills of Yorkshire and occur as isolated barrows, whereas the second type are found in the large cemeteries of the Wolds. The chariot burial at Crambeck appears to be of the intact type with the uncovered wheel standing upright and its location adheres to Cunliffe's geographical distinction of this type of chariot burial as an isolated barrow on limestone hills.

Half a mile south-west of the Iron Age fort at Mount Pleasant farm (Figure 54), there is evidence of a middle to late Iron Age settlement (HER #24845). This was excavated in 1998 ahead of a pipeline installation from Harton to Hildenley. Northern Archaeological Associates conducted the archaeological investigations and the following discussion of their findings is taken from the report (Abramson et al 2005). The features at Mount Pleasant are summarised as follows:

“Change is evident in the landscape around Mount Pleasant, where two distinct phases of pre-Roman activity were identified, but these seem to have fallen out of use with the arrival of the Romans and there is no clear evidence of activity until the development of the Crambeck ware industry in the late Roman period. However, an associated Iron Age trackway (which appears to have acted as a link to the line of the Roman road from York to Malton) continued in use in the Roman period, supplying an element of continuity to the landscape.” (Abramson et al 2005, 1)

A geophysical survey revealed a complex landscape containing multiple periods of activity. Identified features included a trackway running east-west, a ladder settlement to the north of this, and ridge and furrow. Figure 55 shows the combined excavation and geophysics plans of the Mount Pleasant site with the area covered in Figure 56 outlined in red, the latter depicts a detailed plan of some of the features excavated.



Figure 54 Location of the Mount Pleasant site.

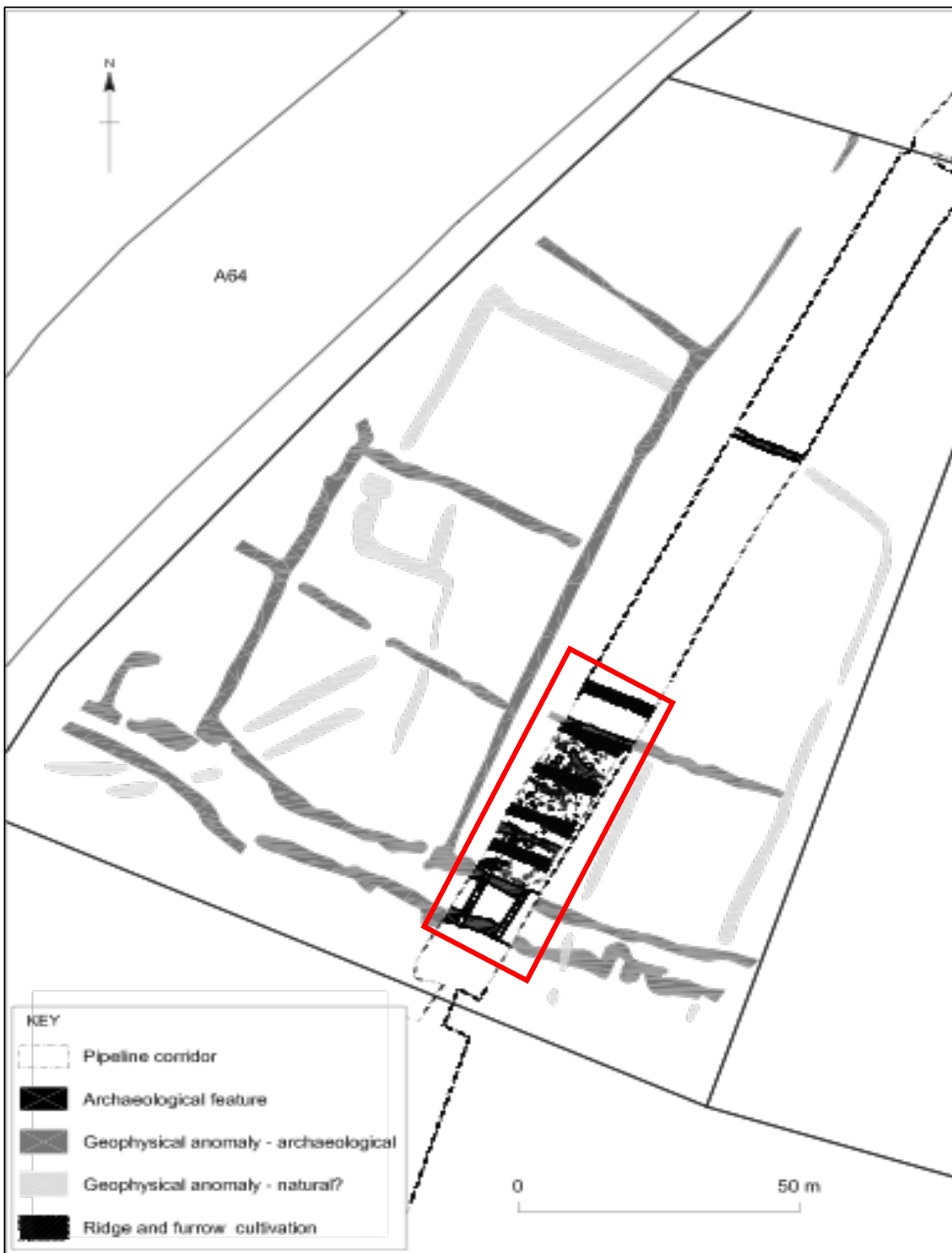


Figure 55 The excavation and geophysics data plan of the Mount Pleasant site (Abramson et al 2005, figure 2).



Figure 56 The roundhouses at Mount Pleasant in relation to the other features excavated (Abramson et al 2005, figure 4).

The Mount Pleasant site is thought to have had three phases of activity. Phase 1 includes the creation of the east-west trackway. This had a surface constructed of limestone chippings excavated from the ditches either side of the track. Parallel linear depressions on the surface were identified as wheel ruts. The boundary ditch to the north of the trackway was also established during this phase. The interior of this enclosure contained evidence of settlement activity including postholes, pits, and stakeholes. Three roundhouses were identified in the enclosure. Roundhouse A, being the biggest, was in the northern end of the enclosure with a diameter of c.7m. This encircled Roundhouse B which had a smaller diameter of c.4.5m. Roundhouse C lay in the southern half of the enclosure and was of similar size to B. Immediately to the south of this was a curved feature described as a possible palisade trench. These features can be seen in the plan included here as Figure 56.

The stratigraphic relationships between the roundhouses demonstrates multiple phases of construction and, given the number of other postholes on the site (some occurring in pairs, others in arcs), the presence of additional similar structures seems likely. However, at the time of excavation, the stratigraphic relationships between the majority of features were either non-existent or difficult to prove, therefore Abramson et al (2005) were unable to establish the specific sequence of construction. Pottery recovered from features attributed to Phase 1 included eighty-six sherds of calcite-gritted wares and nineteen of sandstone tempered wares. These dated from the mid to late Iron Age, with no evidence for pottery continuing here beyond the Roman conquest. The roundhouses and their relation to other features on the site are shown in Figure 56, with the northern boundary ditch of the enclosure represented by the linear at the top of the image.

Phase 2 was visible in the ditches either side of the trackway. These were either partially or wholly cleaned out during this phase and Romano-British pottery was recovered from these later deposits and similar fills in other features on the site (e.g. pits). All of sherds were either

Crambeck greyware or calcite-gritted wares, the latter thought by Abramson et al (2005) to be residual, although this is not necessarily the case. All the Crambeck sherds recovered dated to the mid fourth century. Based on this, Abramson et al surmised that there is no evidence for pottery deposition at Mount Pleasant in the late first to late third centuries and that the settlement there seems to have been abandoned before or around the conquest (Abramson et al 2005, 18).

Phase 3 consisted of ridge and furrow. This has been removed by modern cultivation with only the bottom half of the furrow remaining. There was also an oval pit containing two sheep burials that seem to be from the same phase. These features have been presumed to be medieval or post-medieval in date.

In their general discussion, Abramson et al (2005, 50) summarise the features at Mount Pleasant as follows. The truncation and negative nature of the features leaves much unknown about the nature of the pre-Roman settlement. There is clearly a sequence of structures to the north of a double ditched trackway that date to the Iron Age. These were of different sizes and styles of construction indicating multiple phases of activity throughout the Iron Age. The stratigraphy at the site is non-existent or unclear at best, making it difficult to determine the specific relationships between features. The trackway must have led to the nearby York to Malton road with the existence of the latter in the Iron Age being likely, although not proven, and the ultimate destination of the track is unclear. There is also the possibility it is a droveway rather than a trackway. The settlement activity at the site certainly ended by the third century AD although the trackway seems to have remained in use. There is a parallel example at Wharram Percy where the trackway seems to have been retained in use long after the primary function of the related enclosures (Atha & Roskams 2012). The pottery evidence suggests the Mount Pleasant site fell out of use sometime in the late first century BC or first century AD, whether this was as a consequence of the Roman invasion

is currently indeterminable. However, given that the trackway seems to have remained in use beyond the settlement, it appears that activity in the landscape did not entirely cease in the first to third centuries AD.

The same investigations conducted by NAA (also in Abramson et al 2005) revealed further evidence of Iron Age activity at a site near Hutton Hill to the north-east of Crambeck (PS #989242; HER #24846). A series of ditches were uncovered forming at least two enclosures. The ditches themselves originated in the Iron Age and underwent a phase of reuse during the late Roman period in relation to two Crambeck ware kilns (the latter are discussed in more detail in Chapter 5). This is a strikingly similar sequence to that at the Jamie's Craggs site, which also initially consisted of Iron Age features that were later reused during the production of late Romano-British pottery. At both Hutton Hill and Jamie's Craggs the late Romano-British potters made use of earlier pre-existing ditches, in some cases re-cutting them either shortly before or during the phase of pottery production.

Abramson et al (2005) suggested that the Hutton Hill site, similar to that at Mount Pleasant, saw a phase of activity in the late Iron Age or early Roman period, with an absence of settlement activity during the first to late second or early third centuries AD, at which point activity resumed with the production of Crambeck wares in the landscape. It is possible that the ditches at the Hutton Hill site continued to be utilised as boundaries in the 'quiet' period between the Iron Age use and late Roman Crambeck production, possibly for agricultural purposes, before being appropriated by the Romano-British potters. The evidence for the Iron Age period at Hutton Hill is minimal at best, with the kilns and their associated structures obscuring much of any remaining features. The Roman activity at this site is discussed in greater detail in Chapter 5.

There are no other recorded Iron Age features in the immediate landscape around Crambeck but this does not indicate that the area was otherwise devoid of activity in this period. This absence is more likely to be explained by the fact features have been destroyed or have yet to be discovered.

4.3 Summary

This chapter has established that the themes of activity present in prehistory continued throughout the Iron Age in the Crambeck landscape. It is possible that settlement activity was present within the promontory fort although other uses are possible, including animal management or special uses at specific times of year (e.g. for religious ceremonies or as a place of shelter in times of upheaval. See Cunliffe 2005. The varied uses of hillforts are discussed in Chapter 6). More concrete evidence for settlement exists at Mount Pleasant Farm less than a mile south of the fort. This site also has the only definite evidence for travel in the Iron Age in this landscape, in the form of a track/droeway that seems to head towards the main road constructed in the Roman period but is likely to have existed, at least in places, prior to this. There is further evidence for Iron Age settlement at Hutton Hill to the north of Crambeck. The two enclosures are perhaps all that remains, with any other features being destroyed by subsequent activity, such as the phase of late Roman pottery production. The ditches that form the enclosures seem to have originated in the Iron Age, although their function is not clear; they may have been constructed to define a settlement, as field boundaries, had a role in animal management, or perhaps were something else altogether.

Burial is evident in the Bronze and Iron Ages, although it is unlikely this represents a continuous practice across the periods. There are a small number of identified Bronze Age round barrows in the Crambeck landscape and at least one Iron Age chariot burial at Jamie's Craggs with the possibility of two other such burials a few metres to the north. The

relationship between the Iron Age burial(s) and the promontory fort is unclear and further work is required to understand this sequence of events. However, given the chariot burial(s) is likely to have been deposited under a square barrow, thus being deliberately made prominent in the landscape, it is plausible that the fort existed and fell out of use before the interment of the burial(s), otherwise its banks may have obstructed the view of the burial mound. This poses the interesting question of why at least one such burial was situated in a location where it would have been hidden by the remaining earthworks from the travel routes in the area. If the deposition of the burial(s) predates the fort, it must be questioned whether or not the mounds were visible when the defences were constructed, as it is unlikely that the builders would have chosen this location if it was held to be a special place or had been assigned particular meaning in the landscape. The ditch and banks are very close to the known chariot burial and run between it and the two proposed additional such burials, suggesting that at least one of them was not visible if indeed the construction of the fort postdates the interment(s).

Overall there is some continuity of activity in the landscape throughout prehistory and into the Iron Age in terms of settlement and travel, and presumably agriculture and animal management. The two settlement sites identified may have been new additions in the landscape or may represent a change in location of pre-existing communities. There is also a continued or perhaps re-use of the Crambeck landscape for burial. There were a number of Bronze Age barrows at the bottom of the hill and at least one Iron Age chariot burial on the crest at Jamie's Craggs. This use of the Crambeck landscape re-emerges in the late Roman period (see Chapter 5).

It may be that the continued or re-use of the Crambeck landscape as a special place, with the construction of barrows and henges, is linked to water. Giles (2012) discusses an Iron Age, and perhaps earlier, belief that water aided the dead on their journey to the afterlife

with many Bronze and Iron Age barrows being located next to or close by streams and rivers. Giles (2012) suggests a similar belief may have been attached to routeways. Crambeck is bounded to the north by the Cram Beck and to the east by the River Derwent and there was at least one trackway to the west and another to the south. This may explain the apparent significance attached to the Crambeck landscape.

If the date and identification of the circular feature as a henge is accepted, then it is conceivable that its earthworks stood throughout the Bronze Age when round barrows were inserted into the landscape, throughout the Iron Age as the promontory fort was built and the chariot burial(s) were interred, and throughout the Roman period into the fifth century as the production of pottery took over the landscape before several burials were deposited in the mid to late fourth century, many seemingly in relation to the Bronze Age barrows. Perhaps the earthworks continued to stand in the post-Roman period before gradually submitting to weathering and/or agricultural processes over the centuries. However, this theory must be recognised as such and further work undertaken to rule out the possibility this feature was caused by natural means.

This chapter has examined the evidence for the prehistoric and Iron Age periods in the Crambeck landscape, ultimately suggesting that there was a greater amount of activity during these periods in this area than previously recognised. This is certainly true of the Iron Age which saw the construction of a large promontory 'fort' as well as the insertion of at least one chariot burial into the landscape. The evidence has been taken further, to demonstrate the particular meaning assigned to the Crambeck landscape and its role as a special place, possibly beginning in the Neolithic with a henge, and extending through the Bronze Age with round barrow burials. It is seen again in the Iron Age with the 'fort' overlooking all of this and the deposition of at least one chariot burial. The monuments in

this landscape are typical of those found throughout these periods in the rest of Britain, with the exception of the unique Arras burials.

This is the background against which the evidence for Roman activity in the Crambeck landscape can be discussed in the following chapter.

Chapter 5 Discussion of the Crambeck Landscape in the Roman Period and into the Fifth Century

The previous chapter sought to provide prehistoric and Iron Age background to the Crambeck landscape. This chapter will demonstrate the scope of the Crambeck pottery industry, as it is currently understood, drawing on both past and current research.

The chapter will examine the specific evidence for Roman activity, including that of Romano-British pottery production, in the Crambeck landscape (5.1). An overview of the pottery production industry will follow (5.2). This will be the basis for the comparison of Crambeck to other major Romano-British pottery industries in Chapter 7. The chapter will end with a summary (5.3).

The complexity and varied nature of the landscape activity throughout the Roman period, both geographically and chronologically within Britain cannot be denied (this is discussed in greater detail in Chapter 6). The imposition of centralised Roman administration in Yorkshire did not have a consistent impact across the rural and developing urban areas. The initial impact would have been felt in the hinterlands of the forts established in the late first and second centuries, many of which developed associated civilian urban settlements. In the rural areas, little changed until the late second or third centuries with the greater adoption of Romanised styles of material culture and architecture (e.g. the establishment of villas). Many of the pre-existing pottery traditions continued to provide British styles of vessels, much as they had done prior to invasion, with Romano–British forms emerging in the third and fourth centuries as fashions changed. Many theories have been postured examining the effects of the removal of centralised Roman administration from Yorkshire and Britain. One such explanation suggests an apocalyptic end as a result of the deterioration of the economy and the cessation of the monetary supply (e.g. Evans 1985). This is not feasible as an explanation,

with a gradual transition into the post-Roman fifth century being far more likely based on current evidence (e.g. see Dark 2002; Gerrard 2013).

This section will discuss evidence relating to the phase of late Roman pottery production activity in the Crambeck landscape. It draws on the previous investigations of the industry discussed in Chapter 2 as well as the results of geophysical surveys and an excavation conducted by the author as part of this research. The section will first analyse the Crambeck ware pottery assemblage from the 2014 excavation and compare this to the assemblages recovered by Corder and others, with a focus on identifiable fabrics, forms and decoration. The other wares present in these assemblages will then be discussed and their presence considered, particularly those whose production pre-dates that of the Crambeck wares. The kilns located across the Crambeck landscape will be identified, combining previous work and those identified as a result of this research, and including the discovery of a furnace and the likely 'dump' areas established as a result of the 2014 excavation. The context of the wider landscape will then be considered including evidence for settlements, burials and routeways. Some necessary archival information is included throughout the section to provide context to the discussions and the full excavation report for 2014 can be found in the appendices.

One trench, aimed at an anomaly on the geophysics revealed only the underlying geology as the source for the results. As such it is not discussed in any detail in this chapter (see Appendix 6).

5.1 A Recently Recovered Pottery Assemblage from Jamie's Craggs, Crambeck: a Comparison with other known Assemblages.

The assemblage from 2014 was collected as part of a controlled excavation and provides information on related features as well as the wider landscape setting of the industry. It has

not been possible as a result of this research, to contribute to the understanding of kiln structures at Crambeck, nor were any unknown vessel forms identified.

There is some scope at Crambeck for petrological analysis. It is presumed that the clay came from the Oxford clay outcrop known to run along this part of the Howardian Hills, along the Cram Beck gorge. But the understanding of the industry would benefit from a landscape survey aimed at identifying remains of clay quarrying and from the petrological testing of the raw material against the Crambeck fabrics. Similar analysis needs to be undertaken to attempt to locate the woodland that must have been nearby and provided the fuel for the potting industry. Attempts to reconstruct the natural environment would aid this. No investigations to date have conclusively located either of these resources. The analysis of the Crambeck landscape to answer these questions has not been undertaken as part of this research due to time constraints although it is recognised that such information would improve the understanding of the industry.

The 2014 excavation recovered 1,613 sherds, 1,419 of which were Roman date, including sherds found in relation to a Crambeck kiln. Both Crambeck Parchment (CRA PA) and Reduced wares (CRA RE) were identified, with the latter being the most numerous (928 sherds compared to 106). None of the Crambeck Red ware (see Dore & Tomber 1998, 196–198) was identified in the excavated assemblage.

Crambeck Parchment ware was recovered from a number of contexts, mainly topsoil and subsoil. Sherds of CRA PA were present in the layers above the kiln. Here, CRA PA sherds numbered considerably less than those of CRA RE ware suggesting this particular kiln, at least in the later stages of its life, specialised in the production of the latter (Graph 1). CRA PA was absent from fills of the east–west ditch (Chapter 4) although it was present in the

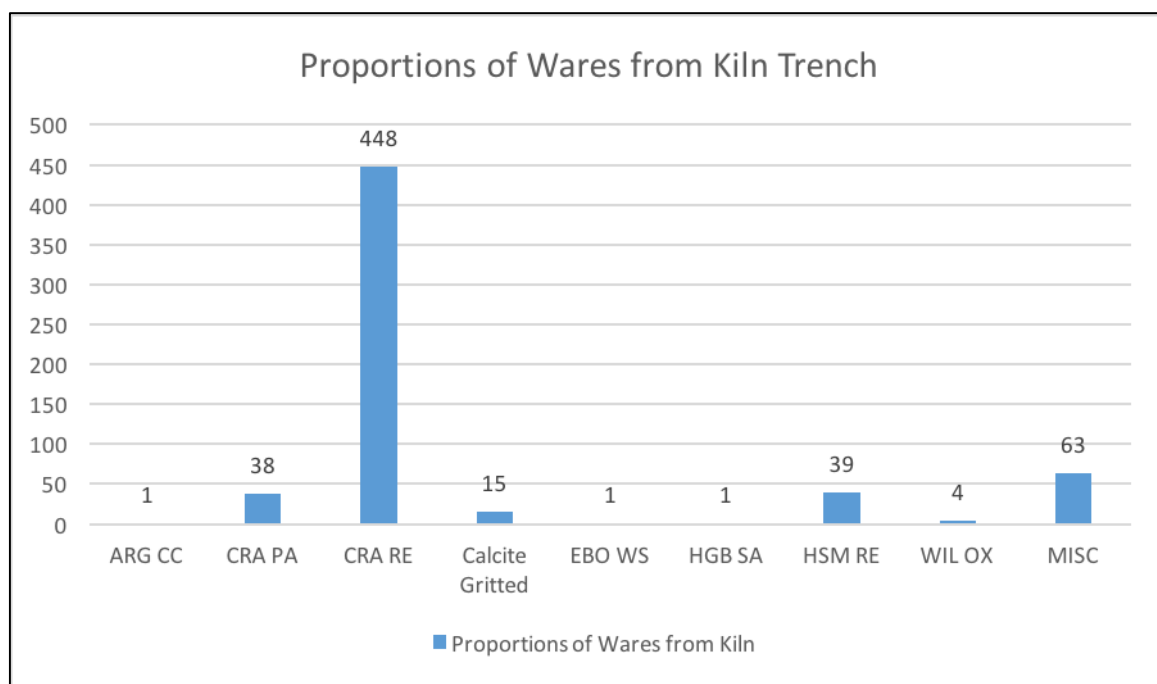
excavated section of topsoil/subsoil above this feature (Graph 2, Graph 3, Graph 4, and Graph 5).

Twenty-eight CRA PA sherds had an identifiable form; twenty-three were bowls of various types and three were mortaria. Ten sherds displayed decoration, nine bowls and one mortarium. The decoration consisted of either a single/double horizontal indented line on top of the flange or a single indented horizontal line below the rim. All the decorated sherds were recovered from topsoil/subsoil and none of the CRA PA sherds featured the characteristic red slipped decoration – this may have worn away post-deposition or simply may not have been present in this instance. In comparison, Corder's assemblage (1989a) had a considerably larger number of identified mortaria and sherds displaying the characteristic red slipped decorations of the industry. Aside from the absence of sherds decorated with the red slip, the 2014 assemblage of CRA PA was not unusual for the Crambeck industry.

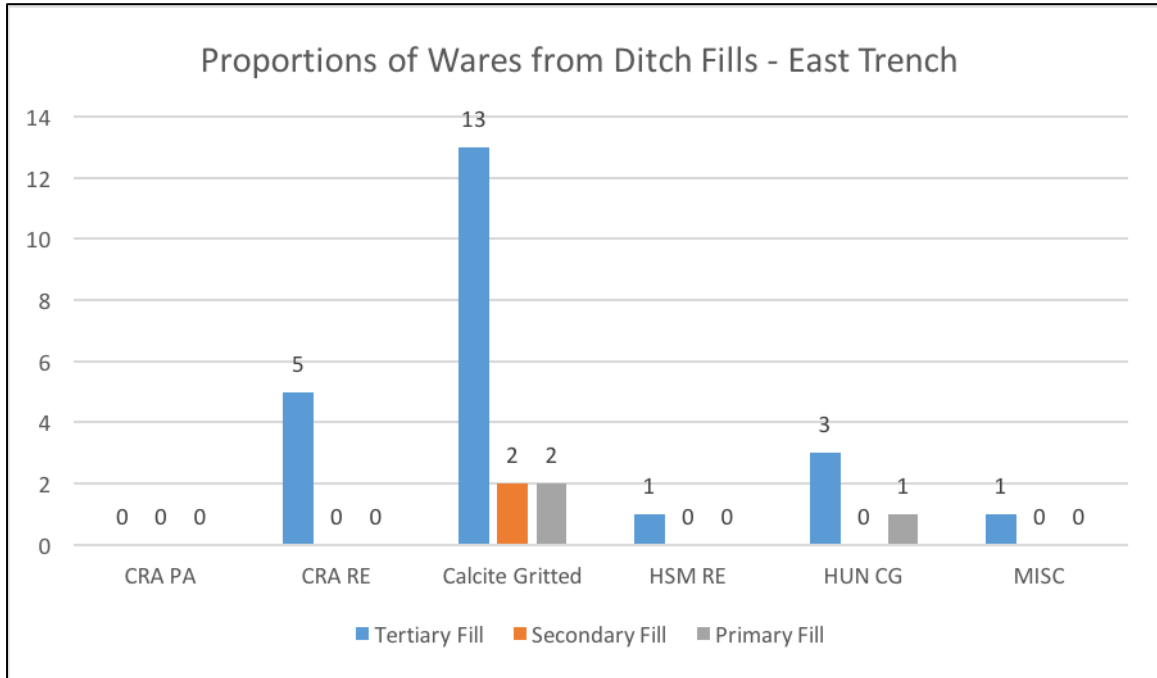
The majority of the CRA RE sherds came from the topsoil and subsoil. Some were present in the tertiary fill of the east-west Iron Age ditch (Chapter 4), suggesting this was still at least partially open in the Roman period and was utilised by the potters. The formation processes of the three fill of this ditch have been analysed in Chapter 4. Similarly, some were in the fill of a possible north-south aligned ditch. A handful of sherds were recovered from the northern and southern Iron Age banks. The presence of CRA RE and CRA PA in the material of the banks could suggest that they were reconstructed or extended in the late Roman period, perhaps to redefine the area(s) of pottery production. CRA RE sherds were also present in the collapse layer of the kiln (see discussion of kilns in the Crambeck landscape below).

Graphs 1-5 show the proportion of wares found in the kiln and ditch trenches. The westernmost ditch trench had over four times the number of sherds than the eastern trench

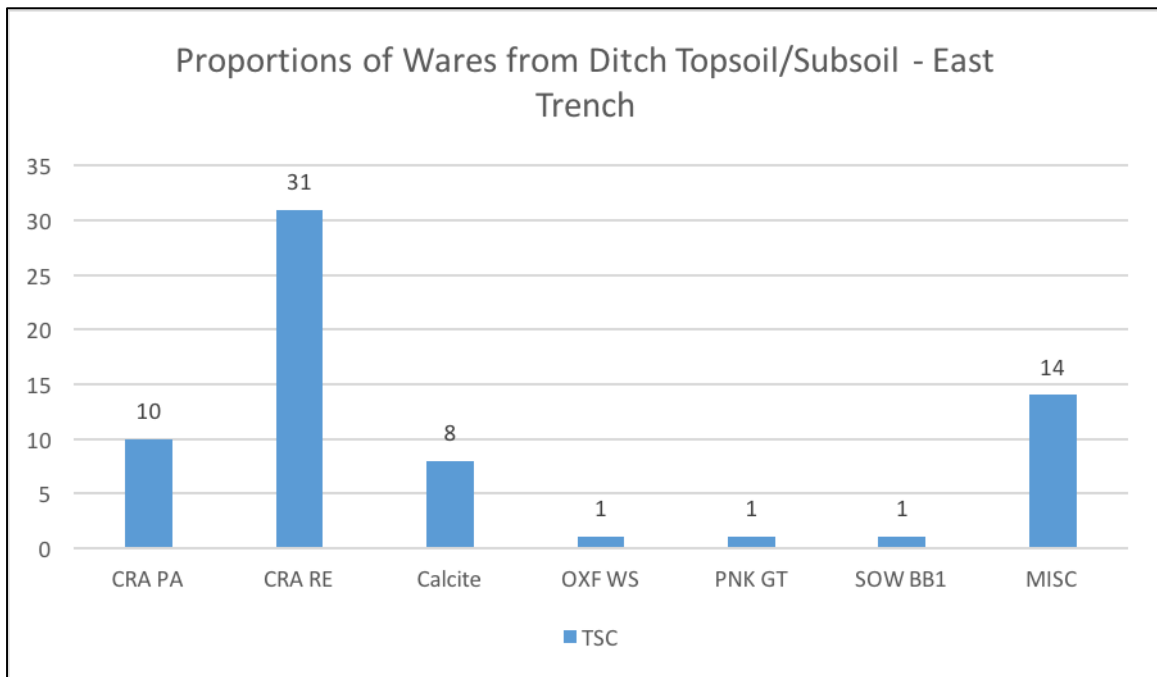
over the same feature. CRA RE was present in the west trench at almost five times the amount of that in the eastern. This supports the suggestion that areas in or close to the east–west ditch were used as dumps by the Crambeck potters. The large amount of CRA RE in the kiln related contexts, almost twelve times more than CRA PA, suggests that this kiln, at least in the later stages of its use, focused on the production of CRA RE (Graph 1). The furnace uncovered in 2014 is discussed in greater detail below. The trenches in relation to the geophysics results can be seen in Figure 29, Chapter 3.



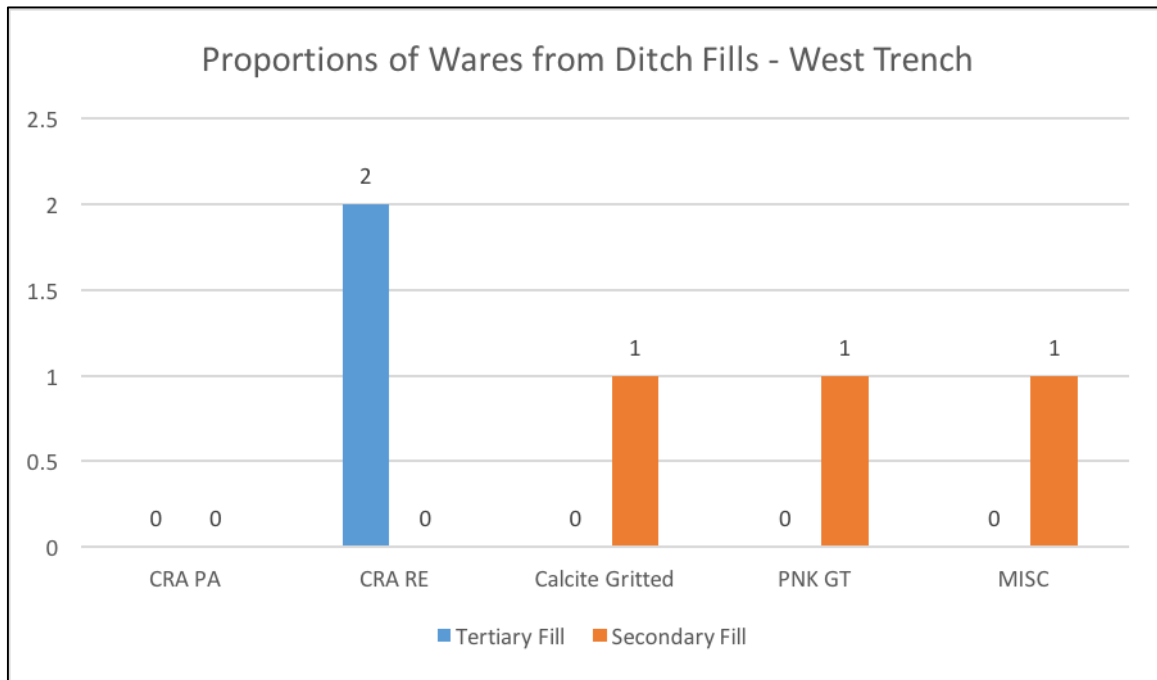
Graph 1 Proportions of wares from contexts related to the kiln.



