

Axe-heads and Identity

An investigation into the roles of imported
axe-heads in identity formation in
Neolithic Britain

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Cover: Flint axe-head (1923.1084 M) simply labelled 'YORKSHIRE',
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In memory of Fiona Roe, who stayed with me to the finish line

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Preface and acknowledgements

This is a study which bridges many divides: British and continental material culture and research traditions; archaeology and petrology; flint and non-flint stone; and so the list could continue. It seems fitting therefore, that it derives from a doctoral dissertation which I wrote while based within two Universities in succession (University of Bristol then University of Southampton), while living on the land, the river, and the sea. This book contains amendments, corrections and updates to the dissertation. It has, like its author, had a nomadic existence and has, itself, been a process of reflection and identity formation.

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Katharine Walker, the New Forest, August 2017

'It is clear that advances in our understanding will be made only if we frame future research both in terms of 'big picture' issues – and here the big picture encompasses the near continent, not just the British and Irish archipelago – and of fine-grained regional and local studies. There is much to be done (not least at improving our knowledge of the information that is already available to us), but the work will be rewarding.'

(Sheridan 2010: 101-102)

Chapter One

Introduction

Aim

The aim of this study is to understand the roles that imported stone axe-heads played in identity formation at the onset of, and throughout, the Neolithic in Britain. 'Imported', within this context, refers to any axe-head which has come from continental Europe, including Scandinavia. 'Britain' has been used as short-hand for the rather old-fashioned expression 'British Isles' in reference to the whole archipelago with Ireland and Britain at its centre. While this is not reflective of 21st century politics, it is an indication of the geography which is of fundamental importance to this study. It also includes the Northern Isles, the Hebrides, the Isle of Man, Anglesey, the Isle of Wight, the Isles of Scilly, and all of the small islets around the coastline of the British mainland which are often forgotten, yet many of these would have played significant roles in continental connections. For this reason, Irish axe-heads have not been regarded as 'imported'; while they have been addressed in discussions they have not been allocated a separate chapter. Not all axe-heads were workaday objects and many had significance beyond that; the most highly prized examples were the reserve of ceremony and may have been regarded as 'sacred' objects (e.g. Pétrequin *et al.* 2012). Axe-heads were of critical importance in the Mesolithic-Neolithic transition and were drawn into focus as objects of meaning. This study explores the specific issues of importation and possible exportation to assess what evidence exists, and it makes a critical review of how this evidence reflects the nature of identity. It does this by examining different types of imported axe-heads within the British Neolithic.

Objectives

To achieve this aim, a series of objectives is required, which is addressed by a carefully tailored methodology. It is essential to be able to distinguish between imported axe-heads and those made in Britain, and to establish the extent of the evidence. Creating the most complete record of these axe-heads is

important for the construction of accurately informed arguments, supported by distribution maps which are true representations of the data rather than biased according to patterns of collection. As 'non-British' axe-heads feature readily in historic collections, and are still bought and sold with ease in the 21st century, careful consideration is required to distinguish genuine Neolithic imports from more recent 'manuports', and also to separate out any ethnographic specimens. Similarly, these objects are faked and reproduced for both honest and dishonest purposes, and being able to spot axe-heads which have been made in recent centuries or decades is crucial. To access the most useful information from these axe-heads includes being able to date their production and, where possible, their deposition. It is essential to obtain as much detail as is available about the contexts and circumstances of their discovery, and to gain information about their find-spot locations, including topographical settings and surrounding archaeological landscapes. In addressing all of these objectives and fulfilling the aim, new directions for future research and the further advancement of knowledge are highlighted.

Background to Neolithic axe-head studies

Axe-heads were objects of admiration and intrigue long before people were aware of the valuable contribution they could make to understanding prehistory. As Mark Edmonds (2012b) has reminded readers, 'thunderstones' and 'elf shot' occupied the shelves of the cabinets of curiosities of Renaissance Europe, alongside items of ethnography and natural history, and religious relics. These *Wunderkammer* served as evidence of the power and control of their patrons over the world as they knew and understood it, by representing it in a microcosmic form (Fiorani 1998: 268). This is a theme which echoes, rather uncannily, a probable role of axe-heads in the Neolithic. From the 16th century onwards, the formation of empires created contact with cultures outside of Europe from which artefacts of interest flowed into Britain. These objects challenged preconceived ideas about nature and history (Wolf

Axe-head

A serviceable Neolithic axe consisted of a head and a haft. Although the term 'axe' has become synonymous with the head alone, the term axe-head has been used throughout this study for the purpose of accuracy. It is used as a shorthand name for all unperforated axe-heads, adze-heads, and chisels. Some writers use 'axehead' rather than 'axe-head'; however it would be more acceptable to write 'axe-haft' than 'axehaft'.