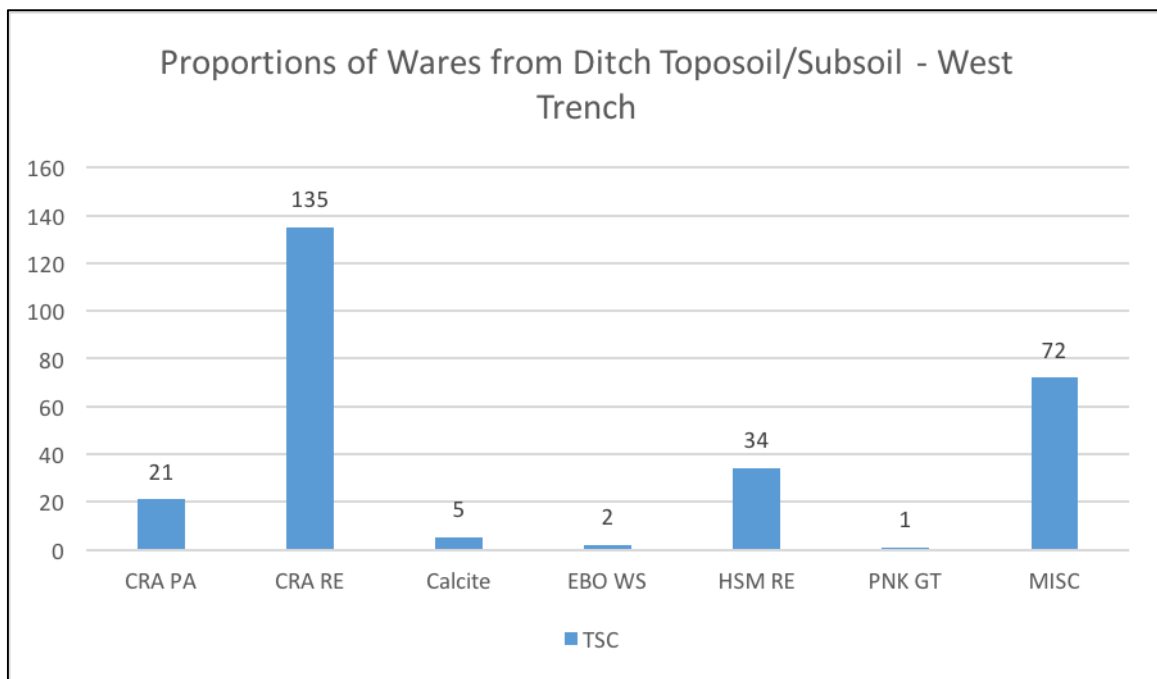
Graph 2 Proportions of wares from the three fills of the ditch, eastern trench.



Graph 3 Proportions of wares from topsoil/subsoil above the ditch, eastern trench.



Graph 4 Proportions of wares from the fills of the ditch, western trench. The two fills were not fully excavated as the primary fill was left in situ in this area.



Graph 5 Proportions of wares from topsoil/subsoil above the ditch, western trench.

Eighty-nine CRA RE sherds had an identifiable form. This included sixty bowls of various types, twenty-four mortaria (although some of these are more likely to be over-fired CRA PA), two handles and one each of a dish and jar along with one possible misfire. Fifty-five sherds displayed decoration: seventeen various bowls, three mortaria, one handle and thirty-three of unidentifiable form. The majority were from topsoil/subsoil although several were from the kiln collapse layer. Decoration included possible misfire and linear patterns of one, two or three indented horizontal lines. Some other linear decorations were also identified (Figure 57).

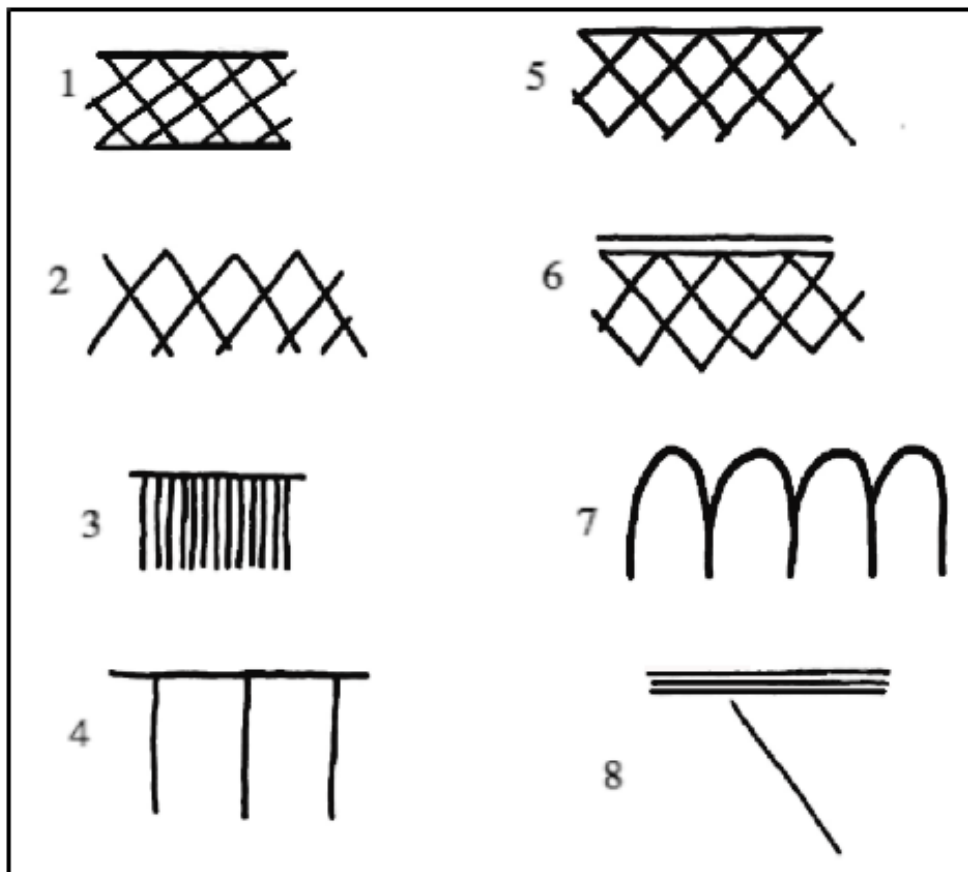


Figure 57 Assorted designs identified on sherds of Crambeck Reduced Ware

The assemblage of CRA RE did not deviate from that recovered by Corder (1989a). Perhaps the only notable factor being the higher number of mortaria in the CRA RE fabric, but this is likely to be the result of over-fired CRA PA. The decoration on the sherds from 1927 can be seen in Corder's illustrations (Corder 1989a) with a prevalence of decorated CRA PA. Decoration on CRA PA sherds from 2014 cannot be compared as none were found. The absence of decorated CRA PA is itself notable and may indicate that vessels in this ware were not produced in this area of the site. Designs on CRA RE sherds are broadly comparable consisting of incised lines of varying sorts. The assemblages from 1927 and 2014 are broadly similar and Table 5 below provides a comparison of forms present as a percentage of the whole assemblage.

Table 5 demonstrates that Corder's assemblage was more varied than that of 2014 in terms of vessel forms present. It shows that bowls and dishes were the most common over both assemblages. Mortaria in Crambeck fabrics were the second most common in Corder's assemblage but were outnumbered by calcite-gritted sherds in 2014. The 1920s assemblage also included some forms that were not identified in 2014. Overall the 2014 assemblage does not add anything new to the form typology established by Corder, except to suggest a greater presence of calcite-gritted ware on the site.

Combined Forms	1927 (Corder 1989a, 24) TSC unstated*	2014 TSC 1,613
Bowls / Dishes	63%	5.2%
Mortaria	15%	1.7%
Jars	9%	0.06%
Jugs / Flagons	1%	0%
Beakers	1%	0%
Painted Ware	2%	0%
Calcite-gritted ware	2%	3.84%

Table 5 Comparing the combined form typologies from 1927 and 2013.

*Corder's total sherd count must have been upwards of 2,500 as he states there were 1,500 rim sherds of a single form (straight sided bowls with a flange below the rim).

Only two of the reports regarding the ditch sections revealed by the quarry works in the 1960s included discussion of the pottery recovered and then only briefly. The first by Hayes (1989, 37-38), discusses the pottery recovered from what has been interpreted as a kiln furnace. Several hundred sherds were retrieved, the majority of them being of CRA PA and RE. Forms present included various bowls, dishes, beakers/jars, and mortaria. Only one hemispherical flanged bowl is listed as having any decoration which was a repeating cross pattern ('XX') in brick red paint. A rim of a calcite-gritted cooking pot is present as are two sherds of a "corky gritted ware" that Hayes suggests is Iron Age (see below in the Non-Crambeck Wares section).

Dent (1989, 39-40) recorded the recovery of several hundred sherds from a section of the quarry face. The silty layer in which they were found is thought by Dent to date to the period of pottery production and it is possible that the assemblage constituted a dump of broken or misfired pottery. Forms present were similar to those identified by Hayes (1989, 37-38), including various bowls, dishes, jar/olla, beakers, and mortaria. Decoration is not mentioned. One sherd of Nene Valley Colour Coated ware was present along with a sherd of "smooth red ware" and some sherds of calcite-gritted cooking pots (see further discussion below in the Non-Crambeck Wares section). Both reports from Dent and Hayes state that no sherds of Samian ware were present. Overall, these assemblages are very similar to those excavated in the 1920s and 2014.

Unfortunately, the pottery recovered from the fieldwalking exercise conducted in 1981 (Bartlett & Hinchliffe 1989) is not discussed in detail. Bartlett and Hinchliffe (1989) surmise that there was a concentration of sherds in the southern part of the field, within the ditched enclosure identified on the magnetometry survey. There is no pattern to this distribution, other than a decrease in sherd size and weight to the north. Bartlett and Hinchliffe suggest this is the result of agricultural ploughing breaking up and spreading the material across the

field. The largest concentrations of sherds occurred away from features identified as kilns, suggesting the presence of dumps or storage areas. Bartlett and Hinchliffe (1989) surmise that the proportions of the three main vessel forms are almost exactly the same as that from the 1920s. No mention of non-Crambeck wares is made in the report suggesting their absence from the assemblage. The 2014 assemblage does not contest the summaries made in these reports by Dent, Hayes and Bartlett and Hinchliffe. These assemblages taken together with those from the 1920s and 2014 present a fairly consistent picture of the pottery across the Jamie's Craggs site.

Non-Crambeck Wares at Jamie's Craggs, Crambeck

The presence of non-Crambeck wares in assemblages from the Jamie's Craggs site has already been mentioned. Each of these wares is given specific consideration in this section and discussion of their existence at Jamie's Craggs in relation to other industries is included in Chapter 7.

Corder, Dent, and Hayes identified four non-Crambeck wares. A sherd of a "smooth red ware" was identified in the ditch investigated by Dent (1989) and a "smooth blue grey ware" tumbler vessel was identified in Cist II excavated by Corder (1989a). No further information about these vessels is discussed apart from that the latter, which as far as Corder was able to establish, was unique in fabric and form. Hayes (1989) identified two handmade wares that he believed to date from the Iron Age; a "corky stony gritted ware" and a "corky gritted ware", both of which may be earlier versions of the calcite-gritted ware found on site. It is unclear what this ware could be and whether Hayes' dating is correct (this seems doubtful given the presence of late Romano-British calcite-gritted ware on site). If he is correct in his dating estimate, then these sherds are the only material culture with the potential to be contemporary with the promontory fort.

A reasonable number of calcite-gritted ware sherds were present in the 2014 assemblage, sixty-two in total, around half of which came from topsoil or subsoil. Some were in the three fills of the east-west Iron Age ditch, thirteen of eighteen being in the tertiary fill. Those in the primary and secondary fills are most likely to be intrusive (see Chapter 4 for discussion of the formation processes of these fills). A total of ten were in the two fills of the south-west – north-east ditch and nine were in the kiln collapse layer. Five sherds had identifiable form, all being various types of bowls. None of the sherds recovered in 2014 exhibited any form of decoration contrary to those in Corder's assemblage. Decoration was not present on any of the sherds. A calcite-gritted vessel was present in the late Roman cremation (see below, this section) and the lower half of a cooking pot in this ware was recovered from Corder's Cist II that dates to 330–420AD (see below, this Chapter).

Overall the calcite-gritted sherds were spread across the site, as also demonstrated by Corder's excavation. He estimated these accounted for 2% of the total sherds found (Corder 1989a). Corder noted that some of the calcite-gritted sherds showed signs of external sooting and that, given their size and shape, they were likely to be cooking pots used by the Crambeck potters. Several of the sherds exhibited indented decoration either in wavy lines or a chevron pattern. Calcite-gritted sherds were also present in Corder's 1936 excavation, although they are not discussed in detail, with Corder giving no additional information (1989b). Calcite-gritted ware has been discussed by several authors including: Hornsby & Stanton (1912); Evans 1985, 2000; Hayfield 1988; Monaghan 1997; and Whyman 2001, although little is understood about the specifics of this industry.

Both Hayes (1989) and Dent (1989) list calcite-gritted ware in the sections of a ditch visible in the quarry face. Hayes (1989, 38) suggests that the ware was so widespread across Yorkshire that it must have been made in many localities. The calcite-gritted fabric is known

to have been produced in a similar time period to Crambeck and it has been suggested²⁶ that the ware may have been produced alongside those of the Crambeck industry on the same site, although this is unlikely to have been in the same kilns at the same time.

Samian ware is also present at Jamie's Craggs with sherds identified in the 1920s and 2014 assemblages. For fabric descriptions of the Samian wares present see Dore and Tomber 1997. A single sherd of Heiligenberg Samian was present in the 2014 assemblage, dating to c101-c250AD. This body sherd was from a slant-sided bowl with a single indented horizontal line on the exterior and was found in the subsoil above the identified kiln. Samian sherds were more numerous in Corder's 1920s assemblage (1989a). This included two Drag. 37 type bowls, one featuring Venus in a cable and leaf design, the other displaying a stag's head. The former is thought to be the work of the potter IVLLINVS from Lezoux who was active between c120 and c130AD (Corder 1989a). A sherd of a Drag. 33 cup featured the stamp of MACCALUSF, a known Gaulish potter who was active in a Hadrianic/Antonine period c117-c161AD (Corder 1989a). There were also three rim fragments and a body sherd of a Drag. 31 vessel, as well as several other small sherds of undecorated Samian that were too small for form to be identified. Hayes and Dent (both 1989) emphasised the absence of Samian ware in the excavated sections of the ditches visible in the quarry face.

These sherds of Samian vessels are the earliest dated pottery from Jamie's Craggs and their presence on a late third to fourth century site must be explained. Samian production in Gaul ceased in the mid third century (Webster 1996), therefore the pieces from Jamie's Craggs pre-date the acknowledged start of Crambeck production. There is enough evidence, of which the Samian sherds are a part, to strongly suggest an earlier phase of activity at the Jamie's Craggs production site, although its precise form and location remains unknown.

²⁶ Suggestion made by Dr. Mark Whyman in conversation February 2014.

There are other explanations for the presence of this early pottery: perhaps the Samian vessels were treasured family heirlooms, handed down through the generations, or perhaps they were found close to the site and kept for their ornateness. Current evidence is not sufficient to provide a reasonable explanation for the presence of Samian ware at Jamie's Craggs. Only the discovery of a Samian sherd or vessel in a sealed context dateable to the first or second centuries could go some way to providing an answer.

The 2014 excavation identified two other wares imported from the continent: Central Gaulish Black Slipped (c101 – c300 AD) and Argonne Colour Coated (c210 – 300 AD) (for fabric descriptions see Dore & Tomber 1997). One sherd of each was identified, both being recovered from subsoil. Neither displayed decoration although the Argonne sherd is part of a bag shaped beaker. The latter part of the production of these wares did overlap with the acknowledged start of Crambeck production and it may be that the vessels these sherds represent were brought to site by some of Crambeck's first potters. However, the fact that they may belong to an earlier phase of occupation must be considered, and is perhaps a more conceivable explanation for their presence. As with the Samian sherds, only the discovery of these continental wares in a sealed context securely dated to the early part of their production phase would provide additional information, explaining their presence on this late Roman site.

Seven British wares were found, the majority from the 2014 excavation (for fabric descriptions see Dore & Tomber 1997). Five sherds of Eboracum White Slipped ware (Monaghan 1997) were identified, one in the kiln collapse layer, the others in subsoil. None displayed identifiable form or decoration. This ware dates to c100 – c200AD and was produced in and around York. Two sherds of South-West Dorset Black Burnished ware were found in subsoil, neither displaying form or decoration. This dates from the mid second century to the fourth and its presence at the Crambeck site is unusual although not entirely

out of the ordinary, given its distribution was densest in the south of the country and had retracted to the south-west by the late Roman period.

Lower Nene Valley Colour Coated ware (Uopex 2008) and Oxfordshire White Slipped ware (Young 1977) were also identified, both dating to c100 – c410 AD (for fabric descriptions see Dore & Tomber 1997). One sherd of each was recovered from subsoil in 2014. The sherd of Nene Valley ware was a curved-sided bowl with a single horizontal indented line on its exterior; the sherd of Oxfordshire ware was a flagon with no visible decoration. Two further sherds of Nene Valley ware were identified in the ditch section excavated by Hayes (1989) and a third in the section investigated by Dent (1989) was identified as part of a small thumb pressed beaker in this ware. Given the extended production dates of these wares it is most likely that the vessels these sherds represent belonged to the potters during the Crambeck production period, although precise dating would require sherds to be identified from securely dateable contexts. It is also possible that they belong to an earlier phase of occupation at the site, perhaps coinciding with Samian, Central Gaulish Black Slipped, and Argonne Colour Coated sherds.

Seven sherds of Pink Grog Tempered ware (Dore & Tomber 1997) were identified in 2014 from the primary fill of the south-west – north-east ditch and the secondary fill of the east-west ditch. None displayed form or decoration. This ware has a general date covering the whole period of Roman administration and was used to produce functional vessels. It is therefore probable that the sherds of this ware represent vessels used by the Crambeck potters. Four sherds of Wilderspool Oxidised ware (Dore & Tomber 1997) were also recovered, one from the kiln collapse, the others from subsoil. One sherd was part of a curved sided bowl and none displayed decoration. This ware also had a broad Roman date.

Lastly, a substantial number of Holme-on-Spalding Moor Reduced ware sherds were recovered from the 2014 excavation, a total of a hundred. Twenty-nine came from topsoil/subsoil across the site. Thirty-two were from the subsoil above the east–west ditch and banks constructed in the Iron Age, with a further thirty-nine from the topsoil/subsoil above the kiln. One was identified in the uppermost fill of the Iron Age fort. Of the forms identifiable, thirteen were bowls of varying sort and one a narrow-mother jar. Three sherds (two bowls and one jar) displayed decoration in the form of a single indented horizontal line on their exterior.

At least two of the production sites at Holme-on-Spalding Moor are known to have been previously occupied by Iron Age settlements that, in the case of Hasholme Hall continued into the Roman period; the other, Bursea House, had Dragonby type pottery present (Halkon 2013, 191–192). The version of Holme–on–Spalding Moor ware present on the Crambeck site is thought to be contemporary with the production of that ware (Halkon 2013, 190-193). The presence of a very similar ware in forms comparable to Crambeck products at the Jamie’s Craggs site is interesting. It suggests that the potters did not produce all the vessels they required for themselves, sourcing some from other industries such as Holme. It could also suggest an origin for at least some of the potters that established the Crambeck industry (see Chapter 7). Halkon has undertaken extensive work on this industry and discusses many of the issues relating to it (for example, 1983; 1987; 1989; 1992; 1999; 2002).

The presence of these non-Crambeck wares on the site is of great interest. The sherds predating the start of Crambeck production may have been heirloom items but are more likely to be the only known evidence for an earlier phase of Roman occupation at the Jamie’s Craggs site. The existence of an earlier phase of Roman occupation at Jamie’s Craggs will remain uncertain without further investigation of the landscape. Those wares that are, or could be, contemporary with Crambeck production were most likely to have been utilised

by the potters themselves, as is suggested with Holme-on-Spalding Moor. This raises the interesting suggestion that the Crambeck potters did not make all the vessels they themselves required for their own needs on site, instead they appear to have imported some of them from elsewhere in Yorkshire and Britain. Perhaps these vessels were representative of success, or were displayed to appreciate their aesthetics.

Summary of the Crambeck Industry

It would be prudent here to summarise the Crambeck production industry. Evans (1985) and Swan (2002) provide discussion that broadly agree with one another and the following is summarised from them. It should be noted that Swan's 2002 discussion does disagree with some of the points made in her 1984 book *Pottery Kilns of Roman Britain*, specifically regarding the origins of the industry.

Production began at the end of the third century, sometime around 270AD and perhaps initially focused on greyware production, with finewares and mortaria production developing later. The forms of Crambeck vessels give little away as to its origins and demonstrate similarities with several industries such as Norton (e.g. Hayes & Whitley 1950), Nene Valley (e.g. Hartley 1960), New Forest (e.g. Fulford 1975) and Oxfordshire (e.g. Young 1977). Evans refuted Swan's 1984 claim that it seemed likely the Crambeck industry had been established by migrant potters from the Norton industry. Swan herself made a similar refute in 2002, agreeing with Evans that the forms common between Crambeck and Norton could be found all over the Humber basin and East Yorkshire as well as elsewhere in the province. They suggest instead that the Crambeck industry seems to have had closer ties to the Holme-on-Spalding Moor industry although both agree that the varied nature of the industry makes it difficult to establish one industry's influence as greater than the others. It is the finewares of the Crambeck industry that bear the closest similarities to the Nene

Valley, New Forest and Oxfordshire industries but it tends to be the earlier minor Crambeck forms that display these similarities. The major later Crambeck types are seemingly unique to the industry having lost much of their earlier similarities. Evans (1985) surmises that there must have been some contact between Crambeck and the southern fineware industries as there are parallels between Crambeck forms and types not found in the north. Evans also proposes that products of the southern industries circulated in the north, for example the Nene Valley mortaria, could easily have been copied by the Crambeck potters in the early days of the industry when experiment with new forms would have been more likely than when the industry had established itself.

Crambeck distribution (Figure 58) is somewhat of an enigma. Its wares were distributed across the North of England to both the east and the west although its consumption fell off to the South perhaps in connection with the boundary between *Britannia Secunda* and the rest of the province. Its principal market seems to have been the north-east of England centred on the civilian settlement at Norton, although it does not seem to have posed much competition to this industry at first. In the early fourth century Crambeck did suffer from competition posed by the Holme industry as the latter underwent expansion, although by the middle of the century this was no longer the case. The finewares of most industries fall off quicker and have a smaller distribution than their greywares, such as at Nene Valley, New Forest and Oxfordshire. Crambeck distribution contrasts this norm and it is remarkable that the Crambeck finewares were never more than a minor part of the industry's output. Swan gives a summary of the Crambeck production up to its peak in the mid to late fourth century:

“There seems to have been a gradual increase in production and distribution, until by the 340s, these potteries became a dominant force in ceramic supplies to Yorkshire and the northern frontier, eventually wiping out all competition from the East Yorkshire greyware industries (such as the Holme-on-Spalding Moor grouping), the Dales ware cooking-jars, the

Cantley mortaria, as well as the kitchen wares from the Dorset BBI workshops.” (Swan 2002, 72)

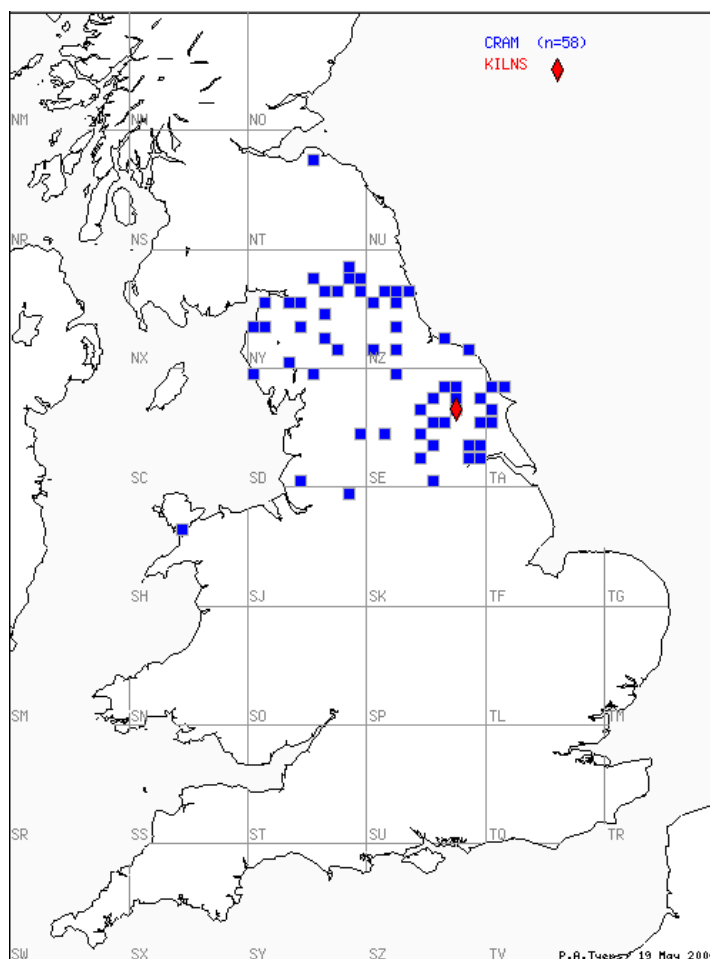


Figure 58 Distribution of Crambeck wares (potsherd.net).

How can the exceedingly successful and consistently widespread distribution of the Crambeck products be explained? There are two competing explanations: that it resulted from free market trading, or there was some sort of military contract in existence. Evans argues that the free market explanation must be disregarded as it would have produced a distribution pattern more in keeping with the other major late Romano-British production centres. Crambeck seems to have been ideally located to facilitate distribution across East Yorkshire but also outside of it, being close to several major transport and trade routes. Evans suggests that the Crambeck distribution does seem to be unique amongst the large scale late

Romano-British production sites – both Oxfordshire and New Forest show regular fall off in distribution with distance (Young 1977; Fulford 1975 respectively). Of the two explanations given, Evans supports the military contract as the stronger of the two. If such things existed Crambeck would have been ideally placed to be a prime supplier to the military. Evidence for such a contract is seen in distributional factors. For example, in the north-west Crambeck ware is only found in towns in late fourth century deposits, and all of these occupation sites had close military connections. Evans concluded that there must therefore have been some sort of military contract or change in the military supply system instigated around 370AD that was responsible for the sudden change in pottery supply and the rise of the Crambeck and calcite-gritted industries. However, this does not account for the success of the industry in the early and mid-fourth century.

Swan (2002) specified how the Crambeck and calcite-gritted industries of Yorkshire increasingly excluded all competing products from Northern Britain and reached into North Wales from the mid fourth century until their demise. Here Swan suggests the demise must have occurred in the early fifth century coinciding with the end of coinage circulation. Swan disagreed with Evans about the likelihood of a military contract suggesting instead that the success of the Crambeck industry was possibly the result of changes to “official policy guidelines” (Swan 2002, 73) in the military. The demise of the industry is unlikely to have been as a result of the cessation of coinage in the region. It is perhaps better viewed as a result of differing tastes and cultural influences as what it meant to live a ‘Roman lifestyle’ changed. The influence from the Mediterranean diminished over the fifth century and that of the Saxon cultures increased (and can be seen as early as the beginning of the fourth century), ultimately leading to the development of an Anglo-Saxon culture in Britain.

Swan ends with a view on the role of the native potters of Yorkshire stating that:

“At the start of the Roman occupation, the native pottery products of Yorkshire could barely make a contribution to military supply; by the twilight of Roman Britain, the whole of the North was dependent on them!”
(Swan 2002, 73)

This neatly demonstrates the influence of the Roman administration on the development of pottery production as a craft in Britain. It was a result of the particular tastes and needs that were attached to the notion of what it meant to be a Roman citizen and to live a ‘Roman life’ in the province. The pottery industries and their products changed, emerged to dominance, and suffered their demise in connection with the changing tastes and fashions of the time. The ultimate demise of the Romano-British pottery production in the country on the scale seen at its peak was no different, tastes and fashions changed to no longer require such specialist products.

5.2 Kilns in the Crambeck Landscape Reconsidered

There are a number of known Crambeck kilns in the landscape (Figure 60). The largest concentration is within the Iron Age promontory fort at Jamie’s Craggs. Two pairs (A/B and C/D) were excavated here by Corder (1989a). These both shared a stoke hole, a feature which seems to be a common character of Crambeck kilns. Five more have been identified on the 2014 magnetometry results (Figure 59), three of which were also identified on the 1981 magnetometry survey (Bartlett & Hinchliffe 1989). These are likely to be pairs of furnaces arranged around common stoke holes, following the typical pattern of Crambeck kilns.

The 2014 excavation aimed to establish the nature of the features identified as kilns on the geophysics results. The excavation conclusively established that not all of the responses are kilns, with at least one being an Iron Age chariot burial (see Chapter 4 for discussion of this feature). A second, smaller, response was investigated and proven to be the furnace of a Crambeck ware kiln. The testing of these responses has allowed the argument to be made

suggesting that it is in fact the only smaller responses on the geophysics that indicate kilns with at least one of the larger being a grave. This discovery is examined in some detail here as it has important implications for the identification of other possible Crambeck kiln sites across the landscape in the future. The full discussion can be found in the excavation report in Appendix 6.

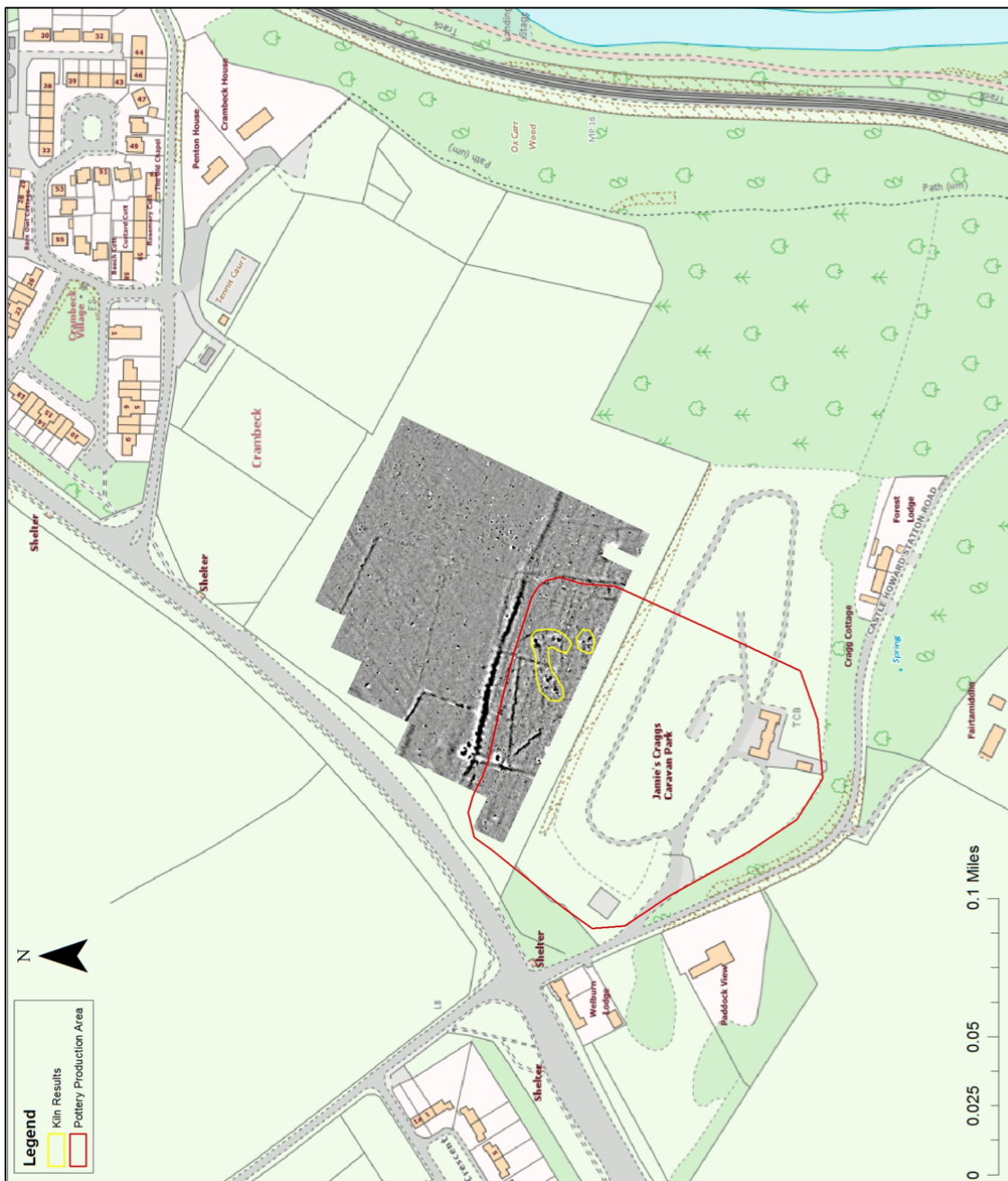


Figure 59 Responses on the magnetometry results identified as kilns.

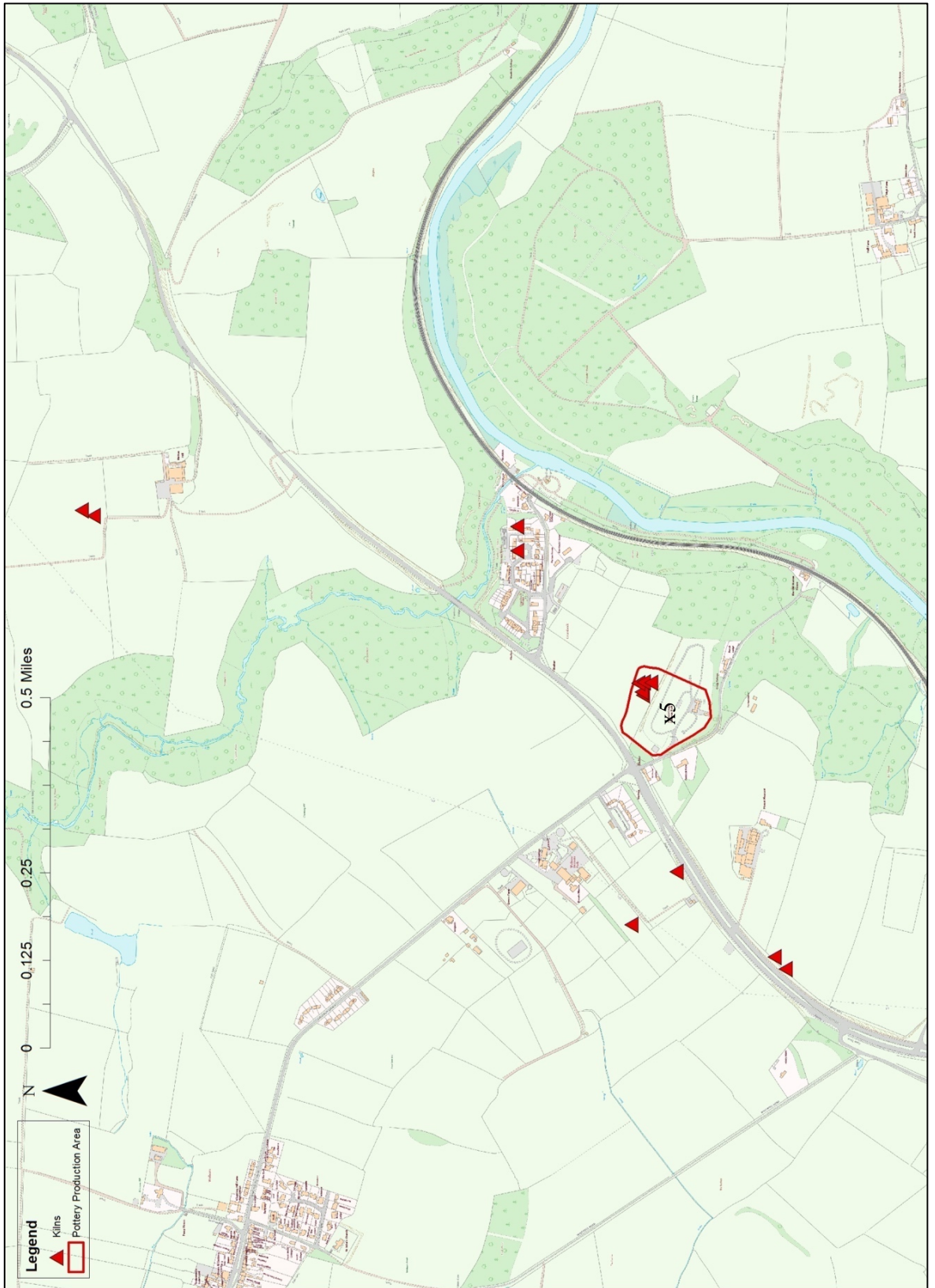


Figure 60 Approximate location of kilns in the Crambeck landscape.

Part of a furnace and its external packing were exposed, the top of which was within 30-40cm of the surface. The kiln was in a reasonable state of preservation, as far as could be established without excavating it in its entirety, with only the very top of the dome having collapsed into its interior. There was no other visible damage to the structure suggesting it had remained untouched by ploughing, although agricultural activities may have caused the dome to collapse. The flue was not located, and was presumed to exit out of the north edge of the trench. The second furnace, assuming this kiln followed to standard paired pattern found at Crambeck, was thought to be close by but was not located. Figure 61 and Figure 62 show the kiln in situ with the collapse, furnace wall, and external packing visible. Figure 63 is a plan of the kiln and its component features.



Figure 61 View of the kiln facing south-west, showing the internal collapse, furnace wall and external packing.



Figure 62 View of the kiln facing north-east, showing external packing, furnace wall and internal collapse.

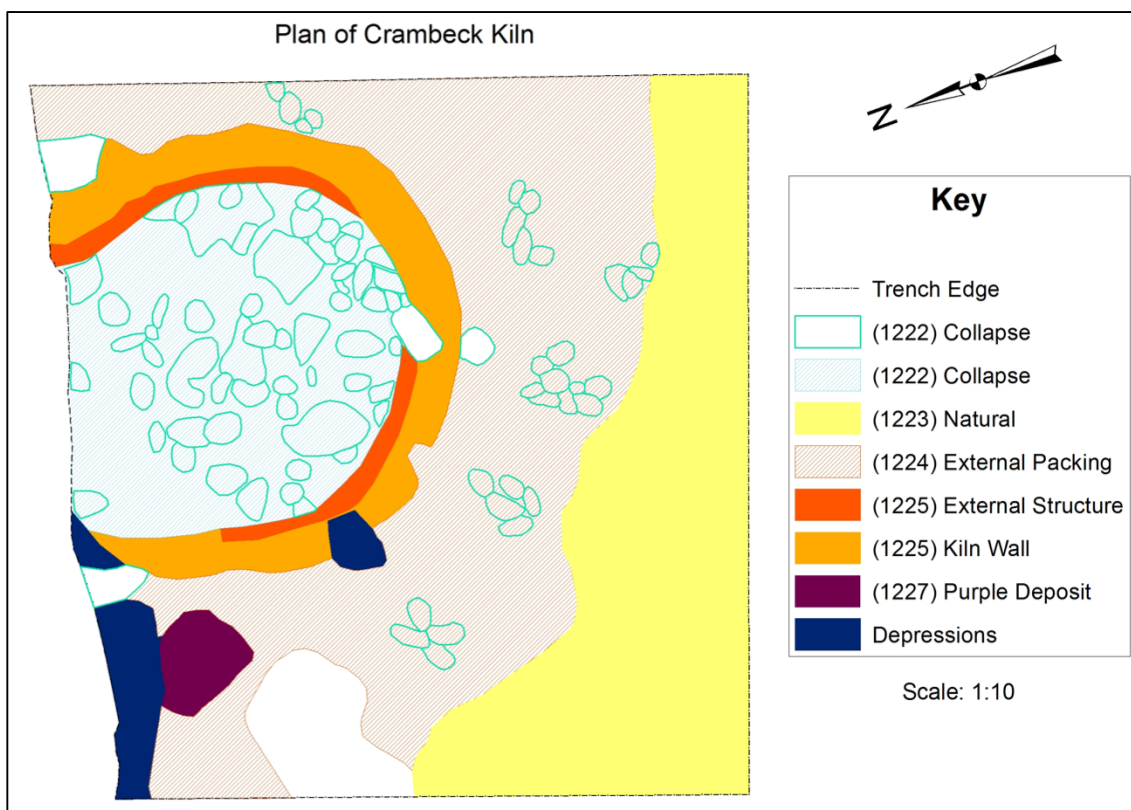


Figure 63 Plan of the kiln and its component parts.

As stated previously, the aim of testing a ‘kiln’ response was not to fully excavate a furnace, rather to establish the nature of the feature and its state of preservation. As such only topsoil and subsoil were fully excavated. The table below lists the quantities of material culture found in this process, with any finds listed from the collapse layer having been removed during cleaning as it was not fully excavated (Table 6). The pottery is discussed separately below.

As Table 6 demonstrates, the kiln context produced a large amount of ceramic material. This is unfired or partly fired clay that has been used as packing material around the kiln. A total of 716 pieces of this material were recovered from these contexts, 94.83% of the total found across the site. The burnt fragments of natural stone suggest that the furnace and possibly the flue may have dug into the natural bedrock or that this stone was used to line parts of the kiln.

Material	Topsoil	Subsoil	Collapse	Comments
CBM	1	0	0	Post-medieval / modern date.
Ceramic (clay)	30	373	313	This is unfired or partly fired clay that seems to have been used as packing material.
Charcoal	2	11	5	Found across the site, but in this instance may have originated from the kiln’s stokehole.
Clay pipe	2	0	0	Post-medieval date.
Glass	0	1	0	Modern date.
Ironstone	0	0	23	Appears to be naturally occurring.
Natural Stone	0	0	34	Some pieces are burnt.
Small Find #2	0	1	0	This is an iron band, most likely from modern farming equipment.

Table 6 Table listing the quantities of material culture from the layers above the kiln and the cleaning of its internal collapse.

A total of 610 sherds of pottery were recovered from the contexts above the kiln and in the cleaning of the collapse layer. These included Crambeck wares, other British wares, two

imported wares, and some unidentified wares. The table below lists the total sherd counts for the identified wares from the topsoil, subsoil and collapse cleaning (Table 7).

Ware	Topsoil	Subsoil	Collapse	Total by Ware
CRA PA	3	26	9	38
CRA RE	32	251	160	443
ARG CC	0	1	0	1
CAL GR	1	5	9	15
EBO WS	0	0	1	1
HGB SA	0	1	0	1
HSM RE	2	37	0	39
WIL OX	0	3	1	4
Total by Context	38	324	180	542

Table 7 The total sherd counts for the named wares of the excavated contexts of the kiln.

As Table 7 demonstrates, the majority of sherds from the kiln were Crambeck Reduced ware, a total of 443 sherds. It seems plausible to suggest that, at least in the latter phase of its use, this kiln focused on the production of Crambeck Reduced ware vessels. It is further possible to suggest that this kiln focused on the production of bowls based on the forms present in this assemblage. Various forms of bowls constituted 81.35% of sherds retrieved with identifiable form, thirty-seven of the forty-eight identified being in a Crambeck fabric (thirty were CRA RE). The kiln is clearly contemporary with the commercialised production of Crambeck ware at Jamie's Craggs and most likely fell out of use in the latter part of the fourth century. A more specific date may be established with the analysis of forms of vessels excavated from the furnace interior. The presence of a handful of sherds in non-Crambeck fabrics and of earlier dates may not have a direct bearing on the kiln as most were recovered from the topsoil and subsoil. However, the presence of such wares across the site may indicate an earlier phase of Roman activity and are discussed in greater detail below.

Discovery of this kiln and analysis of the sherds recovered from the excavated contexts did not reveal any previously unidentified forms of Crambeck vessels, nor has it advanced the

understanding of the internal structure of these kilns. However, it did confirm the nature of the specific response on the geophysics, making the identification of other pottery production sites in the surrounding landscape in the future more plausible. The good preservation of the kiln suggests it may be possible to expose its full extent in the future and there is a reasonable chance the internal structure has survived to a good degree. A full excavation of this furnace, its flue, stokehole, and partner furnace could confirm the suggestion made here that, certainly in its latter phase, this kiln focused on the production of Crambeck Reduced ware bowls.

There are a number of other Crambeck kilns identified in the landscape (Figure 60). The *Malton Messenger*²⁷ (13th February 1858) records a possible kiln at the “*top of the quarry*” which would place it close to the others identified inside the promontory fort. This was a “*mass*” of broken pottery mixed with “*traces of fire and un-burnt clay*”. The pottery was all “*of Roman type*” and the article suggests that the “*appearance of the place was like that of a manufactory of such ware*”. It does acknowledge that this collection of material could also be a dump for broken and unusable pottery. Together these discoveries provide a possible total of fourteen individual furnaces or a maximum of seven paired kilns.

Corder excavated a further two kilns less than a mile away at Mount Pleasant Farm (1989b). These were in the typical Crambeck paired form and were no different from those at Jamie’s Craggs, except that they were located some distance outside the southern boundary of the promontory fort. They are next to the current line of the A64 and would have been located very close to its Roman counterpart.

Three kilns were found (Figure 60) under what is now Crambeck village at the time of the foundation of the Reformatory School (May 1856) (*Malton Messenger*, 28th April 1866).

²⁷ The relevant articles were supplied by Malton Library.

Not much is known about these kilns other than they seem to follow the standard Crambeck form and it is unclear whether they were three paired or individual furnaces. The article does state that one of the kilns was “*charged with pottery*” at the time of discovery but frustratingly no further detail is given. This kiln could have provided some welcome and essential information regarding the end of the Crambeck production industry or at the very least about its demise.

There are two kilns on the west side of the A64. One was identified by geophysical survey in 2014 and is a response similar to those known to be kilns at the Jamie’s Craggs site. This identification could not be confirmed without excavation and there are other explanations for the response, such as a large pit. The second kiln is listed in the HER records as a “*plough damaged site said to comprise of Crambeck ware, tesserae, fragments of fire-bars and part of a kiln dome, All fourth century material*”. A reference is given for an article written by E.M. King in *Britannia* (1978, 426) but this did not provide any clearer detail on the location of this material. On consulting the PastScape data, the relevant record places this material just to the west of the A64, immediately north of Mount Pleasant Farm.

A separate HER listing records the discovery of “*grey ware among burnt stones and soil in a field NW of Crambeck*” which was confirmed as a kiln by a John Ford (see HER listing). Unfortunately, no further description of this kiln or its location is given and no reference is provided. Despite their lack of detail, the records in the HER and PastScape do illustrate the presence of individual kilns scattered in the immediate environs of the Jamie’s Craggs site. It begs the question of how many more of them lay undiscovered or have been destroyed.

There are two kilns at Hutton Hill, approximately one-mile north of Jamie’s Craggs. These were not paired, comprising of a single furnace each. These were excavated by Northern Archaeological Associates (Abramson et al 2005) ahead of the installation of a water pipe

and the following detail is taken from the subsequent report. The kilns were approximately 50m apart set amongst a multi-phased collection of Iron Age features including ditches and roundhouses (see Chapter 4 for discussion). A total of 4,300 sherds were recovered along with several items of kiln furniture. The kilns were associated with at least two structures of indeterminate form and function; a stone stylobate column base was recovered from one of these. Crambeck Parchment and calcite-gritted wares were both recovered with Crambeck Reduced ware being by far the most numerous. In the case of one of the kilns, calcite-gritted ware sherds were removed from its backfill indicative, at least to some degree of its production at the site. These two kilns, both deviating from the usual paired format of the Crambeck industry, produced sufficient evidence for the specialised production of Crambeck Reduced ware and the manufacture of tile products at the site.

A mile to the south at Cliff House Farm, Crambe there is evidence for Roman occupation contemporary with the pottery activity at Jamie's Craggs. Wenham's report (1989, 99-103) details a 'T' shaped grain drying oven of fourth century date. This seems to have been subjected to modification in the latest stages of its use, possibly converting it into a pottery kiln. There is no record of any pottery being found inside this feature. Approximately 20m away King and Moore excavated two further kilns (1989, 105-107). The first was a single furnace structure although with no sign of internal kiln furniture. The pottery was of "*well known Crambeck types*" (King & Moore 1989, 105-107) with flanged bowls being the most numerous. Other forms present include straight sided dishes with and without a beaded rim, small jars, beakers, two types of small bowls, jars, and one large jar base of handmade Calcite-gritted ware. The second kiln had a slightly different construction, being cut into the natural bedrock and the ash pit next to the oven. King and Moore (1989) note its similarity to the structure of a domestic bread oven. Just as with the 'T' shaped oven, this structure showed signs of modification suggests a secondary use as a pottery kiln. It seems to have

been used to unsuccessfully fire a single stack of mortaria. Forms present include mortaria with fine black grit as the most numerous, with flanged bowls in a red ware being the second most numerous, flanged bowls in Parchment ware with and without red painted decoration, shallow bowls with and without red painted decoration, a small beaker in black ware, a cheese press and the neck of a flagon shaped as a human face. There have been similar ‘modified’ kilns excavated at Cold Cam, where there is evidence of a domestic occupation site including rough paving, animal bones and fragments of a rotary quern (McDonnell 1963, 407-413). These kilns do seem to suggest that the people living here were part of the Crambeck industry at Jamie’s Craggs and they may have converted these pre-existing features in order to make their own pots rather than to produce vessels to sell.

The 2014 excavation revealed an area that may have been used as a dump by the potters for broken and misfired pots. The uppermost fill of a section of the east–west defensive ditch contained an unusual amount of Crambeck wares, particularly in comparison with the section excavated further to the east (the formation processes of the fills of this feature have been discussed in Chapter 4). A similar conclusion can be drawn about an area immediately west of the excavated kiln where a large number of Crambeck sherds were recovered from the top and subsoils. Given the apparent lack of features in this area, it may be that agricultural processes have disturbed a dump.

5.3 Romano-British Burials at Crambeck

The Roman landscape around Crambeck is complicated further by the presence of several burials. As discussed in Chapter 4, there are at least five Bronze Age round barrows in the vicinity, two of which were under where the current village lies. Another is in the field immediately east of Mount Pleasant Farm. Some of the Roman burials are in similar locations (Figure 64). The only prehistoric burial within the area occupied by the pottery

production at Jamie's Craggs is the Iron Age chariot burials along with at least two other likely burials of a similar size (presumably also Iron Age in date given their proximity to the first).

During his 1920s excavation Corder (1989a) excavated two cist burials, one of which cut into the furnace of a Crambeck kiln (Figure 65). Both of these were aligned north-east – south-west and were constructed of slabs of local limestone. Cist I cut into the furnace of Kiln A, containing an incomplete skeleton in a poor state of preservation and, as a result, Corder did not send these remains to Malton Museum as he did with those from Cist II. The skeleton in Cist I is of an individual that may be younger than that in Cist II or may perhaps simply be smaller in stature (Figure 66) but the poor preservation of the bones hindered the osteological analysis of this individual. A small grey spherical vessel of “*Castle Howard technique and material*”, that is of Crambeck ware (presumably Reduced ware) was by the left hip and had no parallel on the site (Corder 1989a).

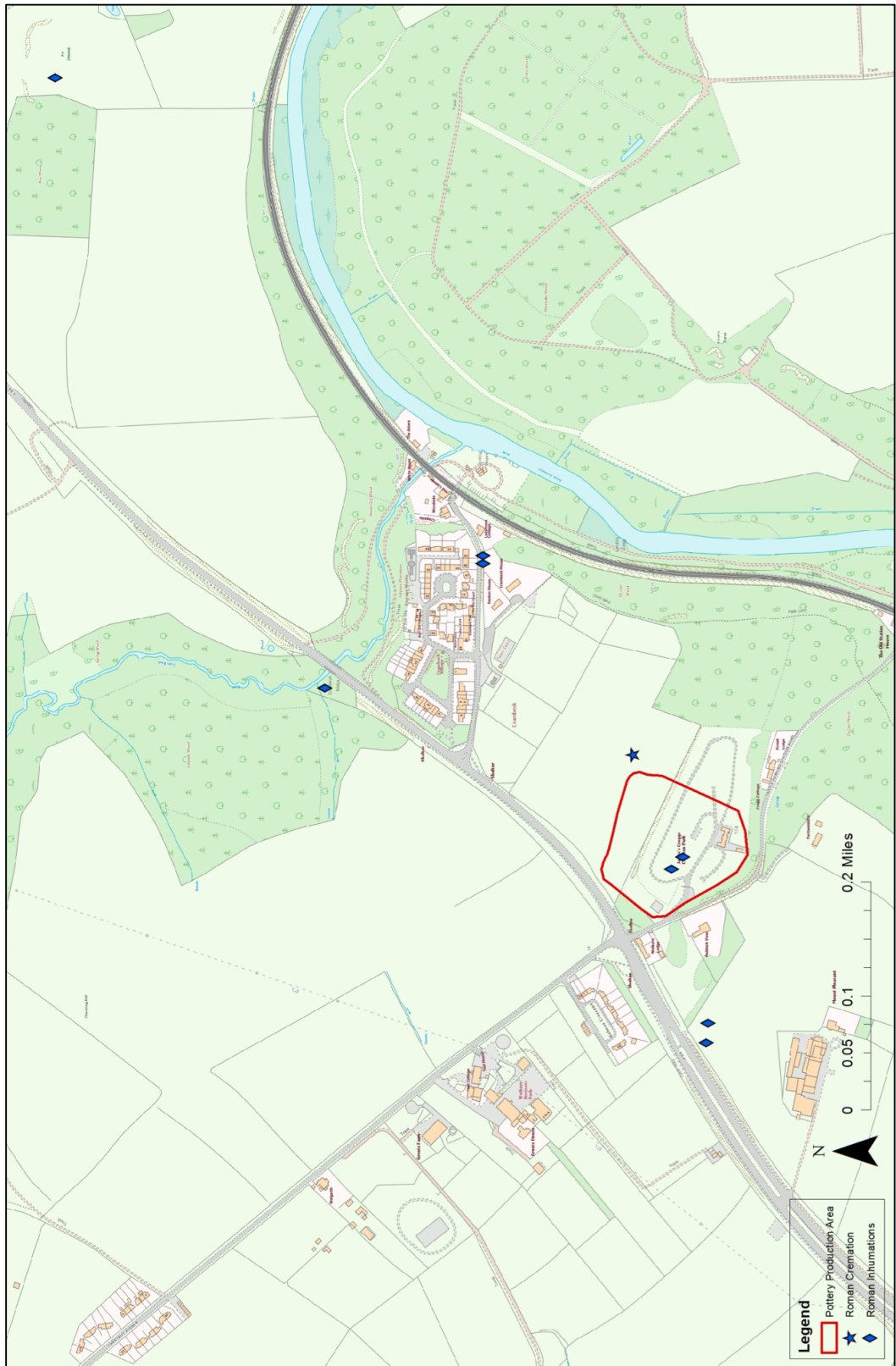


Figure 64 Approximate locations of Roman burials in the Crambeck landscape.

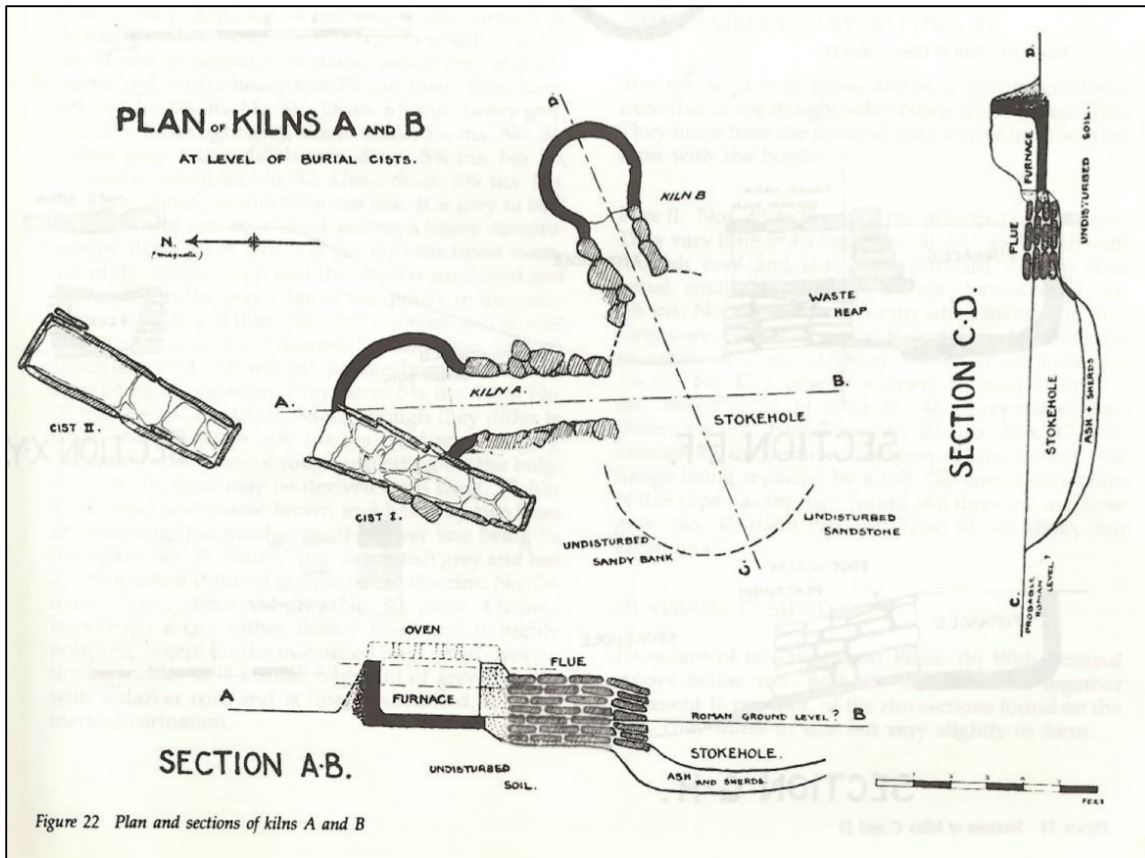


Figure 65 Corder's plan showing the relationship between the cists and kilns A and B (1989a).

Cist II contained a fragile but more complete skeleton of an adult. Recent osteological analysis²⁸ of this individual concurred with the assessment made at the time of excavation (see Corder 1989a, 9). This is an adult female of 35-39 years of age. The individual was interred in a supine-extended position with the head to the north-east. The remains were in a moderate condition. The individual was approximately 152cm (4ft 9") tall, short but still within the average for the Romano-British period. The individual showed signs of transitional vertebrae in the lower back and wear on the right tibia indicative of habitual squatting. There was no dental pathology for the individual.

²⁸ This analysis was commissioned by the author and conducted by Malin Holst, York Osteoarchaeology Ltd with the kind permission of Malton Museum.

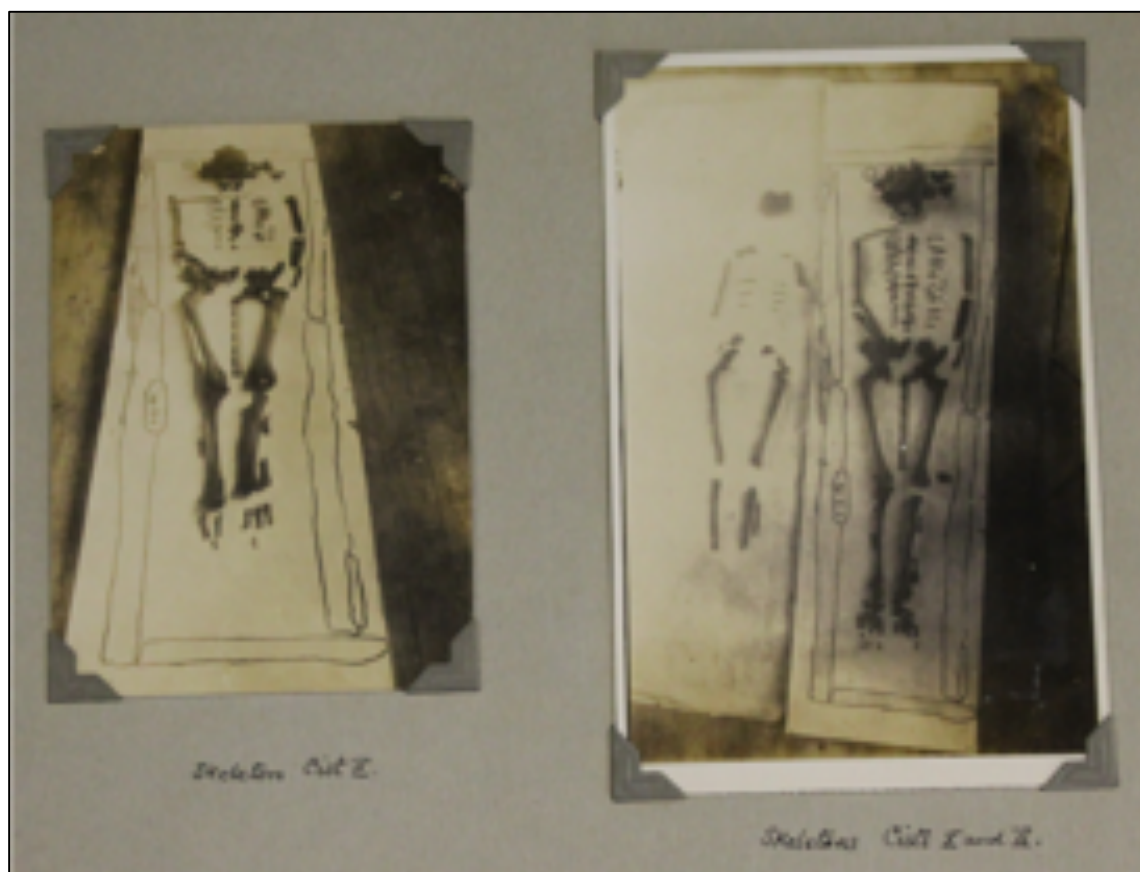


Figure 66 Corder's photograph of the skeletons from Cists I and II (with kind permission from Malton Museum).

Corder surmised that both burials must be of late Romano-British date given that Cist I was stratigraphically higher than the furnace of the Kiln A (1989a). AMS dating²⁹ of the remains from Cist II dated the burial to between 330 and 420 AD. This supported Corder's (1989a) original assessment that the deposition of the cist burials took place after the abandonment of the kilns in the late fourth or early fifth centuries.

There are at least five other cist burials in the immediate landscape found individually or in pairs (Figure 64). One is described as being near to Crambe Bridge (*Malton Messenger*, 13th December 1856) and the grid reference given on the HER record (#2192) places it next to

²⁹ Commissioned by the author and undertaken 2014 by the Radiocarbon Dating Laboratory, Waikato University, New Zealand on the recommendation of Malin Holst and with the kind permission of Malton Museum. Report is attached in the appendices.

the crop marks of the possible henge, although its location is not confirmed. Two empty cists were found a ‘few yards from the high road at the top of the hill’ (*Malton Messenger* 13th February 1858). The grid reference (HER record #2188) places these east of the A64, north-east of Mount Pleasant Farm, just south of Welburn Lodge. Two further cists were found together next to the road running through Crambeck village towards the River Derwent. These are marked on the historic OS maps and described in the *Malton Messenger* (13th February 1858). One contained a male, buried with a vessel in a blue/green fabric unparalleled elsewhere at Crambeck, the other contained the remains of a female. No further analysis of the individual was made and the remains have since been lost or discarded making further investigation impossible.

A sarcophagus was found to the north of Crambeck village between the “*new road*” (A64) and the River Derwent (Kitson Clark 1936, 465) along with Roman pottery sherds, roofing tiles and beads. The HER record (#4444) places this at the eastern edge of Rex Wood. Unfortunately, none of these records reveal anything more about these burials apart from the fact that they all seem to have been interred on a north – south alignment, and in a similar fashion to the two excavated by Corder.

Crambeck seems to have been somewhat of an exception to the typical burial rites in the rural areas of late Roman Yorkshire (for discussion of burial in this period see Chapter 6.3). Fourth century burials in rural areas of Yorkshire are rare occurring singly or in pairs on the margins of fields (Ottaway 2013, 289). This does not seem to have been the case at Crambeck. The identified cists do appear to have been interred singly or in pairs but there are several of them between the Jamie’s Craggs site and the Cram Beck at the bottom of the hill. It is therefore reasonable to assume that, given the reported similarity between the burials, they could all date to a similar period to that of Cist II, placing the majority of them in the late fourth or early fifth century. Taken together, there is an unusually large number of

late Roman burials in this landscape. The area was not a cemetery as such, but seems to have been remembered as a place of burial from the Bronze Age, possibly as a result of upstanding barrows remaining visible in the landscape. Several of the cists occur along the route of or close to the Cram Beck, mirroring to some extent the placement of the Bronze Age barrows which would in all likelihood have been visible. Those cists found by Corder in the area of pottery production are close to the Iron Age chariot burial, the barrow of which is also likely to have been visible in the late fourth or early fifth century. The relationship between the late Roman burials and the pottery production phase is unclear. Cists I and II were deposited after the closest kiln fell out of use, perhaps several decades later. However, the question remains whether pottery production continued nearby at the Jamie's Craggs site into the late fourth and early fifth centuries, or had it moved to an entirely different part of the landscape? Without further investigation, it is difficult to hypothesise further.

A cremation burial was excavated at the Jamie's Craggs site in 2014. This was located towards the eastern end of the site, close to Ox Carr Wood (Figure 67). It was inserted into the top of the tertiary fill of the large Iron Age east-west ditch where the fill of this deposit partially covered the northern bank associated with the ditch (Figure 69). Figure 68 shows the section of the deposit partially excavated and that left in situ. Figure 69 shows the cremation in relation to the Iron Age ditch. Figure 70 is a plan of the cremation and the features of the ditches and banks.

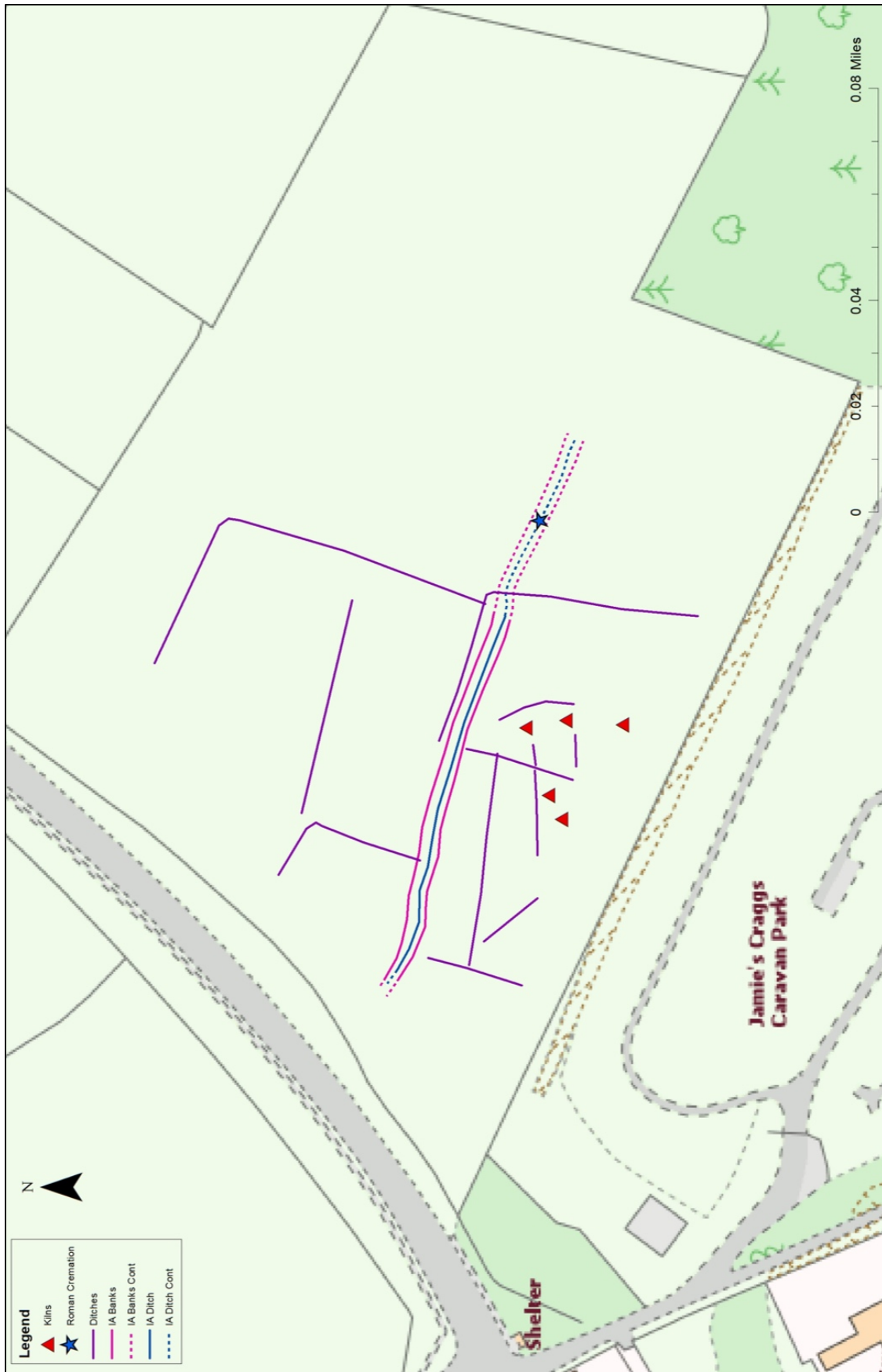


Figure 67 Position of the cremation deposit in relation to the other known features on the site.



Figure 68 Photograph of the cremation deposit in situ.



Figure 69 Photograph of the cremation in relation to the Iron Age defensive ditch and its northern bank. The cremation deposit extends to the east but stops short of the trench edge. A section was excavated in the western half of the deposit.

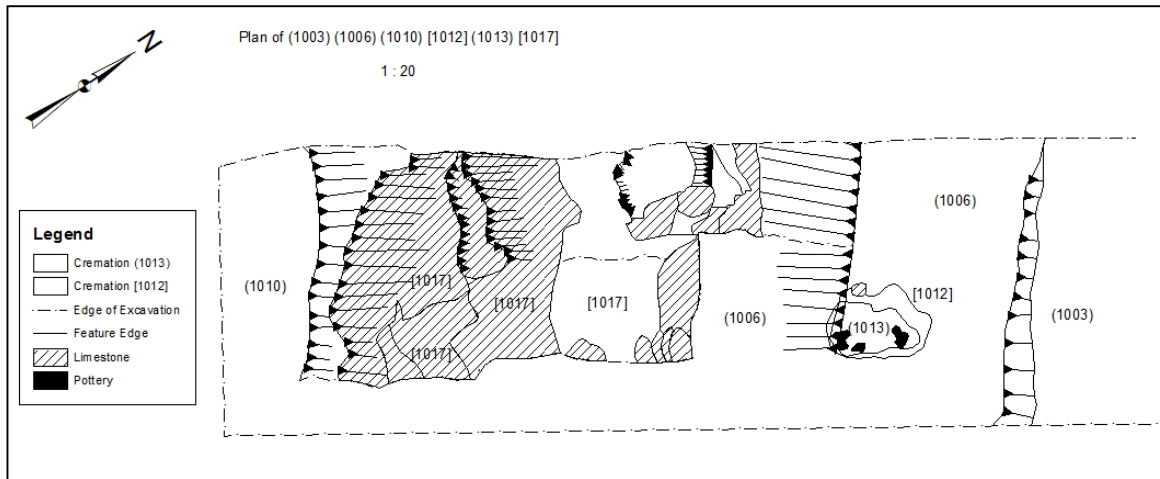


Figure 70 Digitised plan of Trench 1 showing the cremation burial in relation to the ditch and banks of the promontory fort (Scale 1:20).

The cremation deposit contained two pottery vessels, one beaker or jar in Crambeck Reduced ware, the other a calcite-gritted vessel. None of the sherds displayed any decoration and were dated to the fourth century. The calcined bone was subjected to osteological analysis³⁰. Fragments of various limbs and teeth were identified belonging to a juvenile individual aged between 2.5 and 12 years.

Environmental processing of the deposit revealed over seventy worked jet and glass beads³¹ in a range of colours including white, opaque, yellow, blue, green-blue, green, iridescent blue, gold-in-glass, black, and red. The two red beads are in fact carnelian stone that, amongst other places, was imported to Britain during the Roman period from West Africa.³² Some of these beads are very unusual (e.g. the gold-in-glass) although others are typical of the third and fourth centuries AD. Interestingly, none of the beads displayed signs of burning suggesting that they were deposited with the child after the act of cremation had occurred. The dating of the beads and the pottery, and therefore the cremation itself, is similar to that

³⁰ Commissioned by the author and undertaken by Malin Holst, York Osteoarchaeology Ltd.

³¹ These were analysed by Professor Jennifer Price, Durham University.

³² Mentioned in conversation by Professor Jennifer Price, Durham University.

of the cist burials and it is likely this child was interred at a similar time, or at least within a few decades. A selection of some of the beads are pictured below (Figure 71, Figure 72, Figure 73, and Figure 74).

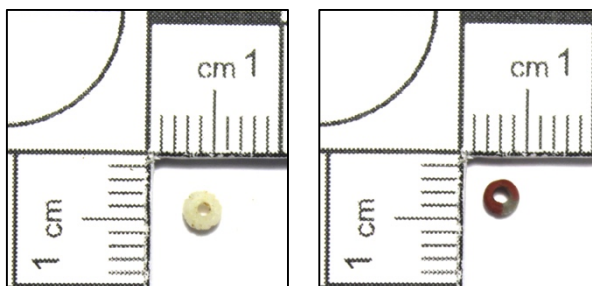


Figure 71 An opaque / white spherical glass bead and a red annular carnelian stone bead from the cremation.

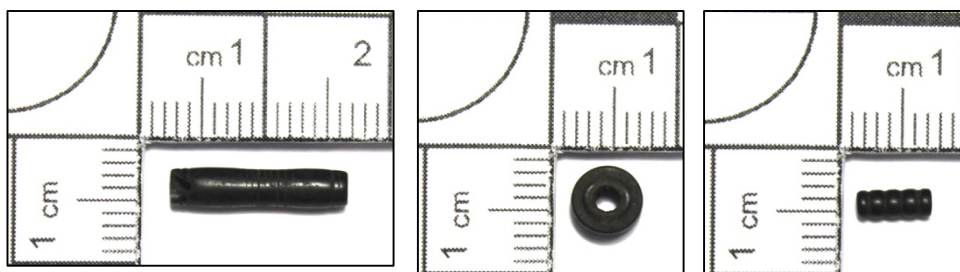


Figure 72 Three of the carved jet beads from the cremation.

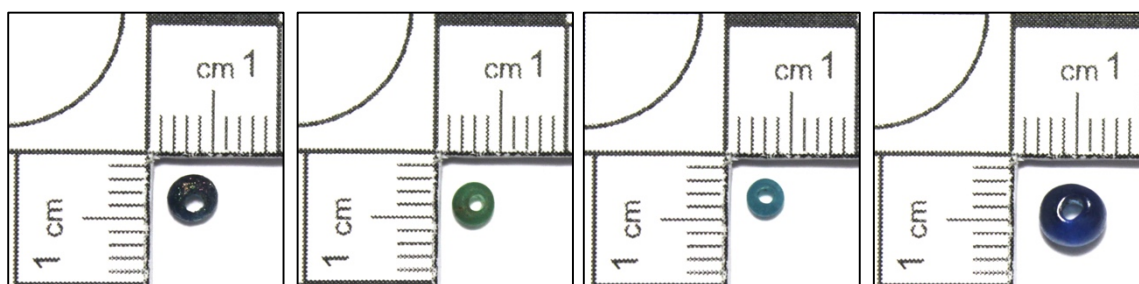


Figure 73 An assortment of the blue beads from the cremation.

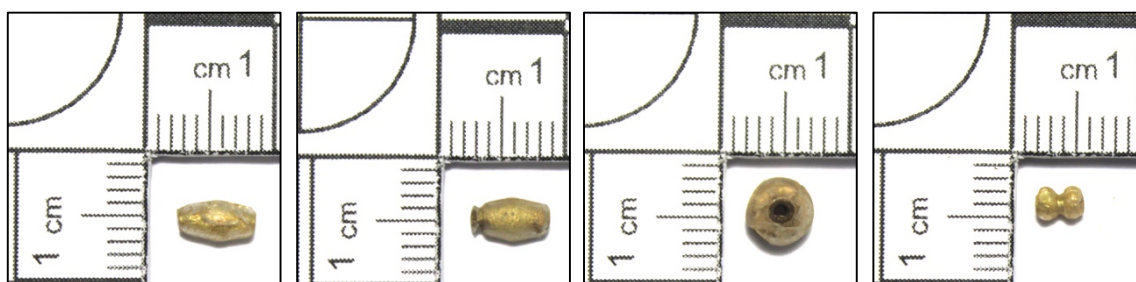


Figure 74 An assortment of gold-in-glass beads from the cremation.

Given the similarity of the burials and the AMS date of the individual from Cist II it could be argued that all the known cist burials in the Crambeck landscape date to the late fourth or early fifth century. If this is accepted, it would suggest that the immediate Crambeck landscape became one of burial after the cessation of pottery production in the area. This would appear to be a return, deliberate or otherwise, to a prehistoric use of this space given the presence of Bronze and Iron Age burials in the same landscape. Perhaps this space was remembered as being 'special' possibly as a result of its proximity to two water courses, the Cram Beck and the River Derwent, and the strong likelihood that the earthworks of ancient monuments (e.g. the henge and barrows) remained visible in the landscape throughout the Roman period. The distribution map of these burials illustrates the spread of Bronze, Iron Age and Roman burials in the Crambeck landscape (Figure 75). The processes driving any deliberate return of the Crambeck landscape to burial in acknowledgement of earlier interments is unclear and warrants further investigation.

In addition to those burials in the immediate vicinity of Jamie's Craggs, two others were discovered at the Romano-British settlement site at Cliff House Farm, Crambe. One was a cist made of the local limestone (Wenham 1989). This cist contained black soil, no skeletal remains being identified, and four conjoining calcite-gritted sherds and seven of Crambeck ware (distinction between Reduced or Parchment is not made). Wenham (1989) notes the similarity between this cist and those excavated by Corder (and therefore the other cist burials discussed above) and suggests that the acidic nature of the soil could be responsible for the lack of skeletal remains. No mention is made of its orientation although it would be a reasonable assumption to suggest it was also north-south like those at Crambeck. Wenham's (1989) report also records the presence of a cinerary urn. This was contained within a beaker of Crambeck fabric (Corder's type 12 or 12a) that had been buried on its side with calcined bone and fragments of burnt wood present. Given the dating evidence of

the burials at Crambeck it would be reasonable to suggest these were also interred in the late fourth or early fifth century, when Crambeck production had ceased.

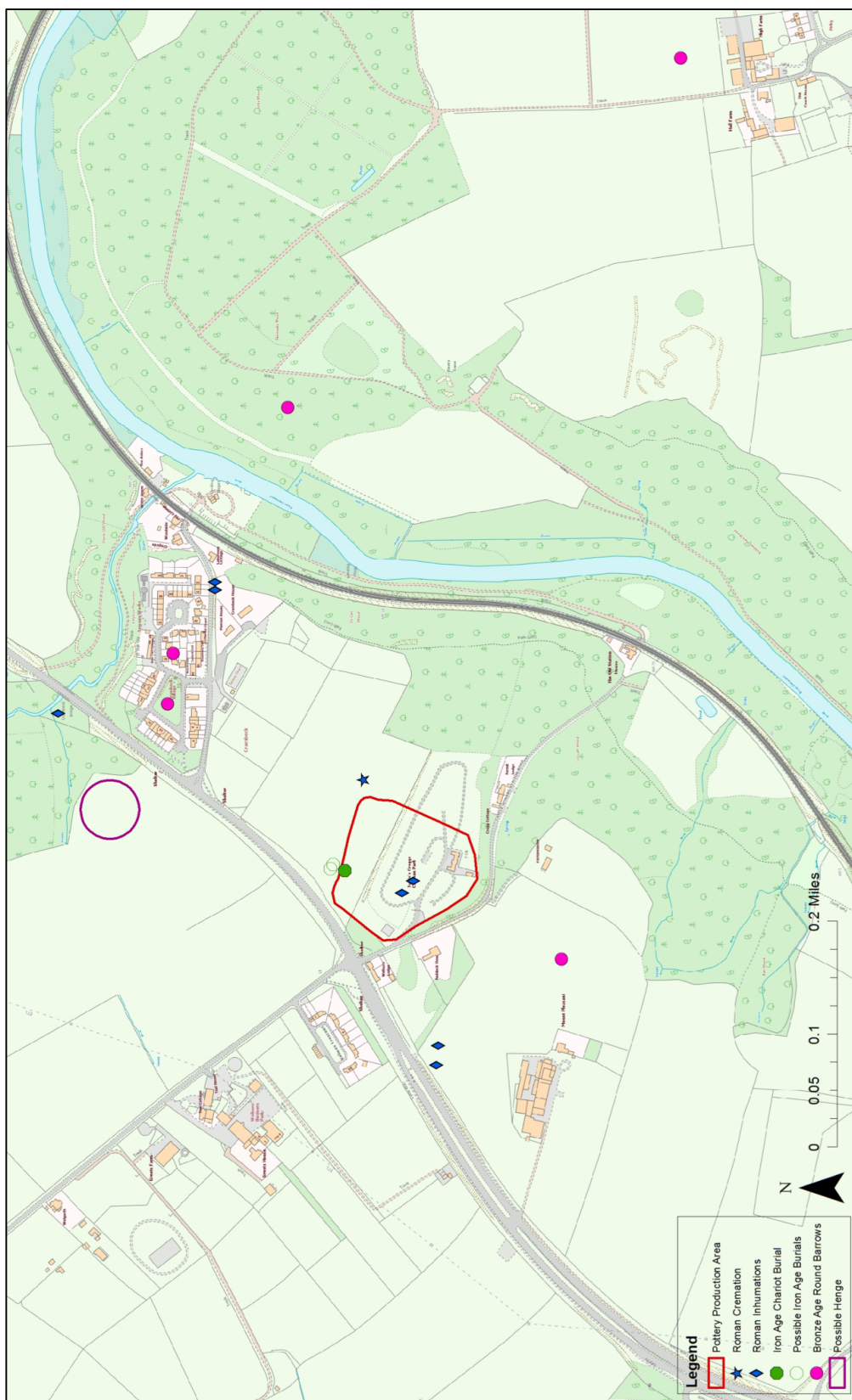


Figure 75 Approximate locations of Bronze Age, Iron Age and Roman burials in the Crambeck landscape.

5.4 Occupation and Routeways in the Romano-British Crambeck Landscape

There is some, albeit limited, evidence for Roman occupation in the wider landscape around Jamie's Craggs. The site at Cliff House Farm, Crambe is one such occupation site. A hut or small building was excavated by Wenham (1989, 99-103). This was made up of a rough stone floor of the local limestone that had a possible hearth constructed of cobbles on top of which was a coin of Constantius II (337-361 AD). There were numerous sherds of pottery lying on the floor, only a few of which were Crambeck wares, the majority being calcite-gritted. This floor was surrounded by a robbed out foundation trench containing fragments of local limestone suggesting the walls were also constructed of this, or at least the foundations were. Other finds at the site included various Crambeck and calcite-gritted ware pottery, a few plain sherds of Samian, two sherds of Nene Valley Colour Coated ware, three small fragments of bronze two of which were possibly brooch tangs, and twenty fragments of red *tegulae* and *imbrices*. These features and finds, along with the T shaped drying oven and two burials (see below, this section) are suggestive of “...a rural Romano-British settlement of some sort.” (Wenham 1989). This dates to the fourth century and Wenham concludes that it could have been where the Crambeck workers lived but is more likely to have been one of the areas that supplied the potters with food. Wenham also notes the presence of scattered stones and cropmarks elsewhere in the field that suggest the presence of more huts and larger buildings or animal enclosures, the latter fitting with the large number of animal bones recovered during the excavation.

King and Moore (1989, 105-107) provide further evidence of the Cliff House Farm site. They note a bowl shaped scoop that was sealed by a complete mortarium (unfortunately stolen before it was recorded, but presumably of Crambeck ware). This was carefully shaped but unlined and its function is a mystery although King and Moore presume it to be a rubbish pit. They also note that “*Other unidentifiable structures in the field were recorded but were*

not excavated due to lack of time.” (King & Moore 1989). This fits with Wenham’s earlier assessment suggesting other structures/enclosures in the field. King and Moore pose the following about the nature of the Romano-British settlement at Crambe:

“Was it an out-worker for the ‘factory’ at Crambeck which supplied so much of the army contracts of the late 4th century, or was it supplying the home needs of the ‘factory’ workers?” (King & Moore 1989, 106)

In conclusion King and Moore suggest in the light of the lack of finer decorated Crambeck wares, traces of metal working, and the two burials that:

“...it seems reasonable to suggest that Crambe represents the workshops supplying the needs of the potters of Crambeck, and possibly even their homes.” (King & Moore 1989, 106)

There has been no recent evidence to suggest an alternative explanation to that postulated by Wenham and supported by King and Moore regarding the nature of the fourth century Romano-British settlement at Crambe.

A second potential Roman settlement is located to the north of the Jamie’s Craggs site in a field on the other side of the Cram Beck, close to Rex Wood. This is visible as a series of cropmarks (Figure 76Figure 77Figure 78Figure 79).



Figure 76 View of the cropmarks looking South-West. Image credit: Rachel Wood.



Figure 77 View of the cropmarks looking North. Image credit: Rachel Wood.



Figure 78 View of the cropmarks looking East. Image credit: Rachel Wood.



Figure 79 View of the cropmarks looking North. Image credit: Rachel Wood.

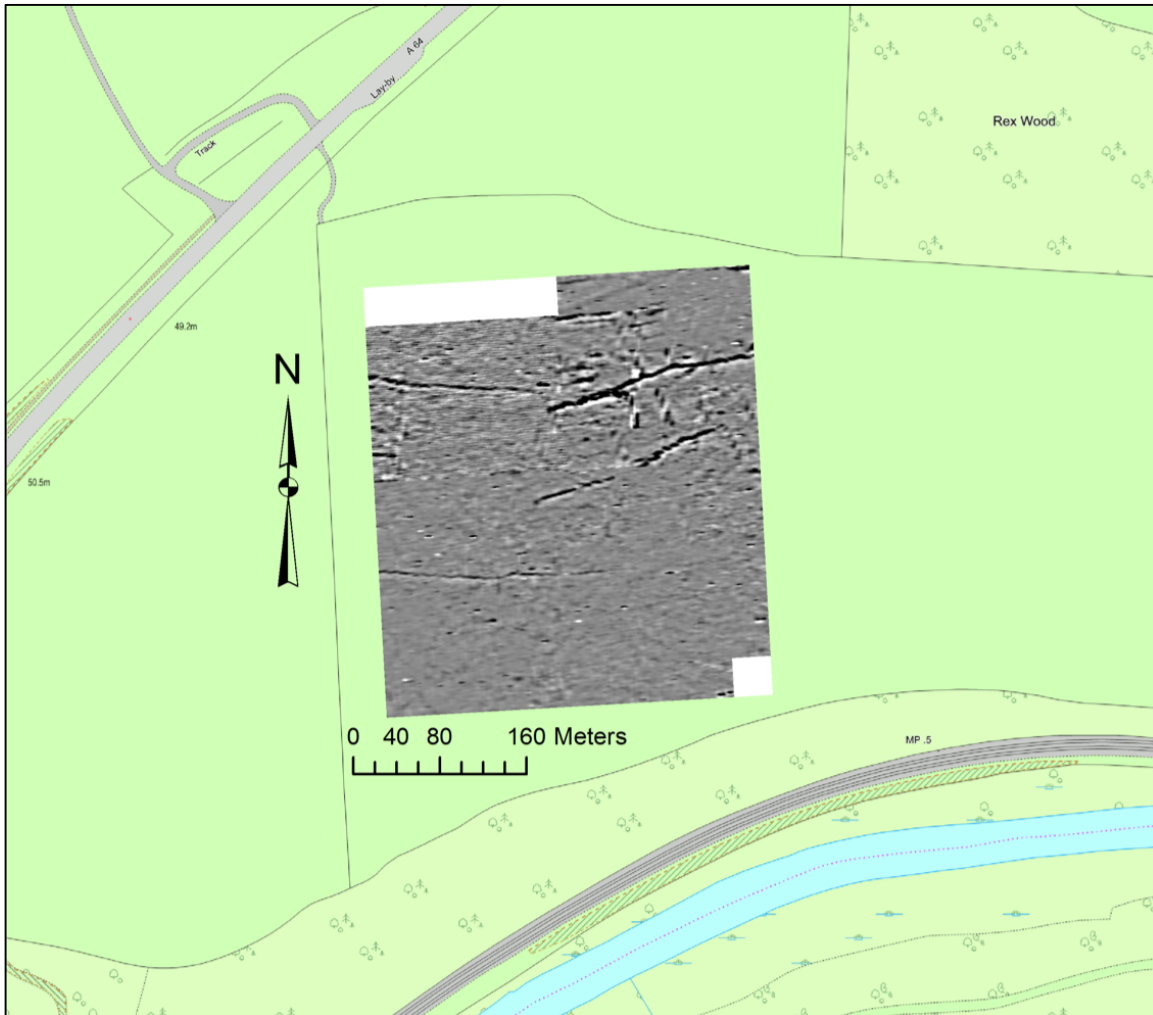


Figure 80 The processed magnetometry results on the site of a possible Iron Age or Romano-British enclosure complex North of Crambeck village.

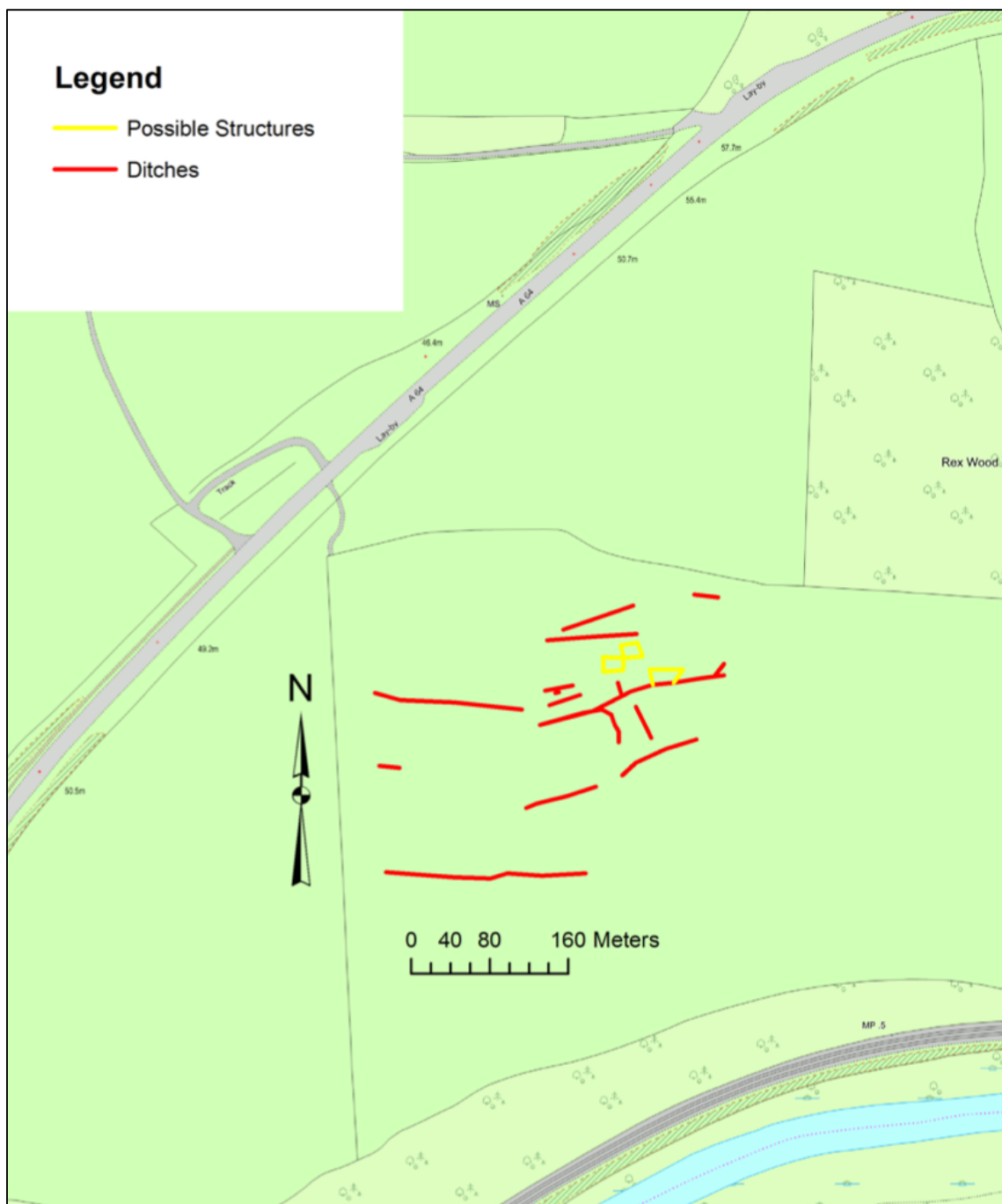


Figure 81 The interpreted magnetometry results showing the ditches and possible building platforms.

These are recorded on PastScape (#1003331) and are described as “*Possible Prehistoric or Roman enclosure complex and boundaries seen as cropmarks*”. A series of enclosures are visible on the 2013 aerial photographs and they align with at least one trackway. A magnetometry survey carried out in 2014 suggests many of these features are ditches

defining areas in which were several possible building platforms (Figure 80 and Figure 81). The specialist report for this survey is included in the appendices.

Material recovered from the surface of the field include Roman pottery and worked flint. There was a lack of Crambeck ware pottery and the finds suggest the site is of earlier Roman date and may have origins in the late Iron Age. A flint scraper/awl (Neolithic/Early Bronze Age) was also found. This site is likely to be a small late Iron Age to 2nd – 3rd century site, possibly a small settlement or farm. The magnetometry did not show any responses to those proved to be kilns. Initial evidence does suggest that it was not contemporary to the period of pottery production at Jamie's Craggs although further investigation would be required to ratify this.

Finally, there are a handful of routeways that are present in the immediate Crambeck landscape. One such routeway has already been discussed in Chapter 4 with a comparison at Wharram Percy (Atha & Roskams 2012). Perhaps the largest and most substantial in the Roman period was the York to Malton road. This would have connected the legionary fortress at York and the subsidiary fort at Malton, and would presumably have been well maintained for military use (including transport of supplies). The surface of this road was encountered during a watching brief for improvement of the bus stop opposite the entrance to Crambeck village (Pre-Construct Archaeology 2010). Much of the current A64 overlies or closely follows the route of this road. Another record (HER #13006) exists for a Holloway "*...running downhill to the stream parallel to the present day road. This may be an earlier route of road. Hollow way may continue on other side of the stream.*" The location given for this is Crambeck Bridge which is to the north of the Jamie's Craggs site, where the A64 crosses the Crambe Beck. There is an Iron Age trackway running alongside the ladder settlement at Mount Pleasant Farm to the south of Jamie's Craggs (see Chapter 4) that does have some evidence for continuing in use for at least some time in the Roman period

(Abramson et al 2005). Lastly there is a prehistoric or Roman trackway on the west side of the A64 to the south east of Greets Farm, near Hardy Flatts (PastScape # 1003324). This was visible as cropmarks and may connect to the trackway at Mount Pleasant Farm. The potters would also have presumably had access to York and possibly Malton via the River Derwent (e.g. see Evans 1989). These routeways, in particular the road between York and Malton and the River Derwent would have made the pottery at Crambeck uniquely placed to distribute its wares and given it an easy connection to the military, perhaps leading to the much discussed military contracts. The fact that some of these routeways were in use certainly prior to the establishment of Crambeck production and most likely prior to the Roman period may have played a role in the choice of location for the industry, along with a number of other factors.

5.5 Summary

It is possible from the evidence discussed in this chapter to see the development of the Crambeck landscape throughout the Roman period and into the fifth century. There is some tentative evidence for early Roman activity, indicated by the presence of small amounts of first, second and early third century pottery. This could indicate a continuation, at least for some time, of late Iron Age settlement in the immediate landscape around Jamie's Craggs. There are several trackways in the Crambeck landscape that were in use in the Iron Age and may have had earlier prehistoric origins. No doubt several of these remained in use in the early Roman period as people moved throughout the landscape.

By the late third century the pottery industry had become established. At its height and throughout the fourth century the pottery industry would have dominated the landscape around Jamie's Craggs. A concentration of kilns and activity exists within the defences of the Iron Age promontory fort. This is not to suggest that the entirety of the footprint of the

fort was occupied by potters over the century and a half or so of Crambeck production. It is likely that there was some movement and change within the fort as different areas of the interior were utilised by the potters (see Dent and Hayes, both 1989).

Based on the existence of the kilns outside of the fort, for example at Hutton, there is likely to have been numerous individual and small groups of kilns that would have come in and out of use across the Crambeck landscape. Potters and their wares would have moved throughout the landscape and beyond using the available trade routes along the York – Malton road and the River Derwent.

In the late fourth and into the fifth century the Romano-British activity around Crambeck would have been subjected to further change. As the pottery production began to tail off, perhaps with the loss of military contracts in the late fourth century (see Gerrard 2013), the hustle and bustle of industrial activity would have tailed off with it. It is likely that pottery production did not just stop entirely but is more likely to have undergone change and downsizing in step with changing market demand. Some of the kilns may have continued production into the fifth century (see Chapter 7 for a discussion of the Romano-British pottery industries in the late fourth and fifth centuries).

Corder's Cist II, which has been dated to the late fourth or early fifth century, and its apparent partner was stratigraphically above a Crambeck kiln furnace. This, along with the cremation of a similar date, and the several other individual and pairs of cist burials in the immediate area suggest that Jamie's Craggs and the land between the crest of the hill and the Cram Beck became one of burial, although the date of this change is unknown. This is unusual for a rural area in Roman Britain as most burials were placed along the boundaries of fields. Those at Jamie's Craggs seem to have been placed next to a water course and with seemingly deliberate association to the then upstanding Bronze Age round barrows. Those at the top of

the hill could be thought to have been placed in a similar fashion perhaps in relation to the small mounds that may have formed over the abandoned kilns and possibly in relation to the mound(s) covering the Iron Age chariot burial(s). Who these burials belong to will remain a vaguely answered question without the discovery and analysis of more. Based on the single example that has been subjected to modern dating and analysis, a tentative suggestion could be made that at least some of these burials belong to the last of the Crambeck potters.

The Crambeck landscape seems to have developed as a special place perhaps as early as the Neolithic but certainly by the Bronze Age. Use of the landscape for burial seems to have continued to some degree in the Iron Age with the deposition of one or more chariot burials at the top of the Jamie's Craggs hill. The question of how these related to the defences of the promontory fort remains an enigma.

Settlement and occupation seems to have dominated the early Roman period with the focus elsewhere in the landscape, away from Jamie's Craggs. Alternatively, it may be that any early Romano-British activity at Jamie's Craggs is currently not visible or has been destroyed by subsequent uses of the landscape. The third and fourth century saw the landscape become one of industrial activity and trade with the production of Crambeck pottery in full force in the early to middle fourth century. Towards the end of this period and into the fifth century the industrial activity would have changed in nature, demand for its wares reducing, particularly with the departure of the army from the province. Eventually production would have dwindled out altogether, the only remaining sign may have been the small mounds of soil that could have formed over the abandoned kilns.

This chapter and its preceding Iron Age counterpart have demonstrated the changing nature of activity in the Crambeck landscape and provided some evidence for continuous activity from the Late Iron Age to the Roman periods, albeit not all in the same area. The activity in

this landscape is more complex and of greater longevity than has perhaps been previously demonstrated and therefore the Crambeck industry ought to be viewed in a different light to the traditional focus on military contracts.

The following chapter will put Crambeck into its wider regional context, discussing Yorkshire from prehistory to the Roman period.

Chapter 6 Prehistoric, Iron Age and Roman Yorkshire with a Regional Study of Romano-British Pottery in the North of Britain

Having discussed the Crambeck industry, its landscape setting and previous research, it is necessary to provide a regional context for the periods discussed in relation to the site. This chapter will give a brief history of Yorkshire in prehistory and the Iron Age (6.1) before examining the region in the Iron Age to Roman transition period (6.2). A brief history of Yorkshire in the Roman period will then be given (6.3), followed by an examination of pottery in the region from the first to the fifth century AD (6.4).

6.1 Prehistory and the Iron Age in Yorkshire

Prehistory has been studied in Yorkshire since the seventeenth century when many prehistoric sites and artefacts were brought to light as a result of the impact on the Yorkshire landscape of the Agricultural and Industrial Revolutions. Manby, King and Vyner (2003, 35-42) provide a history of the study of the prehistoric period in Yorkshire which is summarised here.

The practice of barrow digging was extensively exercised during the antiquarian period and into the first two decades of the twentieth century. This was characterised by the work of figures such as J. Mortimer (e.g. at Duggleby Howe, 1905) and Cannon W. Greenwell (e.g. 1877). The pre-World War I period saw research interests focus on Romano-British sites and it was only in the 1930s that methodical excavations of prehistoric sites motivated by specific research questions began in Yorkshire. The discoveries of this period are represented by the iconic North Ferriby Bronze Age boats (see Wright & Wright 1939).

Generally, investigations into prehistoric Yorkshire in the early twentieth century focused on the upland and eastern areas of the region with little work undertaken on the lowlands or

in the Pennines. It was towards the end of the century that focus began to move to the under-researched areas of Yorkshire. The later twentieth century also saw the application of some non-excavation techniques to the research of prehistoric Yorkshire, including regional palaeobotanical research programs (e.g. Innes & Blackford 2003, 25-30), the extension into the region of the CBA Implement Petrology Programme (Manby, King & Vyner 2003, 40), and the extensive application of aerial photography after World War II. It was during this period that syntheses of prehistoric Yorkshire were published (e.g. Challis & Harding 1975; Manby 1988).

Studies of prehistoric Yorkshire from the middle of the twentieth century have seen the continued application of increasingly complicated lab-based methods (e.g. environmental sampling) to sites such as Star Carr (www.starcarr.com). Growing use is being made of the new generation of data gathered from commercial archaeology with increasing use of grey literature as a wealth of information. The contribution of major landscape studies must also be noted. These are providing an increasingly detailed picture of landscapes over time, for example, the Landscape Research Centre³³ is focused on Heslerton, North Yorkshire and has furthered understanding of the site from prehistory to the medieval period.

The issues of climate and coastal change have come to have an important role in the study of Iron Age Britain and are summarised by Cunliffe (2005). Much has been written on climate change in the first millennium BC (e.g. Lamb 1981; Mercer 1981), with the general consensus supporting the theory there were several significant climatic changes but the varied geography of Britain meant they were felt to greater degrees in some areas than in others. The late Bronze Age and Early Iron Age saw an average drop in temperature of

³³ Directed by Professor Dominic Powlesland.

http://www.landscape-research-centre.org/html/lrc_home_page.html

around two degrees with conditions improving in the middle of the first millennium before deteriorating again around 300BC (Lamb 1981). The same period also saw conditions becoming wetter. Cunliffe (2005, 27-29) suggests that there is enough evidence to demonstrate the abandonment of upland areas in the North of Britain in this period as the deteriorating conditions would have shortened the growing season for crops. Human subsistence strategies also had an impact on the environment and where this interacted with climate deterioration, change in environments could be greatly accelerated (Cunliffe 2005, 29).

Generally speaking, prehistory in Yorkshire followed much the same patterns as the period demonstrated across the country, albeit with a few regional differences. In fact, study of prehistoric Yorkshire has made a prolific national contribution to the discipline, mostly because of the efforts of the nineteenth century barrow diggers (Manby, King and Vyner 2003, 38) and the application of varied and new techniques to the analyses of their findings in subsequent decades.

Mesolithic, Neolithic and Bronze Age Yorkshire

Yorkshire has some of the most important and best preserved sites for the study of the Mesolithic in Britain (e.g. see Manby 2003). The wet conditions at Star Carr and Lake Flixton³⁴ have resulted in the exceptional preservation of organic material and research focused on the various sites in this landscape continues to have a leading role in the study of the period. Mesolithic Yorkshire consisted mainly of a forested landscape with mobile social groups, following the seasonal resources.

³⁴ Star Carr Archaeology Project, Dept. Archaeology, University of York, www.starcarr.com.

The Neolithic period saw the beginning of woodland clearance in Yorkshire, particularly in its latter half (Stoertz 1997, 3). This was caused by the development of farming (clearance to make way for fields) and the decline of the hunter-gatherer lifestyle. Manby states that the Neolithic farming economy was established in Britain by the fifth millennium BC; it succeeded the Mesolithic hunter-gatherer economy with communities practicing agriculture which had advanced lithic technology, pottery production and evolving social and religious practices (Manby 1988, 35). This is also true of Yorkshire during this period. The Neolithic across Britain was characterised by monuments such as long barrows, long chambered cairns, and causewayed enclosures along with the development of pottery types such as Peterborough Ware, Grooved Ware and the Beaker types (Manby 1988).

Henges are a characteristic feature of the Neolithic across Britain. The following discussion of henges is summarised from Harding's (2003) *Henge Monuments of the British Isles*. Henges emerged in the later Neolithic period and were a result of dramatic social change that culminated in a religious 'revolution'. They are the most numerous and widely distributed monuments from the period and were often of large proportions. Two explanations are generally given for their construction: that they were connected to the new set of religious beliefs, or were the product of centralised political leadership. Either way, their construction would have required large amounts of time and labour. Henges are the archetypal monument of the period and represent the transition into a different and perhaps more complex form of society.

There are several henges in Yorkshire (Figure 82), with the largest being the three forming the complex at Thornborough. Harding (2003) suggests that the henges of the region all seem to have had religious rather than political uses. Some of the henges, especially the smaller single monuments, were no doubt anchored in the history and mythology of particular communities, as may have been the case at Crambeck (see Chapter 4). These

monuments continued in this role into the Bronze Age despite the decline of their primary uses. The barrow cemeteries of the Bronze Age were created by the descendants of the henge builders which goes some way to explaining why barrows of this period are often found in the vicinity of henges (Harding 2003). The henge monuments of the Neolithic continued to have a role in people's consciousness long after their decline, acting as ancestral anchors and as points of legitimisation for the emerging barrow cemeteries.

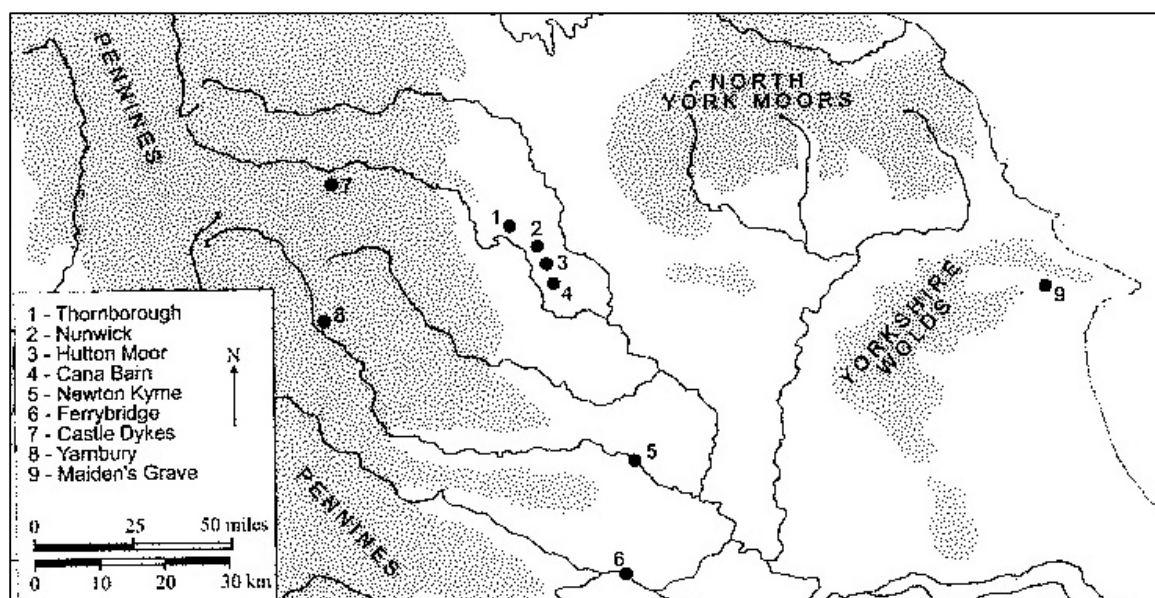


Figure 82 Distribution map of henge monuments in Yorkshire (Harding 2003, figure 63, 87).

As discussed by Harding (2003) the chronology of these monuments is poorly understood, although a later Neolithic date is generally accepted. Many seem to have had a protracted period of use after their construction, often extending over several hundred years. There is some distinction between the forms of these monuments before and after c.2,800BC. Monuments prior to this often had an internal bank and external ditch although there was much variation in their construction. Those after 2,800BC gained common features, many having at least an outer bank, an inner ditch and a minimum of one entrance.

The Bronze Age in Yorkshire saw the formalisation of movement through and ritualising of the landscape. The economy in this period was one of cereal crop production but focused on

animal husbandry (Stoertz 1997, 3). Territories were established, using the construction of linear monuments and the incorporation of existing earlier features (e.g. barrows) as boundary markers (Smith & Walker 2008, 108). Monuments were also used to claim certain landscape features, for example, cairns are often found at spring sites (Smith & Walker 2008, 108). Thus the landscape was divided to meet the agricultural needs of communities and led to a need to demarcate special places (Smith & Walker 2008, 116), and the beginnings of landownership.

Round barrows characterised burial in Bronze Age Yorkshire. New barrows were constructed and some older monuments were altered with burials being inserted into them (Manby 2003). Early Bronze Age burial monuments were often incorporated into features of landscape division later in the period. This, particularly in eastern Yorkshire, took the form of long linear earthworks, connecting up many of the burial monuments across long distances (see Manby 2003). It is generally thought (e.g. Halkon 2013, 52) that the construction of these linear earthworks began in the late Bronze Age and replaced earlier pit alignments, continuing into the Iron Age and possibly the early Roman period. Halkon (2013, 53) noted that they are thought to represent large-scale territorial division occurring simultaneously across Britain. Although they do represent a break with the past, the linear earthworks also have a relationship with earlier monuments, replacing them or respecting them, and seem to deliberately connect existing features across the landscape, i.e. the barrows, (Halkon 2013, 53). The linears would have provided a variety of functions acting as boundary markers as well as routeways through the landscape (Halkon 2013, 59). These large features would have dominated the landscapes, and the construction of both barrows and linear earthworks would have required the concerted and dedicated effort of organised communities, ones with the resources, both human and organic, to support the working force required for such projects (Giles 2012, 40-64).

Iron Age Yorkshire

The later Bronze Age saw the beginnings of what has become an iconic although little understood feature of the Iron Age: the hillfort. Halkon (2013, 59) attributed their emergence to rising tensions caused by climatic changes that had negative effects on aspects such as crop production and the emergence of a society with a more clearly defined hierarchy. Many of the hillforts of the early Iron Age influenced the locations of the Roman *civitas* capitals in the Iron Age tribal territories, adding to the perception of them as part of a hierarchically structured society.

Cunliffe (2005, 347) highlighted the debate around the term ‘hillfort’ and suggested that it actually applies to a broad range of earthworks that themselves cover a period of eight or nine hundred years, making a single reason for their construction unlikely. Many uses for these large landscape features have been suggested from animal holding pens, to defences used in times of need, to more permanent settlements. Current evidence suggests that individual monuments were sometimes in use for 150-200 years (Cunliffe 2005), leaving open the possibility of several functions over time.

Hillforts are traditionally concentrated in the south and east of Britain however there are some in Yorkshire, for example, Roulston Scar³⁵ is one of the largest in the region, and would have commanded extensive views and dominated the surrounding landscape (Halkon 2013, 61). Wappenbury³⁶ hillfort in Warwickshire is very similar to one at Jamie’s Craggs, Crambeck being of a similar size and also having a later Romano-British pottery production centre associated with its earthworks (for discussion of these see Chapters 4 and 7).

³⁵ <https://historicengland.org.uk/listing/the-list/list-entry/1015502>

³⁶ <https://historicengland.org.uk/listing/the-list/list-entry/1009817>

The Iron Age in East Yorkshire is most visible through its distinctive burial rites. Yorkshire is unique when compared to the rest of Britain as it has the largest concentration of square barrows and a distinctive set of burial traditions including the interment of chariots with individuals as well as speared corpses. It was these unusual burial traditions belonging to the Arras culture that characterised east Yorkshire in the Iron Age. Large square barrow cemeteries can be found across the region; Halkon (2013, 71) (based on Stoertz's 1997 aerial mapping work) estimated there to be over 1500 square barrows in East Yorkshire from five identified sites: Carnaby, Danes Graves, Burton Fleming, Garton and Wetwang Slack, and Arras, although these are not the only sites to have produced square barrows (e.g. a recent excavation by MAP Archaeological Practice Ltd. at Pocklington, York uncovered an extensive square barrow cemetery³⁷). It is the last of these sites at which the square barrows were first investigated and from which the culture was given its name. Dr Stead has produced a prolific amount of work on the Arras culture and was one of the first to suggest it may have had continental origins (for example Stead 1979; 1991). Although the chariot burials do have similarities with those from various places on the continent (e.g. near Paris and Germany) the tradition is not thought to have become established in Yorkshire by means of an invasionary force, although neither is it quite believed to have developed entirely indigenously (Cunliffe 2005, 84-86).

Chariot burials consist of a ditch surrounding a square barrow, covering a grave containing a chariot or cart on which the body was placed, usually but not always accompanied by other grave goods, e.g. brooches and portions of meat. These burials can be divided into two general types: in some the chariot was left intact and buried with the wheels upright and the dead placed on the body of the vehicle, sometimes with recesses cut for the wheels; in others

³⁷ http://www.yorkpress.co.uk/news/11679051.Bones_found_at_Pocklington_building_site/

the chariot was disassembled with the wheels laid flat on the bottom of the grave and the deceased on top. Cunliffe (2005, 84) asserted that the former is usually found on limestone hills in Yorkshire with the latter being restricted to the Wolds.

Giles' *A Forged Glamour* (2012) took an alternative approach to the usual invasion versus indigenous argument surrounding the Arras culture in Yorkshire. Instead she applies a less clinical perspective, discussing the possible relationships between landscape, identity and material culture in the period. Giles (2012, 223) further argues that the Iron Age communities of East Yorkshire viewed death as a journey, it being the responsibility of the mourners to ensure the safe passage of the deceased: hence why many square barrows are located near water courses or trackways, these features of movement serving to speed the dead on their way. Giles went on to state that this would make the presence of a chariot or cart in a burial an effective and impressive way of aiding the dead on their journey. She outlined how these mortuary practices present in Iron Age Yorkshire reflected the changes in the social dynamics of the landscape (Giles 2012).

In summary, the prehistoric period in Yorkshire, and indeed much of the rest of Britain, saw a progression from mobile social groups hunting and exploiting seasonal resources, to stationary communities with defined territories, hierarchical social structures and increasingly complicated religious traditions and burial rites. The changing beliefs and attitudes had visible manifestations in the landscape, for example Neolithic woodland clearance, construction of linear earthworks in the Bronze Age, and the square barrow cemeteries of the Iron Age. Exceptional preservation and unique features have resulted in Yorkshire being at the forefront of prehistoric and Iron Age studies in Britain. This has been included here to provide a brief regional context for the discussion of the Crambeck landscape in earlier chapters.

6.2 Becoming Roman? Yorkshire in the First Century BC and the First Century AD

This section provides the regional context for the transition period between the Iron Age and Roman period. The Iron Age to Roman transition is a much covered topic (e.g. the works in James & Millett eds. 2001) with only a brief discussion given here. Cunliffe (2005, Chapter 21) discusses the first centuries BC and AD as a period of transition between the Iron Age and the Romano-British and the following is a summary of his arguments.

Cunliffe divides Iron Age Britain into five zones, each with their own socio-economic systems. These are generalised but Cunliffe points out that they facilitate a broad discussion of the whole of Britain while acknowledging the regional variations within each zone. Yorkshire is divided between two of the zones. The Eastern zone covers Kent up to the edge of the Yorkshire Moors, whereas the North-Eastern zone encompasses the Moors up to the foothills of the Grampians in Scotland.

Until the end of the second century BC Britain lay beyond the periphery of the Roman world but this changed when the Romans began colonising Gaul. By 60 – 50 BC Julius Caesar had extended Roman influence over all of Gaul and Britain went from being beyond the periphery to the immediate proximity of the Roman world. Caesar's failed invasions of 55 and 54BC magnified Rome's desire to extend its influence over Britain. By the beginning of the first century AD the economic systems of the Roman Empire could be felt in Gaul and elsewhere on the periphery of Rome's control. The tribes of south-east Britain would have experienced unfamiliar pressures as a result. A wide range of luxury goods became available to the elite and could be used by the wealthy to enhance their prestige in society. There would have been an increasing external demand for British goods that previously had not been produced in surplus and the continental desire for slaves would have caused widespread disruption to existing social systems.

Cunliffe divides the following centuries into two phases: the Contact Period c120 – 60BC, and the Impact Period c50BC – 43AD, with a brief interlude in between encompassing Caesar's invasion. The Contact period covers the time during which Britain moved from the periphery of the Empire to its immediate proximity. There is no reason to assume that the increase in Roman influence in Gaul resulted in new modes of exchange between Britain and the continent. It is more likely that the movement of commodities took place in existing social systems with the only difference being the intensity and volume of goods being traded. The influx of luxury goods as a result of this intensified trade would have given the elite of southern and south-eastern Britain a new means to display their prestige.

The Impact period saw a shift in the focus of trade to the Thames estuary possibly for political reasons in the wake of Caesar's invasion but more likely was because it was more convenient trading point from the Continent. Trade would have continued through traditional means with Gaul acting as a middle-man between Britain and Rome for some time. But by 10BC more direct trade with the Empire had taken over. In the south and south-east of Britain the changes felt during this period went deeper than just the socio-political systems. New belief systems were adopted, cremation in small cemeteries became the 'normal' burial rite, and deposition of weapons in rivers and storage of grain in pits both declined dramatically; together these amounted to the ending of centuries old traditions.

Within Britain the various tribes and their territories had differing relationships with Rome, as discussed by Cunliffe (2005). The core tribes were those in the south-east, the Atrebates, Cantiaci and Trinovantes. These formed what became the administrative centre of Britain as a Roman province. They had the most intense and direct trade with the Empire. There were several periphery tribes, the Durotriges, Dobunni, Catuvellauni, Iceni and Corieltauvi, that acted as a buffer zone between the core tribes and those beyond direct contact with Rome. They essentially acted as middle-men, facilitating trade between the more 'Roman' south

and east and the native north and west. This resulted in some goods from the continent being traded into the territories of the Parisi and Brigantes in the North of England, but the bulk of continental material would have remained in the provinces with the strongest connections to the Roman Empire. Cunliffe sums up the role of the core and periphery tribes as well as those beyond direct reach of Rome:

“The Roman authorities clearly understood the political geography of Britain: the core was totally annexed, the periphery became a military buffer zone linked from one end to the other by the military road known as the Fosse Way, while the tribes beyond were left to their own devices until their continued hostility forced Rome, reluctantly, to continue its advance into the north and west.” (Cunliffe 2005, 604)

Cunliffe went on to surmise that the ease with which the south–east was invaded in AD43 was indicative of its degree of Romanisation, suggesting that *“The economy and social structure of the area had developed so far towards a fully urbanized state that effective resistance was no longer possible or, in the minds of many, desirable.”* (Cunliffe 2005, 604). It was in the south-east of Britain that Roman ‘civilization’ rapidly took root as the conflict moved away to the north and west. The tribal boundaries of the south-east, many of which had been established for centuries, became the Roman administrative zones and several of the Iron Age *oppida* developed into Roman-style towns. The periphery tribal areas and those beyond presented a different situation, with Rome and its way of life having a decreasing impact comparative to the distance from the core area.

Just as Rome can be seen to adopt the native structures into its own system, so Britain, generally speaking, can be said to adopt aspects of Rome. Frere (1987, 295) stated that the Romano-British culture developed as a result of the impact of Rome on the Iron Age peoples of Britain but it was not a replacement of cultures, rather a synthesis of them. Frere uses the

example of the Romano-British town suggesting these were adaptations rather than adoptions of their counterparts in the Mediterranean.

Aside from the core area in the south-east, the impact of Rome at a landscape level, particularly in the northern tribal areas of the Brigantes and Parisi, was mostly a third century phenomenon rather than an immediate result of the conquest (Atha & Roskams 2012, 82). Change in the late Iron Age and early Roman periods was a gradual event in these areas, although there were some exceptions such as Hayton (Halkon, Millett & Taylor 1999). As stated by Atha and Roskams “...*there is consistent archaeological evidence for significant shifts in behaviour before the main thrust of change...*” (2012, 82). This is both true of the Iron Age to Roman and the Late Roman to Post-Roman periods. That is to say that change was evident in the Late Iron Age prior to the Roman invasion. This is perhaps most visible in the south-east where the tribes were already somewhat ‘Romanised’ through their trade with the continent before 43AD and were, as a result, more accepting of Roman administration than the tribes to the north and west. Cunliffe’s summary of the first centuries BC and AD demonstrates this. The Britain of the Late Iron Age can be seen as one of pre-Romano-British culture, albeit with regional variations.

6.3 The Yorkshire Region in the Roman Period

Roman rule had a varied impact across the Yorkshire region. Certain areas were more Romanised than others, as were various aspects of daily life (see Chapter 1 for a discussion of Romanisation). This section will discuss what is known about the Yorkshire region during the period of Roman administration. It will assess what, if any, impact the Roman conquest had on the lives of the majority of the region’s population and examine how lifestyles in Yorkshire changed over the course of four centuries.

On their arrival into the Yorkshire region the Roman army would have encountered a landscape of formal boundaries, varied local production and trade, with the distinctive burials of the middle Iron Age still upstanding in the landscape. Ottaway (2013, 155-158) discusses the impact of the Roman conquest in the succeeding fifty years after the invasion of the North. He seems to have chosen this figure at random and gives no justification as to why – perhaps it was an attempt to outline the immediate impact of the conquest in the Yorkshire region, the effects felt within a generation. Alternatively, the date Ottaway uses approximately coincides with the changes in the military deployment that followed the construction of Hadrian's Wall and led to a period of around forty years of reduced military occupation of Yorkshire and the Pennines (Mattingly 2007). Extrapolating from Ottaway's discussion, it is possible to view the impact of the conquest in Yorkshire in the short, medium and long terms. The following will argue that the adoption of Roman culture and the Romanisation of life in Yorkshire was a gradual process, which, excluding a few immediate changes, was not fully felt until the late second or third centuries. It should be noted that Roman landscapes in Britain have been studied in a particular way, most frequently in relation to the towns and major settlements, however this narrow view does not consider many other aspects of life in the province and thus cannot provide a complete picture.

In the short term, broadly encompassing the late first and early second centuries, the greatest impact would have been felt in the landscapes surrounding the newly established forts. The arrival of the Roman army and administration resulted in a population increase of approximately 7-8%, which in turn placed a greater demand on the surrounding landscapes to provide food and other resources (Ottaway 2013, 155-156). There was some resistance, for example from Venutius, but it was short-lived (Ottaway 2013).

The invasion is unlikely to have had a great impact over much of the rural areas of Yorkshire. Ottaway (2013) underlines the lack of early Roman pottery found on 'native' sites in the

region and suggests that Roman pottery was not adopted (in general, there are always exceptions) in these areas in the period immediately after the invasion of the North because native food preparation and consumption methods remained largely unchanged, the same being said for other aspects of life such as religion, art and burial. The most tangible and immediate changes experienced by Yorkshire's population would have been whom they paid their taxes to (now a Roman administrative representative), perhaps how they paid them (use of coinage would have increased with the arrival of the army), and the presence of Roman patrols and troop movements that would have been visible across the landscape. They would also have witnessed Roman burial rites as the army and civilian contingents disposed of their dead.

In the medium term, broadly the second and third centuries, Roman administration would have had a much greater impact on the Yorkshire region. These centuries saw more gradual changes such as the development of urban centres. There is a long standing and varied debate surrounding Roman towns in Britain and there has been much confusion over what actually constituted a town in the period (for example: Wilson et al 1984; Wachter 1995; Brown 1995). This confusion has been caused, for the most part, by the terminology used in the ancient texts to describe urban settlements (Wachter 1995, 15-16), as well as modern attempts to assign meanings to these terms.

Wachter (1995, 17-19) provides descriptions of four types of town that were classified as administrative centres in Roman Britain. *Coloniae* were usually established to provide land for discharged soldiers thus their population was largely made up of army veterans, and Roman citizens. They received a charter from the central government on their foundation and many of them occupied sites of earlier invasion forts such as Colchester, Gloucester and Lincoln. *Municipia* were chartered towns but of a lower rank than *coloniae*. They could possess full Roman rights or only Latin rights and could retain some native laws alongside

those of Rome. Verulamium (St Albans) is the only *municipium* in Britain known to have a *municipial* charter, most likely with Latin rights. Both *coloniae* and *municipia* each had a *territorium* attached to them and residents were granted a portion of land there as well as in the town. There is no known evidence in Britain for the size of *territoria*.

The third type of administrative town was the *vicus* (plural *vici*). This term usually describes the settlements that grew outside many of the Roman forts in Britain. But there is a lot of confusion surrounding this term. It was used in the ancient texts to describe settlements of various sizes and importance from cities and towns, to villages. To further complicate matters, cities and towns could be divided into zones that were known as *vici*. These settlements contained a mostly native population but there would have been a number of Roman citizens present also. A *vicus* could be promoted to the status of *colonia*, but usually attained the status of *municipium* first. York is the only known *vicus* in Britain to have been promoted straight to the status of *colonia*, probably sometime in the early third century (Wacher 1995, 167).

The final type of town described by Wacher are the *civitas* capitals. *Civitas* as a term did not exist in the Roman period, having been applied to settlements in modern times. Many of the sites chosen to be *civitas* capitals were pre-existing native centres or newly formed *vici* outside of forts. These capitals had certain administrative, political, protective, economic and educational duties and contained the provisions and amenities considered essential to Roman urban life. In terms of physical attributes, *civitas* capitals had colonnaded/arcaded streets, a bath house, covered and open air markets, a running water supply, adequate drainage, comfortable town houses, and entertainment in the form of a theatre and/or an amphitheatre. It should be noted that not all tribal territories had their own *civitas* as not all were released from military administration. Wacher (1995, 3) notes that some (e.g. Rivet 1969) argue that *civitates* existed physically before the conquest as well as after it, while

others (e.g. Frere 1987) argue that they only existed after Roman military control was removed from an area: he surmises that in reality the truth lay somewhere between the two ends of the spectrum.

York, or *Eboracum*, is perhaps the best known Roman town in Yorkshire. It developed from the vicus around the fort and acquired the status of *colonia* although perhaps in an honorary capacity. There are two known *civitas* capitals in Yorkshire: Brough-on-Humber and Aldborough. The former is believed to be *Petuaria*, the *civitas* capital of the Parisi that developed on the site of a fort established in c71-72AD and abandoned c125AD. The latter is thought to be *Isurium Brigantium*, the *civitas* capital of the Brigantes. As a *colonia*, York was attached to provincial government, whereas the *civitates* of Brough and Aldborough were responsible for the local administration of the region (Ottaway 2013, 166).

Brough-on-Humber has been the subject of much archaeological investigation, with some of the most recent work including Atkinson and Evans (2009), Brigham and Fraser (2009), Ottaway (2004), Hunter-Mann et al (2000) and Wilson (ed., 2003). Brough is thought to be the *civitas Parisiorum* based on an inscription detailing the dedication of a theatre stage (Halkon 2013, 133). However, Wachter (1995, 394-401) lists a number of reasons why Brough is not a 'normal' Roman town. These essentially amount to the fact that Brough lacks many features characteristic of a *civitas* capital, and as yet, excavations have only been able to demonstrate an almost entirely military related chronology for the defences around the site. Wachter (1995, 339) went on to suggest that the navy detachment based at Brough and the *civitas* capital may have shared the same enclosure, thus explaining the military defences, but the evidence displays no rush to embrace urbanism and he concluded that Brough as a *civitas* capital was a failed town, much like that at Chelmsford.

Aldborough had begun to develop as a *civitas* capital by the middle of the second century, although not much is known about it archaeologically (Ottaway 2013, 170-173). The only known civic buildings within the capital are those in the forum. This includes several large rooms, baths, part of a house and the only mosaics known to remain in situ north of the River Humber (Ottaway 2013, 172). Aldborough is unusual in that it had its ramparts and stone wall built at the same time – most other towns in the Britain had the rampart built first with the stone wall following sometime later. The reason for this unusual feature is much debated with a multitude of explanations from defensive military reasons, to the control of tolls and people entering the *civitas* (Ottaway 2013, 172-173). The Aldborough Roman Town Project³⁸ is doing much to fill in the gaps. Recent geophysical survey³⁹ has revealed many of the internal features of the town, as far as is possible around modern dwellings, as well as several features in the immediate landscape outside the town walls.

Malton and the accompanying civilian settlement at Norton are recognised as *Delgovicia* (Wilson 2003, 263). There have been several piecemeal excavations of the fort and small town over the twentieth and twenty-first centuries resulting in a somewhat patchy understanding of the settlement throughout the Roman period (e.g. Wenham & Heywood 1997). The fort was established sometime in the first century AD with associated activity outside its walls that is yet to be proven as definitively civilian (Wilson 2003, 263). The civilian area directly outside the fort developed with the continued presence of the Roman military and may well have extended into the fifth century (Wilson 2003, 264). In Norton, the majority of the information pertains from small scale watching briefs, providing discrete

³⁸ Aldborough Roman Town Project: <https://aldboroughromantown.wordpress.com/>

³⁹ Talk on new perspectives on the Roman town at Aldborough, including detailed discussion of the recent geophysical surveys: <https://aldboroughromantown.wordpress.com/2014/03/17/lecture-new-perspectives-on-the-roman-town-of-isurium-brigantum-society-of-antiquaries-february-2014/>

glimpses of a complicated Roman settlement area (Wilson 2003, 265). The occupation on this side of the River Derwent seems to have focused on industrial activities and much evidence has been uncovered relating to the third and fourth century pottery industry there (Wilson 2003, 265). Malton/Norton was important to the Crambeck industry, being one of its closest distribution markets and possibly the staging point for its link to the supply of the military in the North. As such the settlement here and the third/fourth century pottery industry at Norton are discussed in more detail in Chapter 7.

To add to the disagreement over what constituted urban centres in Roman Britain, the term 'small town' is applied to a wide range of settlements. Wachter (1995, 19-20) supplies an outline of the differences between 'small towns' and *civitas* capitals: the *civitates* were planned from their conception and had a regular pattern of streets, whereas 'small towns' grew in an uncoordinated and haphazard way, *civitates* also had an administrative function and level of amenity seldom found in 'small towns'. The administrative and other roles of the *civitas* capital have already been noted and the 'small towns' often had one or more of these functions but they lacked the provisions and amenities that were essential to Roman urban living: it was the quality of life that made the difference between 'small towns' and *civitas* capitals (Wachter 1995, 20). The civilian settlement at Malton and Norton, North Yorkshire, could be described as a 'small town' (Wilson 2006) and it is perhaps necessary to point out that not all such towns were always small in size. This word is more a reflection of their status than of their physical size. There has been growing recognition of the term 'small towns' as an umbrella phrase applied by modern scholars, which is used to describe a variety of settlements, and Burnham (1995, 10) suggests a three tier system under this umbrella based on the amenities and activities available in the urban places.

Rogers (2011) makes some interesting points about Roman 'small towns' in Britain. He points out that many of them have evidence for pre-Roman activity but many were also

established after the conquest, being associated with forts or road networks. Rogers (2011, 179) emphasised that the urban places under the umbrella of ‘small towns’ became more prominent in the late Roman period and are therefore useful case studies for understanding late Roman urbanism. He went on to suggest that the ‘small towns’ were perhaps interpretations of their Mediterranean counterparts (Rogers 2011, 179).

Rogers (2011, 179-180) surmises that despite the buildings within small towns often being simple and not made of stone, the settlements were neither failures, nor were they economically poor, in fact they created alternative ways of living and organising space. As noted in the previous paragraph these settlements appear to have been British interpretations of their Mediterranean counterparts. Roman Yorkshire also contained a myriad of other settlements perhaps best described as villages. These ranged from small collections of houses in the countryside to large roadside settlements such as Shiptonthorpe and Stamford Bridge (see Halkon 2013, 140-144).

It is the emergence and the development of these centres of urban living that have some of the largest concentrations of evidence for the adoption of Roman lifestyles, visible through material culture. These urban places were often trading centres and were almost always next to one or more major routeways be that a road or river. This opened up the opportunities for trade over longer distances both throughout Britain and across the Empire, bringing the Yorkshire population in to contact with a wider range of goods, ideas and religions. Not all of these new facets of life would have been adopted uniformly everywhere but changing fashions would have influenced the types of objects people used and wore as well as the ideas they adopted.

There has been much debate about the study of urban areas, their hinterlands and the countryside as well as the relationship between them. This is perhaps best summarised in

Perring's *Town and Country in England: Frameworks for Archaeological Research* (2002). He highlights how most studies of these relationships have focused on the role of urban areas in economic and social change. Examinations of urban areas are perhaps inevitably focused on discussion of economies although this has been criticised as projecting modern interests into the past (Perring 2002, 3). Growing emphasis has been placed on urban areas as the outcome of social as well as economic influences. Perring proposes a set of questions central to the study of urban landscapes that are essentially concerned with the ways “...towns have contributed to the construction and replication of power, as fabricated from social and economic ties, mediated by ideologies, and expressed in identities.” (Perring 2002, 3).

Perring (2002, 4) goes on to highlight the potential of archaeology to contribute to understanding of the urban – rural relationship. Despite this archaeology in Britain over the past fifty years or so has been focused, largely, on the study of towns. This is partly a result of the need for the discipline to react to development in these urban areas and the effect of legislation such as Planning Policy Guidance 16 (1990). Studies of rural areas have largely failed to project their conclusions onto the urban landscapes, although there are exceptions such as the study of the hinterland of Roman Wroxeter (e.g. Gaffney et al 2000). Examination of the evidence from both rural and urban contexts has the potential to demonstrate the level of interdependence between towns and the countryside. This is particularly true in the case of Roman Britain. Much research on Roman towns has focused on how it became a Roman province although studies have shifted from using urban areas (and military sites) to construct political and military histories to establishing the cultural choices that played a part in the Romanisation of Britain (Perring 2002, 17).

Villas are a settlement type unique to the Roman period. This represents possibly the most visible impact of Roman administration on the countryside throughout Britain, including Yorkshire. The villa was an “...independent rural settlement of much consequence...” and

was “...usually the social and economic focus of a substantial estate.” (Darvill 2008, 489). Villas are more numerous and exist on a grander scale in the south and east of Britain but a handful are also known in Yorkshire. Halkon and Ottaway (both 2013) discuss the many definitions of ‘villa’ and conclude that the term encompasses many different settlement types. There is a general consensus that villas, particularly the larger grander ones, were the centres of agricultural estates, it being no accident that the known villas of Yorkshire are all situated on excellent agricultural land (Halkon 2013, 168). Their emergence in the region’s landscape in the second century and their ‘hey day’ in Yorkshire throughout the third and fourth centuries represents what is perhaps the most noticeable impact of Roman administration on the Yorkshire countryside. Many villas were established or developed on the basis of economic success such as that at Welton Wold which Halkon (2013, 171) speculates was funded by the exploitation of the Welton chalk.

The majority of settlement in the rural landscape of Yorkshire continued much as it had done in the Iron Age, with many of the boundary ditches remaining in use at least until the third century and the roundhouse being the dominant building type (Ottaway 2013, 181). Many of the existing settlement clusters had continued occupation at least some way into the Roman period and new ones were established throughout the landscape but perhaps were not much visibly different from their Iron Age counterparts. Some of the buildings were eventually constructed from stone although the majority were not (Ottaway 2013, 181-182). For the most part, rural settlement in Roman Yorkshire was much the same as it was in the Late Iron Age with the addition of stone buildings and the enigma that were the villas. Large parts of Yorkshire were still characterised by enclosed landscapes throughout much of the Roman period although settlements within these landscapes had a greater variety of building types than previously seen (Ottaway 2013, 193).

A similar picture can be seen with agriculture and manufacture, much of it continuing as it had done in the Iron Age, although on a larger scale. One area of industry that saw noticeable changes was the production of pottery. In stark contrast to the Iron Age, there were a large number of well-established pottery industries in the region including York (although this was mainly military; Monaghan 1997), Holme-on-Spalding Moor (Halkon 2002), Rossington Bridge (Doncaster) (Buckland et al 2001), Norton (Malton) (Corder et al 1950), Catterick (Wilson 2002), and Crambeck. (For a detailed discussion of Roman pottery production in Yorkshire see section 6.4 below and Chapter 7). These industries produced a wide range of vessel forms in a variety of fabrics. Ottaway emphasises that:

“It is clear that until the mid-second century people in many parts of the Yorkshire region used mainly hand-made pottery, largely cooking jars, in the native tradition. This only gradually died out to be replaced by mass-produced wheel-made vessels of Roman types, hitherto largely confined to York and a few other major settlements.” (Ottaway 2013, 199-200)

It is possible to see differentiation in the use of pottery in various settlement types throughout the Roman period. For example, urban and military sites used more fine wares and specialised forms, such as amphorae and mortaria, than rural sites (Halkon 2013, 145), although that is not to say these specialised products were entirely absent from the rural settlements. The adoption of a culture influenced by Roman administration is visible through certain types of pottery including amphorae and mortaria. These were used for specific aspects of Roman food transport and preparation respectively.

Pottery is the most visible of the industrial materials but it is clear that there was substantial industrial activity across Roman Yorkshire although some of these products are most visible to archaeological investigation through their associated tools, for example, loom weights and spindle whorls being indicative of wool processing (Halkon 2013, 203).

Aside from forms of pottery, other new objects were introduced into Roman Yorkshire, including tiles (*tegulae*, *imbrices*, and box flues) and mosaics. Many of these were specific to certain aspects of a Roman influenced lifestyle, particularly the mosaics and box flues, the latter being used for under floor heating common in bath houses and villas.

Perhaps surprisingly, there are few known Roman burials in East Yorkshire compared to the Iron Age. There are approximately four hundred and fifty Roman burials in the region, of which 14% are cremations, compared to several thousand known Iron Age burials (Halkon 2013, 214). This can mostly be ascribed to the unique nature of Arras culture burials in Yorkshire. The cemeteries of Roman Yorkshire are considerably less visible to archaeological techniques compared to the large square barrow monuments of the middle Iron Age. Many Roman burials occur outside the major towns and settlements such as York, Malton, Norton and Aldborough. This followed the well-known Roman legal requirement of burying the dead outside of the area occupied by the living. Of course, the growth and change of settlements over time occasionally brought the cemeteries much closer to the areas of occupation. However, in contrast to this legal necessity, some burials were within settlements, particularly in the countryside. Halkon (2013, 219) summarises burial in the rural hinterland of the Parisi during the Roman period, suggesting that like settlements, burials did not change much from the late Iron Age tradition although stone and lead coffins in some burials indicate a difference in social status or cultural identity.

Generally speaking, although with some exception, burial practices in Yorkshire conformed to those elsewhere in Roman Britain. Cremation became popular in the early Roman period (e.g. Halkon 2013 in reference to Hayton and Shiptonthorpe) but inhumation had become predominant again by the middle of the second century. Cremation did continue throughout the later Roman period, remaining 'current' within elite social circles (Ottaway 2013, 224). A possible example of this, discussed in greater detail in Chapter 5, is the fourth century

cremation of a child at the Crambeck site, buried with over seventy glass and worked jet beads.

In the fourth century there was some effort in the larger settlements, such as York, to ‘fill in the gaps’ between the earlier cemeteries and the domestic living areas. In the rural areas known fourth century burials are rare, usually occurring in ones and twos on the margins of what were likely to have been fields (Ottaway 2013, 289). Crambeck appears to have been an exception to this as is discussed in Chapter 5.

It is clear from the developments outlined here that the arrival of Roman administration had some initial impact across Yorkshire. In spite of this, change and the adoption to varying degrees of a lifestyle influenced by Rome was perhaps more gradual, particularly in the rural areas of the region, and was not truly prominent across much of Yorkshire until the late second or third centuries. Ottaway (2013, 129-131) surmises this point by suggesting that the conquest had very little immediate impact in the rural areas of Yorkshire and Britain generally with Roman commodities such as Samian ware, mortaria and amphorae being relatively scarce in rural landscapes until the middle of the second century. He suggests that more of an impact would have been felt in the environs of the fortresses established as a consequence of conquest, e.g. around Eboracum (York) due to the army’s need for food and resources (Ottaway 2013, 129-131). Ottaway (2013, 157) took this point a step further by suggesting that the real force for change in Yorkshire was not the conquest itself but the movement of people, goods and ideas throughout Britannia.

In the fourth century, and possibly slightly earlier, the Roman Empire began to decline, as did its influence over the province of Britannia. The fourth century saw the Roman Empire becoming increasingly unstable with ‘Barbarian’ raids and incursions into its territories, including Britain, as its political and military might weakened. There is significantly less

archaeological evidence in Yorkshire for the second half of the fourth century than the years prior to this with some suggesting that the level of activity that produced visible archaeological evidence (e.g. building, waste disposal etc.) was lower than it had been in the first half of the fourth century (Ottaway 2013, 291-292). However, this is somewhat implausible, a more likely explanation being that the evidence has yet to be found. There is some evidence for the strengthening and repair of town and fort defences in Yorkshire in the mid to late fourth century although there was no new construction in the latter part of the period (see Ottaway 2013).

The size and success of the towns and major settlements fluctuated with the decline in the economic capability of the province and the Empire generally. Some suggest that the occupation of many of these places continued into the later fourth century and even into the fifth but on a reduced scale (for example Ottaway 2013; Rogers 2011). In Yorkshire, the town at Catterick is known to have continued occupation throughout the fourth century and does not seem to have been in obvious decline although it is unclear how far into the fifth century it survived (Wilson 2002; Ottaway 2013, 303-304). At Norton, pottery production ended, at least on any large scale, soon after the middle of the fourth century, coinciding with a decline in occupational activity (Ottaway 2013, 305). Crambeck ware in the fourth century seems to be somewhat of an enigma with its high and consistent level of distribution across the North of Britain, as other local sources seem to have returned to a pattern of distribution closer to that of the Iron Age (Ottaway 2013, 313). Production of calcite-gritted ware seems to have continued throughout the fourth century and into the fifth (see Chapter 7).

Due to the widespread lack of diagnostic material culture that can be closely dated to the fifth century, there being a lack of newly minted coinage nor any as yet identified distinctive pottery wares (although some headway is being made in this respect, for example Gerrard

2004), little can be said with any certainty about the end of Roman Yorkshire and the province generally (Ottaway 2013, 318). This lack of tangible evidence has led to many problems and misconceptions, such as the sudden migration of people to the Continent, in the study of the end of Roman Britain and the fifth century (Cool 2014, 13). Industries such as Crambeck and the calcite-gritted wares seem to have continued at least for a short time into the fifth century despite the removal of the military demand. In Yorkshire there is a selection of hand-made pottery wares that some suggest represent somewhat of a return to a potting tradition similar to that of the late Iron Age although specific dating is evasive (Ottaway 2013, 318). However, these calcite-gritted wares were present throughout the Roman period even when wheelthrown pottery was freely available (e.g. Swan 2002), suggesting that there was a decline in the finer wares that corresponded with an increase in use of these coarser fabrics.

Ultimately, as Ottaway (2013, 318-319) suggests, the prevailing opinion of an apocalyptic end to Roman Yorkshire (and Britannia) cannot be reasonably sustained, with a gentle transition to the post-Roman period being far more likely given current evidence. Dark (2002) supports this more gradual view of post-Roman change. He suggests that most aspects of Romano-British culture did not suddenly and dramatically end, but instead ‘wound down’ over the fifth and sixth centuries. Dark takes the view that fifth and sixth century Britain was dominated by a British Romano-Christian culture, and it was the profound changes of the period that led to its decline and the rise of an Anglo-Saxon culture.

It is probable that the settlements and cultural fashions of the region changed gradually through the fifth century with the impact of new external influences (e.g. that of the Anglo-Saxons) and that of internal development. Just as the arrival of the Roman administration had a varying impact across much of the Yorkshire region and the rest of Britain, so did its departure, with life continuing much as it had done in the later Roman period before small

changes over a protracted period resulted in a new historically defined era, that of the Anglo-Saxons. What it meant to be a ‘Roman’ living a ‘Roman lifestyle’ changed over the fourth and fifth centuries, eventually blurring into ‘Anglo-Saxon’ culture but the question must be posed whether all aspects of Roman life every truly disappeared from England (White 2007).

6.4 Romano–British Pottery in the North of England, First to the Fifth Centuries AD

This section will give a brief account of pottery production in the Yorkshire region throughout the Iron Age and Roman periods. This is a generalised account as it is not the aim here to examine in detail all the Romano-British pottery industries of Yorkshire and the North. A comparison between some of the industries and Crambeck is made in Chapter 7.

Late Pre-Roman Iron Age

Pottery in the Iron Age was not a universally produced commodity. Many parts of Yorkshire and the North were aceramic although there was a tradition of pottery production in the east between the Rivers Humber and Tees that continued to flourish into the Roman period (Ottaway 2013, 82). Ottaway and Halkon (both 2013) agree there was a stark contrast between the sophistication and skill employed in the production of pottery compared to that of metalworking. The wares of Iron Age Yorkshire were handmade, fired in bonfire or clamp kilns, universally dark in colour, and contained large inclusions of flint, shell, or calcite. There is some suggestion that pottery in the Iron Age would have been a part-time occupation undertaken by farmers when the seasonal calendar allowed the time, there were no ‘professional’ full-time potters as there were in the Roman period. This may indeed have been the case but there is no certain evidence suggesting this that has been identified in the archaeological record. If Iron Age production was a seasonal activity, there is no evidence from the Roman period to suggest it could not have remained so. The increased demand

would have required a higher volume of vessels produced but this may have been solved by increasing the number of workers rather than producing pottery year-round.

Vessel forms created in the Iron Age were dictated by the functions the pots were required to perform, there being a distinct lack of those produced for decorative purposes. The most common forms produced in the Iron Age were bowls and jars (Halkon 2013, 111). The British Museum East Yorkshire Settlement Project (Rigby 2004) provided a generalised typology of pottery in the region throughout the Iron Age which demonstrated the functionality of the vessels produced. Pottery was used for practical purposes such as storage, food preparation and cooking although finer vessels may have been given as gifts (Halkon 2013, 109). Pots are frequently found in the Type A square barrow burials of the Arras culture, where the body is crouched or contracted, head to the north facing east and often accompanied by a ceramic vessel and the foreleg of a sheep (Halkon 2013, 75, 109). Pottery in East Yorkshire would have been produced in small quantities compared to the Roman period and was most likely the part-time occupation of farmers (Ottaway 2013, 135). Distribution would have been very local although in some cases vessels could have travelled up to twenty kilometres, approximately twelve miles (Halkon 2013, 109).

There is some evidence for the continuation of Iron Age potting traditions into and throughout the Roman period. Perhaps the best examples of this are calcite-gritted and Black Burnished wares which were made in the Iron Age throughout Yorkshire and in the south-west of Britain respectively, and their production continued into the Roman period. These indigenous wares did not suit the needs of the Roman military but they continued to be used throughout the first to fourth centuries AD in civilian and rural contexts, with the late third century seeing an increased commercialisation of the indigenous calcite-gritted potteries of East Yorkshire (Swan 2002).

There is some evidence from the Norton industry to suggest that calcite-gritted wares were being produced at the same time as the Romano-British Norton fabrics and may even have been fired in the same kilns (Swan 1984, 110; see Chapter 7). There is some evidence to suggest a similar situation at Crambeck (see Chapter 7). It may be that in the case of these industries, there was a tradition of producing calcite-gritted fabrics in their landscapes long before the Romanised wares of the fourth century, perhaps originating in the Iron Age. Generally speaking, the calcite-gritted fabrics are the precursor to the Roman potteries of Yorkshire and the North more widely. The forms of calcite-gritted and Black Burnished pottery only saw development in the late second and early third centuries, undergoing a degree of 'Romanisation'. But for the most part they remained the same large cooking and storage vessels that were produced in the pre-Roman Iron Age.

It is possible, therefore, through a consideration of the calcite-gritted and Black Burnished fabrics to demonstrate the lack of impact Roman administration had on the indigenous potting traditions. Throughout the first, second and early third centuries these fabrics remained the dominant pottery type across much of the North and Britain with the more Romanised and imported fabrics being largely restricted to military and urban sites. It was only in the late second and early third centuries that they became more Roman in form although they remained the recognisable and functional kitchen wares. Their production continued throughout the fourth century reaching a peak late in the period and, at least in the case of Black Burnished wares (e.g. Gerrard 2004), continued after the end of Roman administration although their ultimate longevity has yet to be established. It was the calcite-gritted and Crambeck fabrics that dominated the markets across the North of Britain in the fourth century into the fifth, and the former fabrics certainly bear more resemblance to their Iron Age predecessors and their Anglo-Saxon successors than to their contemporary Roman cousins.

Impact of Conquest

The arrival of the Roman army in Yorkshire did have a considerable impact in some places in the region, for example in the areas around the newly established forts. The military potters brought with them the more sophisticated ‘up-draught type’ kilns and the potters’ wheel. In the early Roman period, local production could not support the ceramic needs of the army in terms of specialised vessel forms and the quality of their finish so military production centres were established, for example at York (Monaghan 1997) and Rossington Bridge, Doncaster (Buckland et al 2001) (Ottaway 2013, 141). Imports from the continent were also increasingly prevalent including types of Samian ware.

In the larger settlements (e.g. Malton, e.g. Wilson ed. 2003; and Brough-on-Humber, e.g. Hunter-Mann et al 2000) the variety of pottery present in the late first and early second centuries demonstrates the degree to which aspects of Roman cuisine in the form of mortaria and amphorae as well as the good quality tableware (e.g. Samian) was adopted (Halkon 2013, 145). This contrasts with rural sites where ceramics of Roman form were far less prevalent and is perhaps representative of the speed the ‘Roman lifestyle’ was adopted in different parts of the county. The conquest also brought with it craft specialists (Ottaway 2013, 135). These were initially attached to the military but by the second century had become civilian members of society and heralded the beginning of more industrialised production.

The industries at Rossington Bridge (e.g. Buckland et al 2001) and York (e.g. Monaghan 1997) do not have pre-Roman histories of pottery production, it is the arrival of the army that provides the context for its introduction in these places. The industry at Rossington demonstrates the movement of pottery production from military control to a civilian industry. It was introduced by the army into the region but enough of Roman techniques and

forms had been adopted by the third century for the civilian production to become dominant. Essentially the industry had two peaks of production. One in the first to second century when the army arrived in the area and began producing pottery to fulfil its own needs, and the other when the administration of the area was more civil than martial and civilian potters had taken over the majority of production. The pottery industry at York certainly had its roots in military production and also saw a change to a civilian dominated industry in the third century but it is a unique place in Yorkshire and as such has a different history to the majority of the region.

Second Century

Ottaway (2013, 199-200) notes that excavation evidence demonstrates how hand-made pottery in the “native tradition”, mostly cooking jars, were used in many parts of Yorkshire until the middle of the second century when this began to gradually die out and be replaced by mass-produced wheel-made vessels of Roman forms, previously confined to the larger settlements such as York. This supports the suggestion that the impact of conquest was not wholly felt in Yorkshire, and much of the North, until the late second or third century. It was also in the mid second century that direct military involvement in pottery production ceased with the emergence of civilian centres that were able to fulfil the regions’ demand – although the two main ‘factories’ of this period were Rossington Bridge (e.g. Buckland et al 2001) and York (e.g. Monaghan 1997). There were other smaller production centres in the second century such as Catterick and Aldborough, some of which expanded in the third century. The second century saw the expansion of the trade network expedited by the construction of new roads which facilitated the distribution of the civilian-produced pottery vessels.

Third Century

The third century saw the growth of the non-military industries in Yorkshire, including Holme-on-Spalding Moor (e.g. Halkon 2002), Norton (e.g. Corder et al 1950) and Crambeck, as a result of increasing demand for wheel-thrown and kiln-fired vessels fuelled by the expansion of the major settlements (Halkon 2013, 187). Halkon (2013, 188) suggests the introduction of lower value copper-alloy coinage led to wider participation in a monetised economy and therefore a demand for a greater variety of goods, including types of pottery vessel. However, the demand for more Roman style pottery is more likely to have stemmed from a combination of increasing adoption of a 'Roman lifestyle' and wider availability of 'small change'. Trade and the expansion of the economy reached their peak in this century with the potential for ceramics to be distributed far from their place of origin, in some cases aided by military demand.

Fourth to Fifth Centuries

The mid to late fourth century saw the end of production for many of Yorkshire's pottery industries including Norton (e.g. Corder et al 1950), although pottery centres such as Crambeck and calcite gritted ware filled the subsequent gap in the market. As fashions and tastes began to change once more, ahead of the post-Roman culture in the fifth and sixth centuries, demand for Roman style vessels dropped. The departure of the military whose soldiers had always provided high demand for such specialised vessel forms also impacted on the decreasing production levels. It is enough to emphasise that the production of indigenous wares and forms seems to have continued into the fifth century although for how long is unknown. Production of pottery eventually lost its industrial nature, returning to production in much smaller quantities. This is likely to have occurred gradually over the fifth century. It is not implausible to suggest that in some shape or form, the production of

the indigenous wares continued into the sixth century, eventually merging with Saxon influences.

6.5 Summary

This chapter has given a chronological regional discussion of Yorkshire, thus providing context for later considerations of the Crambeck industry and its landscape. It has discussed how the landscape of the Yorkshire region altered throughout time, with the changing role of monumental structures evident. The impact of the Roman invasion has been considered and the varying nature of Roman administration over the region emphasised. A brief account of Romano-British pottery in the North of England from the first to the fifth centuries AD has provided an industry specific context for the analysis of Crambeck and its wares.

The following chapter will draw comparisons between the Crambeck industry and other Roman pottery manufacturers in Britain, considering issues including location, landscape, wares, clay source, and distribution methods.

Chapter 7 Comparing Crambeck to other Major Romano-British Pottery Industries and their Landscapes

Pottery in the North of England from the Iron Age to the post-Roman period has already been examined in some detail in Chapter 6. This chapter seeks to set the Crambeck industry in the wider context of late Romano-British pottery production. It will discuss other Yorkshire production centres that are roughly contemporary with, or geographically related to Crambeck (7.1) including the Norton, Holme-on-Spalding Moor, Catterick and Rossington Bridge industries. Various thematic aspects of the industries including kilns and clay sources, forms and fabrics, as well as their landscape contexts, will then be examined (7.2). The chapter will end with a summary (7.3).

Crambeck wares are a significant signal of Romanisation north of the River Humber, indicating a regional identity. The striking distribution of the industry, no further south than the Humber and up to the western end of Hadrian's Wall, may be linked to the fragmented regionality of the late Roman province. Therefore, pottery is useful indicator of identity and cultural change. However, the focus of this research is the Roman landscape context of Crambeck production. It concentrates on how Roman or otherwise this landscape context of production was at Crambeck. Whilst this could encompass issues of style and use, it is the technology and landscape context that remain the focus in this thesis.

7.1 Other Romano-British Yorkshire Production Centres

This section will examine four Yorkshire pottery industries that are either broadly contemporary with Crambeck or have a geographical relation to it, that is to say, is in the same region. The case by case discussion will begin with the industries closest to Crambeck (Norton and Holme-on-Spalding Moor) and move onto those further away but still within Yorkshire (Catterick and Rossington Bridge). A discussion of each industry will be followed

by analysis of its similarities to Crambeck. There is scope in future research to focus on the environmental resources aspects of the pottery industries, for example, the mapping of clay sources. Although the role of such resources is recognised here, it is not the main focus of this research.

Norton

Swan and Evans provide similar assessments of the Norton industry (1984; 1985 respectively).

The fort at Malton was established in the late first century and Norton developed soon after as the industrial sector of the corresponding vicus. Similar to the Catterick (Wilson 2002) and Rossington (Buckland et al 2001) industries, that at Norton seems to have had military origins and its success appears to have been rooted in military demand. However, unlike these others, there was a pre-existing Iron Age pottery industry in the region surrounding Norton consisting of handmade calcite-gritted cooking pots fired in clamps in or near to local settlements such as at Knapton (Corder & Kirk 1932). In the late first and second centuries these local potters seem to have improved and extended their range of forms and adopted Roman style kilns in order to provide vessels to the Malton garrison. However, this would have only resulted in a very small part of the garrison's supply, most of their needs being met by their own military potters.

Pottery production on an industrial scale emerged at Norton in the third century. It likely had origins in the late second century in the wake of the reoccupation of the fort, e.g. at Malton, but identified kilns date no earlier than first part of the third century. The character of the kilns and their products have parallels with the North Lincolnshire industries suggesting the presence of non-local potters. Most of the Norton vessels were wheel-thrown greywares although there is evidence for the production of a calcite-gritted ware being made on the site

and Swan (1984, 110) suggests they may even have been fired in the same kilns. Swan (1984), taking inspiration from Hayes and Whitley (1950), sums up the Norton industry and its impact on the pre-existing ceramic tradition as follows:

“The establishment of Romano-British pottery workshops at Norton could well have advanced the technology of the native industry by introducing proper kilns. It could also have made it more centralised, by attracting indigenous rural potters to move their workshops into the Norton industrial complex and share raw materials and drying facilities...”
(Swan 1984, 110)

Evans (1985), for the most part, agrees with Swan’s account of the Norton industry but provides greater detail. There is no immediately obvious clay source for the industry and it is therefore likely to be under the Derwent alluvial sand. There is scope in future research to attempt to map nearby clay sources. The site itself had excellent transport links, by the River Derwent to the south, and by road to the coast, Brough-on-Humber, York and the main road to the North and the frontier. It is the only known East Yorkshire industry located on the edge of a small town with the vicus and fort providing its main distribution market. There is some evidence for the development of potting technology at the site with a chronological change over the third to fourth centuries from pear shaped to circular kilns and from clay lined to stone lined flues. It is difficult to suggest a clear origin for the Norton industry, the variety of its kiln furniture clouds the picture, although it is clear there was some influence from the North Lincolnshire industries and more generally from Holme-on-Spalding Moor. Norton ware had a fairly even distribution across East Yorkshire and some in the North-East, although the latter was in very small quantities. The Norton products developed with speed and success in the third century but were losing markets in East Yorkshire in the early fourth century and had suffered its demise by the mid to late part of the same century. The Norton

industry had lost the market at Brough-on-Humber by the fourth century possibly due to the dominance of other industries in the area, such as Crambeck.

Norton and Crambeck

There are some similarities between Norton and Crambeck, both being industries primarily producing greyware vessels. Norton has a pre-existing Iron Age tradition that developed into a commercialised industry producing Romano-British forms in the late third to fourth century. It is plausible to argue a similar situation for the Crambeck industry. The quantity of calcite-gritted ware at the site could suggest its production there. Any earlier production of such vessels may not have occurred at Jamie's Craggs, but does seem likely to have been in the immediate landscape (see Chapter 5). Both industries at Norton and Crambeck have evidence for stone lined flues. This was a somewhat logical development in kiln construction as it prolonged the working life of a kiln. Stone lined flues are also present at Crambeck and would have extended the working life of a kiln. Such similarities led some, such as Swan (1984, 111), to suggest that Crambeck was established by migrant potters from Norton, although this is not widely accepted.

The suggestion has been made that the Norton kilns were built into structures to protect them from the elements (Evans 1985) and a similar situation may have existed at Crambeck. Corder (1989a) described the proximity of paving to Kiln C in his 1920s excavation report, surmising it was an external surface but it may well have been the floor of a structure similar to those suggested by Evans (1985) at Norton. Furthermore, Norton displays a degree of specialisation between the products of individual kilns, a facet which is also evidenced at Crambeck with certain kilns concentrating on the production of certain fabrics and forms (see Chapter 5). The Norton industry suffered as a result of the success of the Crambeck wares, ceasing production half a century or more before its rival.

Holme-on-Spalding Moor

The area around Holme-on-Spalding Moor was a focus for industrial activity in the Iron Age and through into the Roman period, although pottery production there did not start until the late second or early third centuries (Halkon 1987). The pottery industry was spread out across the landscape and Evans (1985, 93-99) suggests Throlam was at its centre. Evans (1985) and Swan (2002) give similar descriptions of this industry and the following is summarised from them.

It had good transport links along various rivers to the north, west and south and was close to the major north road running towards York. Two other nearby roads ran to Shiptonthorpe and between York and Brough-on-Humber. The kiln structures and vessel forms indicate the industry derived from those in North Lincolnshire. The Holme kilns produced reduced grey-brown wheel thrown vessels in Romanised fabrics mainly used for culinary purposes. There were several Black Burnished Ware imitations and there was a particularly strong emphasis on large handled jars and other storage vessels. The industry expanded throughout the third century, reaching its peak early in the fourth. Its distribution was limited to the southern part of East Yorkshire, largely as a result of local competition in the north of the region from Norton and the emerging Crambeck industry. Swan (2002, 63) suggests that its vessel forms seem to have been largely geared towards 'rural tastes'.

Holme-on-Spalding Moor and Crambeck

There are some similarities between the Holme and Crambeck industries. It has already been discussed in Chapter 5, that it seems as though the Crambeck potters were importing some of the vessels they required for everyday tasks from the Holme industries, there being a reasonable quantity of the ware on the site. This is interesting as it poses the question of why

the Crambeck potters were not making all the vessels they needed themselves, instead importing at least some of them from an industry that produced very similar wares.

Both the Holme and Crambeck industries appear to have been spread out across their respective landscapes but with a focus of production at their centre; Throlam being the focus for Holme and Jamie's Craggs for Crambeck. At the latter the outlying sites do not appear to have been as large as that at Jamie's Craggs. As already mentioned, there is a close resemblance in some forms between Throlam and Crambeck, leading to the suggestion some of the potters moved from the former to the latter.

Production in the Holme landscape does not appear to have continued into the fifth century as it did at Crambeck and it likely suffered its demise in the mid to late fourth century as a result of competition from the increasingly popular Crambeck forms.

Catterick

The volume *Cataractonium: Roman Catterick and its Hinterland, Excavations and Research 1958 – 1997* (Wilson ed. 2002) provides the most recent synthesis of the Roman occupation at the site and it is from this that the following summary of its pottery industry is taken (*Discussion of the Mortaria*, Evans, J. pp243–245; and *Synthesis of the Catterick Pottery*, Evans, J. pp246–249, both in Wilson 2002).

There are a number of identified sites at Catterick that all seem to have been established around 80–90 AD with occupation ending in the mid to late fourth century. Occupation was not necessarily continuous at all sites, for example there was a decline in activity around 120 AD when the fort was abandoned but it had recovered by the 160s AD. Roman pottery production at Catterick has military origins and although there was a pre-conquest Iron Age tradition in the region. Evans suggests that Catterick seems to have acted as a market centre for its hinterland and its economic role seems to have been derived from pottery. He suggests

that Catterick was connected to a “flow of trade” from the East Midlands via the River Humber throughout the Roman period. The primary recipient of its pottery vessels appears to have been the army and Catterick acted as a supply centre for parts of the frontier at Hadrian’s Wall.

The first Roman pottery produced at the site was by the local garrison to supply its own needs, with perhaps some red wares coming from South Yorkshire or Lincolnshire. By the second century local industries had emerged, the most prevalent perhaps being that at the Baines site. The pottery supply at Catterick was dominated by sandy greywares that were copies of Black Burnished Ware 1. It is likely that much of this material was produced at or around Catterick although there were several centres in the North producing similar Black Burnished copies (Busby et al 1996). By the third century production of greywares appears to have ceased with supply being dominated by two other local fabrics – a wheel-made gritted ware usually in lid seated jars, and another Black Burnished imitation with hand-burnishing. Both emerged in the late third century and continued until the mid to late fourth century.

Catterick and Crambeck

The early to mid-fourth century saw the emergence of three locally produced fabrics that were copies of those produced at Crambeck. These were likely to be the products of a small industry local to Catterick set up by migrant potters from Crambeck in the latter part of the first half of the fourth century. Distribution of these wares remained fairly local although singular pieces have been found at Binchester and York Minster. The supply of mortaria to Catterick initially from Mancetter Hartshill, followed by Cantley, but was dominated by Crambeck parchment ware forms from the early fourth century, although supply probably began around 290 AD. This was impacted by the local imitation industry from the mid fourth

century and the wares are sufficiently similar to support Evans' suggestion of migrant potters from Crambeck. The copy industry had a dominant part of the mortaria supply to Catterick by the late fourth century.

The pottery industry at Catterick was firmly rooted in military supply and this formed the basis of the town's economy. Crambeck was connected to military supply in a much less direct manner, although it does seem to owe at least some of its success to military demand (e.g. see Evans 1985). This appears to be the extent of the similarities between the two industries.

Rossington Bridge

The works of Buckland et al (2001) and Swan (1984) provide similar assessments of the Rossington Bridge, Doncaster industry and the following is taken from these.

There is some evidence for early Roman pottery production but it is the establishment of the mortaria potters such as Sarrius (known from his vessel stamps) c140 AD that provide the earliest excavated kilns. The immediate landscape was aceramic in the pre-Roman Iron Age although the opposite can be said of the area to the east. The precise origins of the industry are unclear although it is likely to have been with the military in the late first century. The industry at Rossington is partly derived from that at Mancetter and the structure of kilns at both have similarities to those at the Oxfordshire industry. There was enormous expansion of the Rossington industry in the mid to late second century possibly fuelled by the arrival of migrant potters from Mancetter, some, such as Sarrius, seem to have expanded their business to other locations.

The industry produced local Romanised vessel types as well as Black Burnished imitations and had a widespread distribution to northern military sites and the Antonine Wall (Figure 83). This wide distribution had ceased by the late second century, a period which also saw a

change in the vessel types produced. More jars and wide mouthed bowls were made than previously, presumably reflecting a change in main consumer from military to local rural citizens. From the late second century, the industry at Rossington, Doncaster, continued to have a local distribution until its demise in the mid to late fourth century. Its mortaria forms seem to have been influenced more by examples from the Midlands than from the neighbouring Lincolnshire industries but the opposite can be said of the types and forms of kitchen wares, with many of them being firmly rooted in the local ceramic traditions of the North-East.

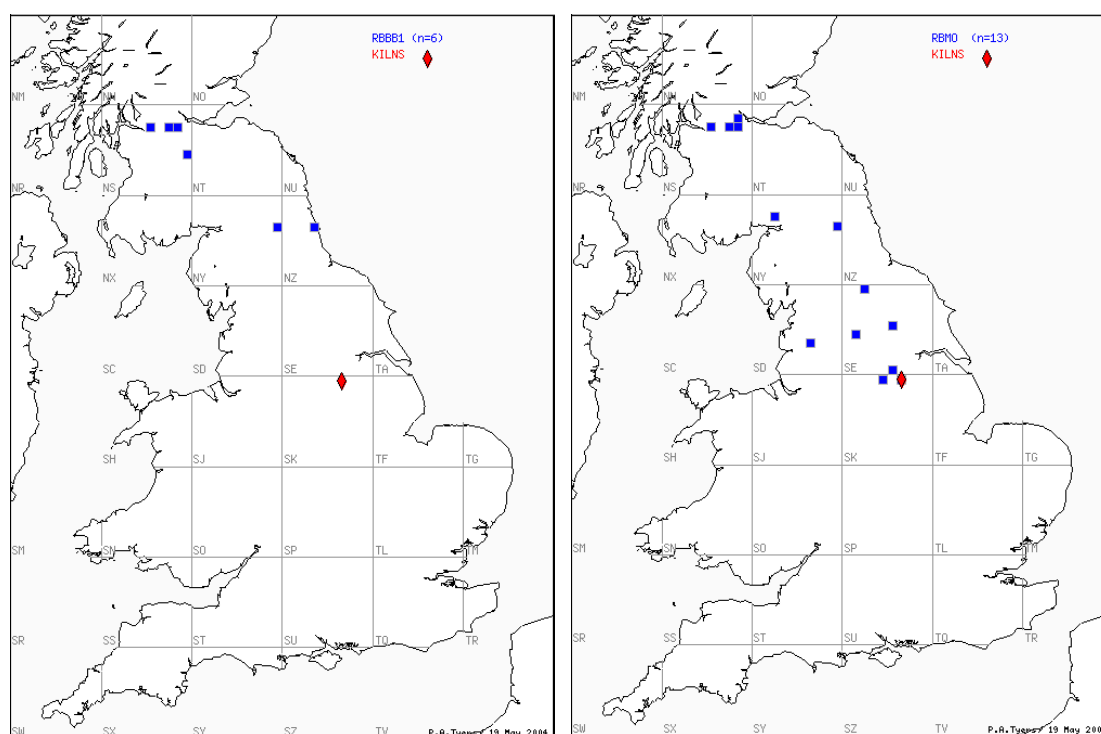


Figure 83 Distribution of Rossington Bridge wares (potsherd.net), black burnished ware (left) and mortaria (right). Maps from potsherd.net.

Rossington and Crambeck

There is not a great deal of similarity between the industries. Rossington was certainly smaller than Crambeck, with a more restricted distribution. However, both industries did

have a connection to the supply of the military. Rossington has its closest similarities with the Catterick industry which produced imitation Crambeck wares.

7.2 Thematic Discussion

This section will examine various themes of pottery production starting with kilns and clay sources before moving onto fabrics and forms, and ending with landscape context. Each theme will discuss the general picture before ending with an examination of how the Crambeck industry fits into this. Nine industries have been analysed: Crambeck, Norton, Holme-on-Spalding Moor, Catterick and Rossington Bridge (Doncaster) from Yorkshire, and Wappenbury, New Forest, Nene Valley, and Black Burnished Ware 1 (Poole Harbour, Dorset) from elsewhere in Britain.

Clay Sources and Kilns

An easily accessible clay source seems to have been a large factor in the location of pottery industries. Of the nine industries analysed here, almost all of the kiln sites are situated on sandy geology, some being associated with gravel and a few with limestone (e.g. Crambeck) or alluvium (e.g. Norton and Black Burnished 1). All are associated with clay. This is present as underlying geology below the sand / gravel / limestone / alluvium / combination of these, or is in the nearby landscape as bands, pockets or outcrops. From this it can be concluded that the industries were situated within easy reach of their primary raw material. Crambeck's geology is sand that overlies limestone with pockets of clay. The most visible clay being on the edges of the Cram Beck valley a short distance downhill from the kilns. However, all the industries discussed in this chapter were located on gravel/sand geology rather than on clay. This was presumably because these sites were nearer to fuel source/s which would have been required much more frequently than the clay, as has been suggested for the Nene Valley industry (Hartley 1960). As already mentioned, there is scope in future research to map and

compare the locations of clay sources of the industries discussed here; although important to the understanding of the industries, this has not been the focus of this research.

All nine industries produced grey kitchen wares, mostly storage jars and cooking pots in indigenous fabrics and forms, although this is not always the most researched aspect of the industries. Some of them had an Iron Age tradition of pottery production if not on the same site, then in the immediate area (for example, Nene Valley and Black Burnished Ware 1). At Wappenbury, the third to fourth century fabric is very similar to that found in the Iron Age deposits on the site, suggesting production in the first century BC/AD although it is not clear whether this was the beginning of a continuous period of production on the site that culminated with the late Roman industry (Stanley and Stanley 1964). In Yorkshire, Norton and Holme-on-Spalding Moor both have links to the Iron Age calcite-gritted wares of the region. At Norton there is evidence for continuous production of this indigenous fabric from the Iron Age through to the late Roman period when, in the third and fourth centuries, calcite-gritted vessels were fired in the same kilns as more Roman fabrics (Swan 1984).

On sites with evidence for an Iron Age tradition, there does seem to have been a consistent shift in the second or third centuries towards the production of the same or similar indigenous vessel forms but in a slightly more Romanised fabric and produced with aspects of Roman technology (e.g. the potter's wheel), for example, at Norton and with the Black Burnished Ware 1 products. Other sites with Iron Age traditions of pottery production have evidence for a gap in the first and second centuries AD but their late Roman industries seem to have resumed production of the traditional greywares alongside more Roman fabrics and forms.

There is some evidence (see Chapters 4 and 5) to suggest an Iron Age tradition of production at Crambeck. There is a substantial amount of calcite-gritted ware on the site, known to have been produced across Yorkshire in the Iron Age as well as features of a similar date. It seems

reasonable to suggest that there may have been a similar situation at Crambeck to that at Norton – traditional fabrics and forms being produced alongside the more Roman versions and possibly in the same kilns.

Some industries seem to show specialisation of production between the kilns to one degree or another, such as Wappenbury and Norton, and a similar situation can be seen at Crambeck. All kilns seem to have been constructed with individual furnaces with the exception of Crambeck (and possibly Catterick) where pairs of furnaces shared a stokehole. Some kilns have associated structures. As noted above, at Norton there is the suggestion that the kilns were built into associated buildings both to protect them from the elements and to utilise their waste heat for drying vessels prior to firing (Evans 1985). This may be evidence of local environmental knowledge manifesting in the adaptation of the kilns to the local environment, although this cannot be proven at present. It is possible that there was a similar association between kilns and structures at Crambeck – Kiln C was surrounded by flagstone paving and there is evidence for associated buildings (Corder 1989a). The origins of some of the industries is visible in the structure of the kilns; those at Holme-on-Spalding Moor (Swan 1984) are similar to kilns of the North Lincolnshire industries, and both Rossington Bridge (Swan 1984) and Wappenbury (Stanley & Stanley 1964) are similar to the Mancetter/Hartshill kilns which themselves are similar to those of the Oxfordshire industry. Evans (1985) and Swan (2002) both refute the suggestion that the Crambeck industry was established by potters from Norton (e.g. Swan 1984). This was based on the perceived similarities between the kilns.

However, both authors suggest that the industry actually had more in common with Holme-on-Spalding Moor, although its vessel forms have similarities with a number of industries (Nene Valley, Upex 2008, Hartley 1960; New Forest, Fulford 1975; Oxfordshire, Young 1977, etc.). This makes it difficult to suggest that Crambeck originated from one particular

industry. Not much is known about the structure of the Crambeck kilns given the limited survival of the kiln furniture. The excavation of an intact kiln would allow more detailed discussion of the structure (although whole kilns have been excavated, their internal furniture has not been in place or complete enough to allow such a discussion).

Fabrics and Forms

Some of these industries only produced greywares, in both traditional fabrics and forms as well as more Roman styles (Norton, Corder et al 1950; Catterick, Wilson 2002; Holme-on-Spalding Moor, Halkon 2002; Rossington Bridge, Buckland et al 2001; Black Burnished 1, and Wappenbury, Stanley & Stanley 1964). Crambeck is more like the Nene Valley and New Forest industries in that it produced finewares alongside its grey kitchen wares. The latter two industries are well known for their colour coated wares, a distinctly Roman technique imported from the Continent (Swan 1984). These industries seem to have blended their indigenous aspects with more Roman ones. At Nene Valley the indigenous greywares and the continental finewares were fired in the same loads which meant that the kilns had to be a compromise in structure between indigenous and continental designs. At Norton, a chronological development of kiln structure is visible, from pear to circular furnaces and from clay to stone lined flues (Evans 1985). This may evidence a similar adaptation of continental techniques to Romano-British needs. Perhaps, given its production of both fine and greywares, there was a similar acceptance and adoption of continental techniques at Crambeck.

The industries discussed in this chapter are all, generally speaking, fairly similar to one another in terms of their wares and forms. The majority produced a local greyware as well as some more Romanised wares and forms. All but one of the industries (New Forest, Fulford 1975) has evidence for roots in the Iron Age if not always evidence for continuous pottery

production from that period. All produced one or more of the following: a local tradition ware in native forms, perhaps developing Romano-British forms towards the later Roman period; a Romano-British finer ware(s) usually with Roman forms and some form of decoration; some produced wares that were far more Roman in style and form (e.g. New Forest, Fulford 1975, and Nene Valley Colour Coated, Upex 2008)

Catterick produced a local gritted ware, and imitations of both Black Burnished 1 and Crambeck wares. The latter two are definitively Romano-British in fabric and forms. The range of forms produced at Catterick is fairly typical of the area in the mid to late Roman period, being mostly copies of Black Burnished and Crambeck forms. It included jars, bowls, mortaria and native cooking pots. Some more 'Roman' wares and forms are likely to have been produced in the first century by the soldiers at the fort.

Rossington Bridge produced its own version of a black burnished fabric and a finer orange-brown sandy fabric. The latter was used for mortaria. Everted rim jars and pie dishes were also produced. Both of the fabrics were Romano-British.

Norton produced wheel-thrown greywares as well as a local calcite-gritted ware. The former was used for dishes, jars, bowls, dishes, and flagons, and the latter for cooking pots.

Holme-on-Spalding Moor produced regional fabrics, influenced by industries in North Lincolnshire, a black burnished imitation fabric and wheel-thrown greyware. The latter two were Romano-British fabrics. Many forms were copies of black burnished vessels. The industry produced jars and bowls but with an emphasis on large handled jars and storage vessels.

There were several versions of the calcite-gritted fabrics produced throughout Yorkshire and Lincolnshire, such as at Knapton. These wares were firmly rooted in Iron Age traditions. They were handmade in the early Roman period, developing wheelmade and Romanised

forms in the third and fourth centuries as demand changed. These wares developed from Iron Age tradition into Romano-British forms, albeit remaining in a more traditional fabric. Storage jars and cooking pots were predominately made in this fabric.

Wappenbury produced black burnished imitation vessels in various forms including jars, storage vessels, bowls, dishes and cooking pots. This was a Romano-British version of the black burnished fabric.

The New Forest and Nene Valley industries are slightly different from the others discussed here. Both produced colour coated fabrics that were very Roman in style. Both produced forms that included flasks, jugs, beakers, cups, jars, bowls, flagons and dishes. Both also produced mortaria in a non-colour coated fabric. With regards to Nene Valley this was an off white fabric not too dissimilar to the Crambeck Parchment ware. Nene Valley also produced an imitation Samian ware. New Forest, despite not having roots in a native potting tradition, also produced local greyware kitchen vessels presumably, jars, bowls and storage vessels. Nene Valley also produced local greywares but rooted in its Iron Age traditions.

Over the course of the Roman period the Black Burnished Ware 1 industry produced a large range of vessel forms. The ware was a handmade variety that grew from the local Iron Age Durotrigan tradition. This developed into some wheelmade Romanised forms although the traditional fabric continued to be produced. The industry's production fluctuated with demand over the Roman period as did the forms it produced and its distribution. The ware typically produced everted rim jars, plain dishes, and flat rimmed or flanged bowls. The jars, bowls, and dishes formed the core of its export market

The table below (Table 8) shows the approximate chronologies of the products of each industry discussed here. The wares have been divided into indigenous greyware (e.g. calcite-gritted vessels), Romano-British greyware (e.g. Crambeck Reduced ware), Romano-British

oxidised ware (e.g. Rossington bridge oxidised vessels), Romano-British finewares (e.g. colour coated wares). If the areas saw a period of military production, this has also been indicated.

Table 8 demonstrates that many of these industries had a prior tradition of pottery production rooted in the Iron Age with production of similar wares in the Roman period, whether this was a continuous stretch of production remains to be proven in many cases. Calcite-gritted pottery and wares with other mineral tempers have been made throughout Yorkshire and from the Iron Age. These wares did not suit most of the needs of the Roman military but continued to be used throughout the Roman period in civilian and rural contexts (Swan 2002). The late third century saw an increased commercialisation and streamlining of the indigenous calcite-gritted potteries of East Yorkshire (Swan 2002, 71). The following is summarised from Evans (1985) general account of this industry.

Black Burnished Ware 1 has been included because of its longevity of production, originating in the Iron Age and continuing through to the fifth century. It also had an extensive and relatively consistent distribution much like Crambeck. Catterick and Rossington have been included as prominent Romano-British industries in Yorkshire. Holme-on-Spalding Moor is a similar contemporary industry to Crambeck and supplied some of the pottery requirements of the Jamie's Craggs site (see section 7.1). Nene Valley and New Forest have been included as previous authors such as Evans (1985) have drawn similarities between the forms of the products from the industries to those at Crambeck. Furthermore, they were late Romano-British producers of finewares, as was Crambeck. Norton has been included as one of Crambeck's competitors. It is with this industry that the closest similarities can be drawn and those such as Swan (1984) have previously suggested potters from Norton established the industry at Crambeck. It is no longer a widely accepted theory but there are undeniable similarities between the industries (see section 7.1). Lastly,

Wappenbury has been included as the only known similar example of a late Romano-British pottery industry situated in direct relation to an Iron Age promontory fort (see below, this section).

	First BC 100BC- 0BC/AD			First AD 0BC/AD- 100AD			Second AD 100 – 200AD			Third AD 200 – 300AD			Fourth AD 300 – 410AD		
	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L
BB1															
Catterick															
Crambeck															
HSM															
Nene Valley															
New Forest															
Norton															
Rossington															
Wappenbury															

Table 8 Chronology of broad wares produced by Romano-British industries.

Key:

Pink – Indigenous greyware (e.g. calcite-gritted wares).

Blue – Romano-British greyware.

Orange – Romano-British oxidised ware.

Purple – Romano-British fineware.

Green – Military production.

The East Yorkshire calcite-gritted wares seem to have achieved dominance by the mid fourth century and remained a large part of the pottery supply to Yorkshire and the North (as much as a quarter of assemblages at some sites). The wares are found throughout the North and there does not seem to be a drop off in distribution between east and west, prompting Evans (1985) to suggest that similar mechanisms, whatever they may have been, for the distributional success of Crambeck ware may have also been in operation for the calcite-gritted wares. It has already been mentioned above that there is evidence from the site at

Norton for calcite-gritted wares being in production at the same time as the Romano-British Norton fabrics and may even have been fired in some of the same kilns. There is some evidence to suggest a similar situation existed at Crambeck (see Chapter 5). It may be that in the case of Norton and possibly Crambeck, calcite-gritted fabrics were made in these landscapes long before their Romanised cousins, perhaps in some places stretching back into the Iron Age. Generally speaking, the calcite-gritted fabrics are the precursor to the Roman potteries of Yorkshire and the North more widely. The forms only saw development in the late second and early third centuries, undergoing a degree of 'Romanisation'. For the most part they remained the same large cooking and storage vessels that were produced in the pre-Roman Iron Age, most likely because of their functional usefulness.

It is possible, therefore, through a consideration of the calcite-gritted fabrics, to demonstrate the lack of impact Roman administration had on Yorkshire and the North of England (e.g. Swan 2002). Throughout the first, second and early third centuries these fabrics remained the dominant pottery type across much of the North with the Romanised and imported fabrics being largely restricted to military and urban sites. It is only in the late second and early third centuries that they became more 'Roman' in form, although they remained the recognisable and functional kitchen wares. Their production continued throughout the fourth century reaching its peak late in the period and continued after the end of Roman administration, although it is impossible to say for how long. It was the calcite-gritted and Crambeck industries that dominated the markets across the north of Britain in the fourth century and into the fifth. These calcite-gritted fabrics certainly bear more resemblance to their Iron Age predecessors and their Anglo-Saxon successors than to their contemporary Roman cousins.

Landscape Context

Good transportation links, as well as a readily available clay source, seem to have been key to the location of production industries. Roads seem to have been particularly important; most industries have access to at least one major road. The exception was the New Forest industry which must have used the River Avon as its main distribution route instead (Swan 1984). Rivers do seem to have been somewhat important to the distribution of pottery, with many industries having access to navigable waterways as well as roads. For example, the Wappenbury site was next to the Fosse Way (a major Roman road; Booth 1986); Norton had access to the River Derwent as well as roads to the East Yorkshire coast, Brough-on-Humber, York, and to the North (Evans 1985).

A third factor in the placement of production industries was the accessibility of distribution markets – the potters needed easy access to somewhere to sell their wares. Some of the industries were situated in the town to which they distributed the majority of their wares. For example, Norton was situated in the vici attached to fort. Such industries supplied the urban population as well as the immediate hinterlands to some degree. Other industries were a handful of kilometres from the nearest town or large settlement. Wappenbury was roughly 10km from Chesterton, accessed down the Fosse Way; Holme-on-Spalding Moor had easy access to Brough-on-Humber and Shiptonthorpe and was a major supplier to the East Yorkshire region through a series of rivers (e.g. Derwent, Ouse, Aire, Wharfe) and roads (e.g. the major north road, others giving access to York, Brough and Shiptonthorpe). Industries such as the Black Burnished Wares of Dorset used sea routes to transport their goods to the north-west of Britain during the peak of their distribution.

The impact of change from Iron Age to Roman routes and roads affected the economic landscape as well as altered the nature and experience of mobility. Landscape approaches to

the past can help to address this important issues however, they are not the focus of this research. Future investigation of the Crambeck landscape and its comparison with Romano-British industries could engage with such issues.

Crambeck is as ideally situated as a pottery industry could be in terms of distribution routes and markets. It was on the edge of three market centres, Malton/Norton, York and Shiptonthorpe as well as on the boundary between the two Iron Age tribes, the Brigantes and the Parisi. It had easy access to a good clay source (geological pockets of it in the landscape) which is sometimes credited with drawing potters to the area (e.g. Evans 1985, Swan 1984), as well as to transport routes. It was next to the road between York and Malton, giving it easy access to the East coast in one direction and the major road running to the North and the frontier in the other. It also had access to the River Derwent which would have given access to the Rivers Ouse and Humber. As a result, Crambeck is perhaps better placed than most industries to distribute its wares consistently over a large area.

Occasionally, pottery industries have other related landscape features. Wappenbury is a good example of such an industry, being situated next to the eastern defences of an Iron Age fort. The only other known example of a late Romano-British pottery production industry situated in relation to an Iron Age fort, is Crambeck. The following discussion of the Wappenbury industry is summarised from Booth's 1986 account of Roman pottery in Warwickshire and the excavation information from Stanley and Stanley (1964).

The Wappenbury site in Warwickshire is situated about thirty miles slightly to the South-East of the Mancetter-Hartshill industry. It is next to the Fosse Way, a major Roman road that ran through Chesterton. The pre-Roman pottery industry in Warwickshire is difficult to determine as little is known about it. Jars of 'middle Iron Age type' have been found at settlement sites across the region including Wappenbury. Booth (1986) states this was

presumably made locally. No suggestion is made stating that this pottery was made on the settlement sites but neither is there evidence against this scenario. Early Roman military sites excavated in the area appear to have used pottery unrelated to anything of earlier date fitting with the picture painted by Swan (2002) that the local pottery of the early Roman period did not suit the military needs and as a result the army produced or imported their own. It was the departure of the military from Warwickshire that saw the beginnings of the growth of civilian settlements thus creating some of the later markets of Romano-British pottery.

The Wappenbury kilns are located a short distance east of an Iron Age univallate fort. The site is scheduled⁴⁰ and has several related records accessible through the Heritage Gateway. As a result of its protection, the earthworks of the defences are still extant and are visible on the 1m LiDAR data available through the Environment Agency (Figure 84).

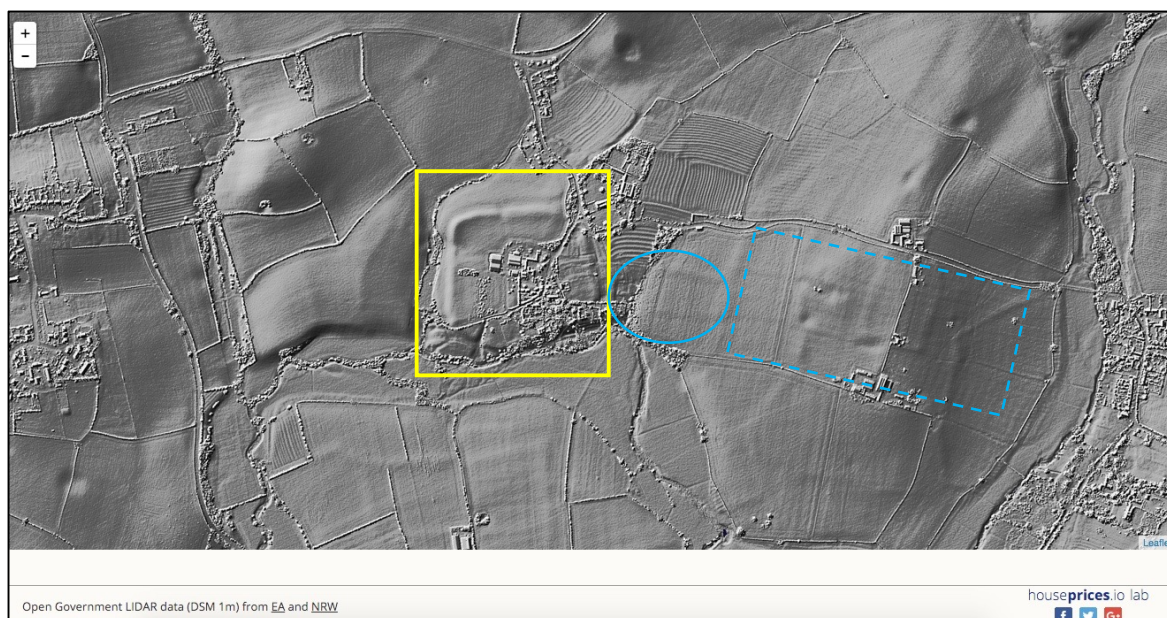


Figure 84 LiDAR image of the Iron Age fort (yellow square) and the Romano-British pottery industry (known blue circle, possible extension blue dashed rectangle) (<https://houseprices.io/lab/lidar/map>).

⁴⁰ <https://historicengland.org.uk/listing/the-list/list-entry/1009817>

The Romano-British production site seems to have been spread over 8–10ha although its true extent is not currently known. Part of the site closest to the eastern defences of the fort was excavated in 1959 (Stanley & Stanley 1964). This identified four kilns, three dating to the first half of the fourth century and the last to the first half of the second century. Generally speaking, the industry seems to date to the third and fourth centuries and is broadly contemporary with Crambeck. The second century kiln has a particularly close affinity to those at Mancetter/Hartshill and may be the result of an early migrant potter from that industry. Indeed, the kilns at Wappenbury and its wares all bear more than a passing resemblance to those at Mancetter/Hartshill. Booth (1986) suggested that once the Mancetter/Hartshill industry was established and a trend towards mortaria production developed, some of the potters who did not specialise in this form no longer had reason to stay at the site so moved away into the surrounding landscape to establish secondary industries in places closer to certain market centres, e.g. Chesterton. Booth suggests this theory may explain the development of the pottery industry at Wappenbury. The similarities between Mancetter/Hartshill and Wappenbury in both vessel forms and kiln technology, are strong enough to suggest very close links between the two and certainly justifies discussion of migrant potters from one to the other (probably Mancetter/Hartshill to Wappenbury). Wappenbury is likely to have been the main supplier to the settlement at Chesterton, accessible down the Fosse Way, in the third and fourth centuries. Products may have reached further e.g. to Alcester, particularly in the fourth century when the industry was firmly established. The products also occur widely on rural sites in the south of the country.

The Wappenbury industry seems to have filled the gap created in the market after the reduction and/or demise of the second and third century pottery suppliers, much as Crambeck and the other Yorkshire industries did in the North.

Certain comparisons can be made between the industries at Wappenbury and Crambeck. The Warwickshire site has been included here as the only other known example of a third to fourth century Romano-British pottery industry situated in relation to an Iron Age fort. Both sites are connected to an earlier Iron Age pottery tradition comprised of largely grey gritty wares. It is not too unreasonable to propose the existence of earlier versions of these pottery industries, contemporary with the use of the forts. It has already been established that the calcite-gritted equivalent in Yorkshire was produced in the Iron Age and throughout the Roman period, only undergoing 'Romanisation' in the late second or third centuries. It remained popular into the fifth century. This is by no means to suggest that there was continuous activity at the Wappenbury and Crambeck sites from the construction of their forts through to the end of Roman administration. It is enough to make the proposition that the Romano-British wares made at the sites were not necessarily the first pottery to be produced there. But perhaps the location of these Romano-British industries is not as random as it may first appear, perhaps their locations were remembered from earlier phases of activity including pottery production. Both forts appear to be of a similar size Wappenbury covering approximately 9.67 hectares and Crambeck covering approximately 9.75 hectares. The Wappenbury fort is squarer in shape than the elongated triangle of Crambeck. There are enough similarities between these sites to warrant further investigation particularly as no others like them are known in England. They have the potential, particularly in view of their scheduled status and good preservation, to shed light on the development of pottery production in the Iron Age, into and throughout the Roman period as well as the relationship between pottery of these dates in these landscapes.

7.3 Summary

This chapter has provided regional context for Crambeck production against other industries in Yorkshire and elsewhere in Britain. It has demonstrated that, generally speaking,

Crambeck is typical of the pottery industries of the north of Britain in the late third and fourth centuries. The unusual aspects of the industry have also been highlighted. Its widespread and consistent distribution is the most discussed of these. However, this research has brought to light the position of the production industry at Jamie's Craggs inside the defences of an Iron Age promontory fort. This is the only known example of such in Britain although the closest comparison is the industry at Wappenburg which existed outside the eastern defences of a very similar fort. The strong suggestion has been made for a phase of pre-Roman pottery production in the vicinity of Crambeck in comparison to the other Yorkshire industries. Although no evidence has been found to prove continued production of indigenous calcite-gritted wares at Crambeck, it seems highly likely that this was indeed the case, e.g. as at Norton.

The previous three chapters have discussed the evidence for Prehistoric, Iron Age, Roman, and fifth century activity in the Crambeck landscape and sought to set the industry in its regional landscape context. They have also sought to set Crambeck in perspective against the other industries in Yorkshire and elsewhere in Britain. The following chapter will seek to summarise this thesis and assess the extent to which its research questions have been answered.

Chapter 8 Summary

This chapter will examine the extent to which this thesis has answered the research questions set out in Chapter 3 (8.1). It will then summarise the complex nature of the Crambeck landscape from prehistory to the fifth century (8.2). This will be followed by a discussion of the questions raised as a result of this research (8.3) and end with some concluding thoughts (8.4).

This thesis has taken a functional processual approach to the study of a late Romano-British pottery production industry. It has done so with a distinct landscape focus in order to contextualise the processes of production of Crambeck ware in its wider surroundings. Such an approach is necessary to understand the character of landscape use and scale of production and to understand the impact of, for example, pre-existing features from past phases of use on the potters and their wares. In the case of Crambeck, this has revealed the positioning of a concentration of kilns within the boundary of a promontory fort, raising questions of continuity of activity in the landscape. This research suggests that the study of Romano-British pottery industries should focus on the economies of production and not just those of distribution and consumption. Postprocessualist approaches have been criticised here for their general omission of the social nature of human actions. Therefore, the functional processual approaches are more applicable in this study of what is generally acknowledged as the social act of constructing and operating a kiln.

8.1 Research Questions

Chapter 3 set out the focused questions of this research into the Crambeck production landscape. How open was the Crambeck landscape, were there visible remains of earlier monuments and what did the late Romano-British landscape inherit from such past activity? Was there one main production site at Jamie's Craggs with a few small outliers or were there

a series of ‘factories’ spread across the landscape? Were these sites contemporary with one another or do they represent different phases of production spread across the landscape? And finally, did the potter’s live and work on the same site or was the settlement(s) elsewhere? A number of methods have been used to investigate these questions including, use of the Historic Environment and Portable Antiquities Scheme records, earthwork and geophysical surveys, and small scale excavation to groundtruth these results. This section will assess the extent to which this research has succeeded in answering these questions.

How open was the Crambeck landscape, were there visible remains of earlier monuments and what did the late Romano-British landscape inherit from such past activity? A survey of earthworks in Ox Carr Wood and along Castle Howard Station Road has identified them as the boundary ditch and banks of an Iron Age promontory fort. This was utilised by the later Romano-British potters, with the majority of known kilns in the immediate landscape being situated within the c10ha these earthworks enclose. This has led to questions of continuity in this landscape and raised the issue of whether there was a longer, although not necessarily continuous, period of activity in the Jamie’s Craggs landscape than previously understood. The landscape then, was one of enclosure, in the sense that the majority of the kilns were contained within a large and imposing set of earthworks. However, there are at least two kilns a short distance to the west of the fort and two more approximately one mile to the north at Hutton Hill. On this basis it is reasonable to assume that there were several such minor kiln sites operating outside the confines of the fort. The Crambeck landscape, despite being dominated by the substantial earthworks of the fort, would perhaps have been closer to the description given by Ottaway:

“...if you had been here in the fourth century all around you there would have been the smoke from clusters of pottery kilns. Everywhere you looked there would have been people making pots, carrying pots, and loading pots onto wagons pulled by Oxen. Crambeck was the site of one of the great

pottery centres of late Roman Britain, making use of the local clay deposits on the southern edge of the Howardian Hills, the local woodlands and water from springs and the beck itself.” (Ottaway 2013, 290)

Whilst this picture of the landscape hasn't been directly tested here, the evidence presented does not contradict it. Consideration of the evidence at Crambeck and related sites throughout this thesis suggests that the picture painted by Ottaway is a reasonable representation of Roman period activity in this landscape.

Was there one main production site at Jamie's Craggs with a few small outliers or were there a series of 'factories' spread across the landscape? It has already been established that the largest cluster of Crambeck kilns is at the Jamie's Craggs site. Others identified in the landscape exist singly or in pairs, with only a handful of confirmed examples. The 'kilns' at the Romano-British settlement at Crambe, when compared to those at Jamie's Craggs, appear to be more along the lines of domestic bread ovens that had been converted into failed pottery kilns for home/personal use. Examples of such kilns have been found at the Cold Cam site which produced greywares distinctly similar to those made at Crambeck (McDonnell 1963, 407-413). It does not seem plausible that the conversion of domestic ovens in this manner could contribute successfully to the large scale production of Crambeck ware. On this basis, it is plausible to suggest with a degree of certainty that there was one central production site situated in the promontory fort at Jamie's Craggs. In addition to this, there were a handful of outlying kilns no more than around a mile distant from the main site, some of which may in fact represent earlier phases of Crambeck production on a smaller scale.

Were these sites contemporary with one another or do they represent different phases of production spread across the landscape? The likelihood is that not all of the Romano-British pottery kilns in the Crambeck landscape are exactly contemporary with one another. Of those

discussed in this thesis, most, if not all, seem to be part of production in the mid to late fourth century. There are not enough known kilns to have produced the quantity of Crambeck pottery found across the North of England. Therefore, it is reasonable to suggest the presence of additional kilns, both in other locations in the surrounding landscape, and as earlier predecessors of those in the main 'factory' at Jamie's Craggs. Some of the evidence for such additional kilns will have been lost to subsequent activities such as agricultural processes and quarrying.

Did the potters live and work on the same site or was the settlement(s) elsewhere? Currently, there is no concrete evidence suggesting that the potters lived and worked on the same site at Jamie's Craggs. Wenham (1989), echoed by King and Moore (1989) suggest that the potters lived at Crambe and commuted to work, yet this does not seem plausible. Why would the potters create a distance of a mile or so to travel in each direction, when they could live much closer to the kilns? A more plausible explanation lies in the suggestion that the evidence for the domestic areas at the Jamie's Craggs site have not yet been found or, more likely, have been destroyed by quarrying activity. The presence of non-Crambeck ware fabrics at Jamie's Craggs, particularly Holme-on-Spalding Moor ware, provides a small hint of domestic activity at the site (as discussed in Chapter 7). The scenario favoured here, suggesting that the potters lived and worked at the same site, as opposed to commuting from elsewhere in the landscape, is unfortunately based on circumstantial evidence and the belief that the potters would not have created a long commute for themselves unless directly necessary. This does not undermine the argument, but rather should be borne in mind when examining the ephemeral evidence for contemporary domestic occupation sites in the landscape. A larger scale excavation would be required at the Jamie's Craggs site to identify any remaining evidence of contemporary domestic activity.

Evidence pertaining to the environment and its changes over time would help with the understanding of the questions discussed here. However, currently there is no such environmental data available for Crambeck, specifically in relation to flora. It is currently possible to conduct more detailed analysis of the geology, soils and issues such as drainage but this has not been a central focus of this thesis. The collection and analysis of environmental data is acknowledged as a focus for future research in the Crambeck landscape.

8.2 The Crambeck Industry and its Landscape Setting: from Prehistory to the Fifth Century

Through this research the complex nature of the landscape around Jamie's Craggs, Crambeck has been demonstrated. The application of various methods of investigation including pre-existing information as well as undertaking recent ground-based surveys and excavation, have brought to light unknown factors in the landscape, for example the function of the earthworks as a promontory fort. The map below illustrates the known or approximate location of all features identified in the Crambeck landscape (Figure 85).

This section will summarise the evidence for activity in the Crambeck landscape from prehistory through to the fifth century.

Prehistory

There is a substantial amount of evidence for prehistoric activity in the Crambeck landscape (Chapter 4). A number of worked flints have been found, possibly dating to the late Palaeolithic or the Neolithic, although the activities these flints indicate remain elusive. It is clear that the landscape at Crambeck was considered a special place in prehistory with the construction of a likely henge just west of the A64 and several Bronze Age round barrow

burials, three of which are along the route of the Cram Beck. These monuments, in their own ways, lay claim to the landscape, with much subsequent activity (e.g. Roman burials) being situated in relation to the structures.

Iron Age

The Iron Age landscape at Crambeck would have been dominated by the large earthworks of a 10ha promontory fort encircling the crest of Jamie's Craggs hill. Given the substantial nature of much of the earthworks today, the fort would have remained a significant feature in the daily lives of the Romano-British potters. The scale of the earthworks represent a substantial amount of time and labour committed to its construction with a ditch that was cut into the natural geology.

Burial continued as a theme in the Iron Age with the deposition of at least one, possibly three, chariot burials. These are somehow related to the fort earthworks although the specific chronological relationship remains unclear. Square barrows would have been constructed over these burials and surrounded by ditches, creating yet more imposing monuments in the Crambeck landscape.

There is some evidence for domestic settlement activity at Mount Pleasant Farm, less than a mile south of the fort. Here a series of boundary ditches, a trackway and three or more roundhouses formed the basis of a ladder settlement. Further, albeit less clear, evidence of domestic settlement, is found at Hutton Hill about a mile to the north of Jamie's Craggs. Here a series of ditches that had been constructed in the Iron Age were re-used by late Romano-British potters. No material culture contemporary with the original construction of the ditches has been found at Hutton Hill but it is plausible that they formed the boundary of a settlement or were perhaps related to agricultural activity in the Iron Age.

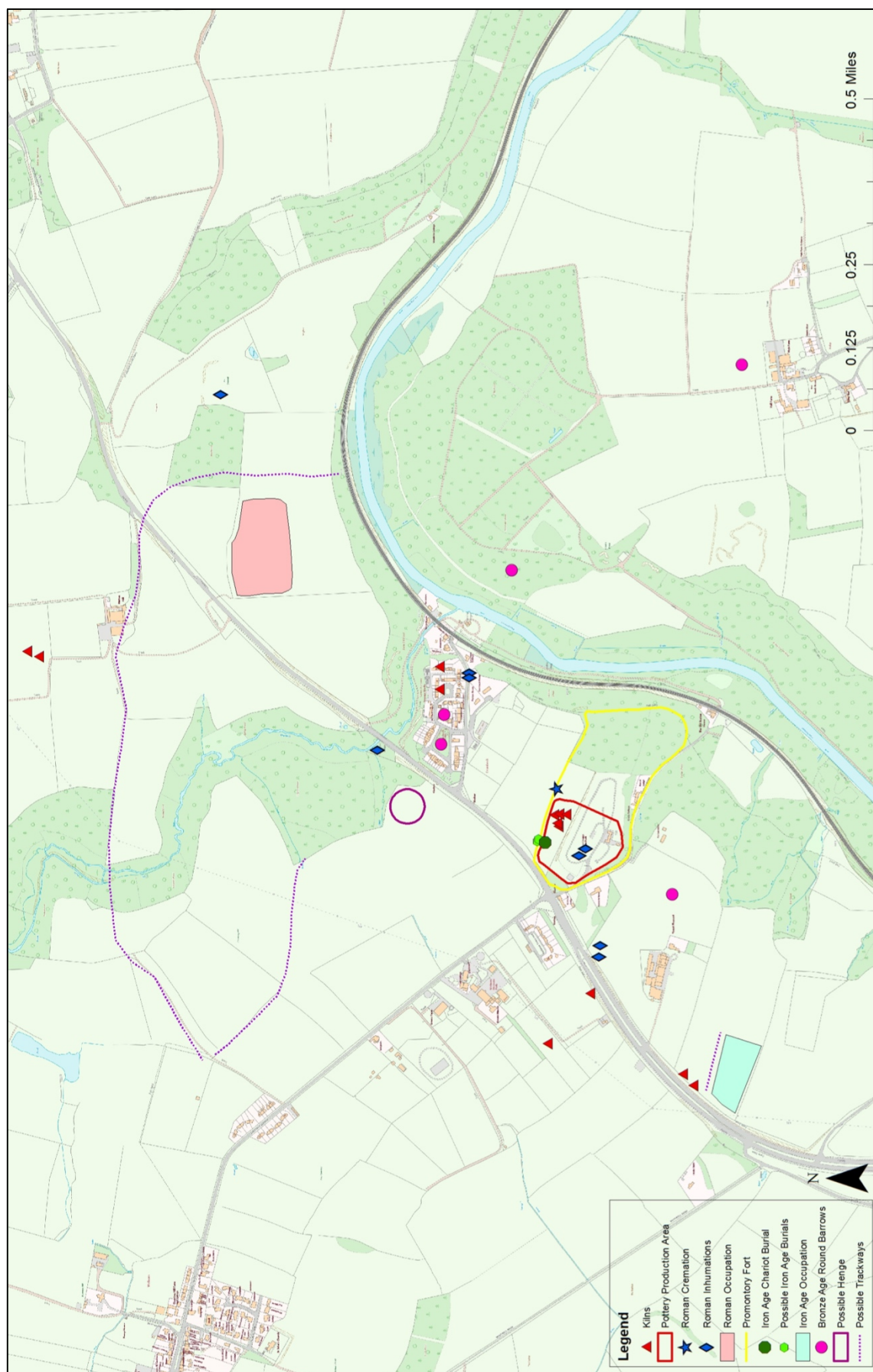


Figure 85 Known or approximate locations of Prehistoric to Roman features in the Crambeck landscape.

Roman

The prehistoric and Iron Age evidence has revealed the nature of various claims made over the Crambeck landscape in the form of a possible henge, a promontory fort and burial mounds. This continuing need to have a sense of ownership or control over the landscape is repeated in the late Roman period with the deposition of several burials. A total of seven cist burials have been identified, many of which relate to the known Bronze Age barrows or the Iron Age chariot burial(s). It is plausible therefore, to suggest that the earthworks of the earlier features remained visible at the time of deposition of the later cist burials. One individual, a female approximately 35-39 years old, has been dated to 330-420AD and displayed a squatting facet in the lower legs. It is conceivable that the cist burials are those of the last generation of Romano-British potters at Crambeck. The 2014 excavation also revealed a cremation burial of a child with two pottery vessels, one in Crambeck Reduced and the other in calcite-gritted ware. The cremation also contained a large number of glass and worked jet beads, possibly belonging to a necklace that had been deposited with the burial after the act of cremation had taken place.

Burials in the late Roman rural landscapes tended to occur singly or in pairs at the edges of fields. This makes the placement of so many cist burials and at least one cremation all within a relatively small area of the Crambeck landscape unusual, although this in no way suggests the area was, or can be, viewed as a cemetery. The cists do occur individually or in pairs but the repeated deposition of such burials reinforces the concept that the landscape at Crambeck was considered special from prehistory, a notion that continued throughout the Iron Age and Roman periods, and possibly into the fifth century. It also reinforces the concept of a continuing need to have a sense of ownership over the landscape, particularly given the close association of many of the Roman burials to the earlier monuments. It must also be noted that the creation and deposition of such features was less about claims of authority, and more

to do with the everyday connections to the landscape. The landscape was recognised as special in prehistory with the early monuments not only accepted by the later Romano-British potters, but also incorporated into everyday life through utilisation of features such as the fort and the deposition of burials with acknowledgement of their earlier counterparts.

The material use of the Crambeck landscape in the Roman period is most clearly represented by the kilns of the pottery industry. As discussed above, there would have been several clusters of kilns spread across the landscape in ones and twos but the main concentration was confined within the promontory fort. This site seems to have been the focus of the production activity, at least towards the end of the industry's lifespan. The kiln uncovered in 2014 was well preserved, suggesting the internal structure of at least one of the kilns identified on the geophysics may remain intact enough to provide a clearer picture of this poorly understood structural aspect of the Crambeck kilns. There is also a proven degree of specialisation between the kilns with those at Hutton Hill producing tiles and the furnace identified in 2014 producing reduced ware, mostly bowls.

Calcite-gritted ware is common across the Jamie's Craggs site and a substantial amount was recorded from the contexts immediately above the kiln in 2014. Not a great deal is known about the production of this ware with only one known production site having been identified at Knapton (Corder & Kirk 1932). This type of pottery is known to have been produced in many places across Yorkshire (Knapton being the only known production site) throughout the Iron Age and Roman periods, into the fifth century. It is plausible to suggest that a version of this was made at Crambeck in the Iron Age albeit not in any large quantity, particularly given the evidence for activity from this period. It is also plausible to suggest that this small scale production continued throughout the Roman period and into the fifth century, although it is unlikely the vessels were fired in the same kilns. Production of calcite-gritted ware has been suggested at Norton alongside its late third and fourth century wares. It is not the

intention here to suggest that there was an unbroken continuation of pottery production in the Crambeck landscape from the Iron Age to the fifth century, rather than it seems fairly unlikely that the Crambeck fabrics were the first to be produced in this area. Although the Huntcliffe variety of calcite-gritted ware is often found alongside Crambeck parchment ware, further analysis of the assemblages from Jamie's Craggs is necessary to understand its role at the main production site.

There is some tentative evidence for Roman settlement to the north of the Cram Beck, with a geophysical survey indicating ditches, a trackway and what appear to be housing platforms. This may date to the first, second or early third centuries as there is nothing to suggest it was contemporary with the late Roman Crambeck pottery production. The Romano-British settlement at Crambe (Wenham 1989; King & Moore 1989) is provably contemporary with the later phase of Crambeck pottery production. As already discussed (8.1), it seems implausible to suggest this was the living area of the potters themselves. It seems more likely to have been a nearby settlement with two ovens that were converted into unsuccessful kilns for personal use.

The seasonal nature of commercial pottery production has long been suggested (e.g. Fulford 1975; Peacock 1982) often undertaken alongside agriculture, a concept that has been questioned by Evans (1985, 127-128). However, the substantial amount of Crambeck ware recovered across the North of England suggests that a seasonal industry would have required a large number of people to produce such a large quantity. While there is nothing inherently wrong with this suggestion, it poses issues with the concept of military supply. Such seasonal production would not have facilitated the regular supply of the Roman armed forces who would have required a large number of vessels on a regular basis to supply garrisons with goods. At Crambeck, it seems more plausible to suggest that some parts of the community were engaged with agriculture while others were involved with the professional, commercial

production of pottery, ensuring a year-round supply of vessels. The consistency of the wares and sophistication of the vessels certainly supports the theory of full-time production, at least in the late third to fourth century.

Crambeck as a late Romano-British industry operating in the North of England is not particularly unusual in terms of its wares or forms compared to its contemporaries (see Chapter 7). However, its consistency of distribution up to and along Hadrian's Wall is exceptional and is explained by the likely existence of a military contract. Reanalysis of the data discussed throughout this thesis would provide the opportunity to test this hypothesis. It has not been included as a research question here and is not directly explored as a result.

Crambeck is an unusual example of a late Romano-British pottery industry situated inside the earthworks of an Iron Age promontory fort. The only other known similar example is at Wappenbury where the kilns were located outside the eastern defences of a fort of approximately the same size (see Chapters 5 and 7). These sites are unique examples of the re-use of such feature several centuries after their original use must have ended. As already suggested, it is possible to propose an earlier phase of pottery production in the vicinity of Jamie's Craggs, sometime in the Iron Age, most likely a predecessor to the late Romano-British calcite-gritted fabrics, and this may have continued in a broken manner through the Roman period and into the fifth century. If this was in fact true, then such activity may have been related to the fort.

8.3 Questions Raised as a Result of this Research

This research has raised more questions than it has answered and these will be briefly summarised here.

The identification of the circular feature visible as cropmarks to the west of the A64 remains unconfirmed. Whilst it appears to be a henge, more detailed examination of the local geology and soils, further survey and a small scale groundtruthing excavation would be required to state this with any certainty.

The original function of the promontory fort earthworks is unknown. The enclosure may have been used permanently or on a temporary basis for specific events. It may have had a domestic, agricultural, or defensive purpose, or indeed may have been used for different things at different times. Whatever its function, it is clear that it would have required a great amount of time, effort and commitment from an organised community to construct. Investigations of the fort's original function will unfortunately be limited by the simple fact that half or more of its interior has been lost to quarrying. Such investigations could also confirm the possibility of pottery production in the landscape during the Iron Age, perhaps the predecessors to the late Roman calcite-gritted ware.

The chronological and spatial relationship between the northern fort defences and the deposition of at least one Iron Age chariot burial is unclear. Promontory forts are known to have been constructed throughout the early to middle Iron Age, approximately c800 – c101BC, chariot burials are generally thought to date to the fourth or third century BC and seem to cluster around c200BC. These two types of features clearly overlap chronologically: the question remains which was constructed first at Jamie's Craggs and why was the second feature, whichever that may have been, situated with such close association to the first, potentially obscuring the view of the monument across the landscape? Careful excavation of the chariot burial, the two similar features to the north (on the geophysics) and the relevant section of the earthworks would shed light on this. If the fort was constructed first, then the deposition of a chariot burial *inside* the earthworks and out of the line of sight across the landscape is curious.

Analysis of the pottery assemblage from 2014 and information of previously recovered assemblages from the site strongly suggest an earlier phase of Roman activity in the immediate landscape around Jamie's Craggs, if not at the site itself. This is most visible in the distinct presence of several non-Crambeck fabrics, some of which have a much earlier date. Continued investigations at the site could therefore provide answers to multiple questions: investigation of the remaining interior of the fort may reveal evidence not only of its original function but also of any earlier Romano-British activity.

There are a number of questions about the Crambeck industry that remain unanswered. As already noted above, there are several gaps in knowledge relating to the environmental aspects of the Crambeck landscape over time that warrant further research. Specific details of the internal structure of the kilns are unknown, although the well preserved kiln identified in 2014 and the presence of others in the vicinity, visible on the geophysics, provide a good opportunity to investigate this. The hypothesis of a military contract would benefit from dedicated testing. There is no doubt that Crambeck would have been ideally placed to take advantage of such a contract existed and the success of the industry certainly cannot be satisfactorily explained by means of a free market economy. Finally, it has been established that there were a number of kilns in the immediate landscape that acted as outliers to the main concentration at Jamie's Craggs. This being the case, there are only a few identified examples. There is a strong possibility that evidence of others remains to be found in the surrounding landscape. Identifying and confirming the type of signal these kilns give off through geophysics and groundtruthing excavation has created the ability to identify kilns in a survey of the wider landscape with much greater certainty. This is necessary in the study of Crambeck as it will provide an understanding of the scope and scale of the industry.

8.4 Conclusions

Investigation of the Crambeck industry has provided an opportunity to demonstrate the underlying principles of this thesis: the processes and economy of production are just as important as those of trade and distribution. This research has expressed the possibility of a pre-existing potting tradition in the vicinity through the analysis of calcite-gritted ware and the evidence for prehistoric and Iron Age activity in the landscape. It has therefore suggested that the late Romano-British Crambeck wares may not have been the first produced in the area. That said, the late third and fourth century was certainly the period during which such production in this landscape operated at its largest scale and was at its most commercial. If the existence of a pre-Roman pottery tradition is accepted, although it is not suggested here that it was necessarily continuous, then it is possible to argue that the Crambeck Parchment and Reduced ware vessels represent a 'Romanisation' and commercialisation of this indigenous tradition, i.e. the calcite-gritted wares. Examples of such a situation can be found in the Norton and Dorset Black Burnished Ware I industries.

This thesis has demonstrated the complex nature of the landscape at Crambeck and has set the late Romano-British pottery production into its spatial and chronological contexts. In doing so, it has demonstrated the need to understand the character of landscape use and the scale of production of a pottery industry. This is necessary in order to contextualise the processes of that production. This thesis has argued that, in the case of pottery, production underpins consumption, that in order to understand the trade and distribution patterns of a pottery industry, an understanding is required of the production site, its wider landscape setting and the effect this may have had on the potters and the economic aspects of their industry.