1982; Edmonds 2012b: 147), and stimulated further debates in natural philosophy, which established that axe-heads were evidence of past societies (S. Piggott 1989; Pearce 2007; Edmonds 2012b: 147).

Since the conception of the Three Age System by Thomsen, in Denmark, in the 1830s and its introduction to Britain by Worsaae (see Morse 1999), with the partitioning of the past into Stone Age, Bronze Age, and Iron Age, axe-heads have been dealt with in a largely technological way. As such, they have been regarded as indicators of evolutionary development and change. Knowledge of prehistory was, at this time, in its formative stages and the Neolithic was a term coined by John Lubbock, in his influential publication of 1865, to denote the New Stone Age (Lubbock 1865: 2-3; see also Owen 2013). Just a few years earlier, Wilde (1857) had published his catalogue of stone tools from Ireland. Charles Darwin's 1868 work *Variation of Plants and Animals under Domestication*, and subsequent publications on domestication by other authors (e.g. de Candolle 1882; Roth 1887), were followed by the recognition that domestication originated in the Near East (Pumpelly 1908). It was within this intellectual climate that John Evans published his classic, extensively illustrated, work *The Ancient Stone Implements of Great Britain* (1872), followed by a second edition (1897), which is still a valuable source of reference today. At the same time, in Scotland, Joseph Anderson was working on similar material (e.g. 1886; J. Anderson & Black 1888; 1892; see Clarke 2002) and in Ireland this was carried out by W.J. Knowles (e.g. 1893; see Woodman *et al.* 2006; Saville 2011: 1-2).

John Evans distinguished between 'celts ground at the edge only' and 'polished celts', and further divided the latter into four groups according to cross-section (with sharp sides or flat sides, with a rounded, oval, or irregular section). This need to classify, which can be traced back to an earlier attempt at British axe-head typology by Hugo (1854), has persisted and is still present in studies today. Subsequent significant attempts include that by Reginald Smith, which was based on the shape of the butt, such as pointed, thin or thick, and the appearance of the sides, either squared or pointed (R.A. Smith 1921). It was a system which drew analogies with that used in Scandinavia; however it simply did not work due to differences between the axe-heads in Britain and Scandinavia.

In 1912, O.G.S. Crawford published a paper entitled 'The Distribution of Early Bronze Age Settlements in Britain' in *The Geographical Journal* and demonstrated for the first time that artefacts in Britain and the Continent were the result of contact across the sea. The 1920s brought new ideas that laid the foundations for the study of Neolithic beginnings. V. Gordon Childe's introduction of the archaeological culture into British

archaeology from continental scholarship (Childe 1925) and his description of a 'Neolithic revolution' (Childe 1928) were fundamental cornerstones for the way that research was to proceed in the following decades. These had a direct impact on the way that stone axe-heads were approached. Cultural groups were read as separate ethnic entities and the succession of culture changes was interpreted as a record of arrivals of 'new' people, represented by their material traces. Childe argued that agriculture, along with other innovations, moved to Europe from its place of origin in the Near East via invaders or traders. The culture historical model became the primary way of approaching how the Neolithic spread across Europe to arrive in Britain. The result was the production of some major period-based publications (for the Neolithic: S. Piggott 1931). They fitted within a broader output of international syntheses (e.g. Childe 1925; 1940; Childe & Burkitt 1932; Fox 1932) with consolidation in the subsequent two to three decades (e.g. S. Piggott 1954; Hawkes 1959). The main theme running through all of these publications was the assumption of settlement from the Continent. With this was the inherent expectation that material things, not least stone axe-heads, were brought into Britain.

The collecting of stone axe-heads had reached its peak by the Victorian era. Networks of collectors existed via which objects were swapped, bought and sold. Many of these collections became the foundations of, or were donated to, early museums. Historically, the earliest use of petrology to identify 'archaeological' stone has been credited to William Dugdale in 1656 (Peacock 2013: 5), and the development of geological science during the early 19th century, including the identification of rocks in thin section under a petrological microscope, was attributed to Henry Clifton Sorby in 1850 (Geschwind 1994: 35). By the early part of the 20th century, petrologists had classified the textures and structures of different rock types, and basic petrography was known (Holmes 1921: 368). The development of implement petrology from the early 1920s onwards marked a change in attitudes to stone axe-heads and related tools, and a move away from their treatment as purely collectors' items; however, it was this interest in collecting which was the driving force behind the change. The primary aim of the implement petrologist was to find 'an exact determination of the rock material and its original provenance' (Keiller *et al.* 1941: 50). Previously, stone axe-heads had been appreciated as objects in their own right with little desire for additional knowledge about them. Alexander Keiller had been interested in implement petrology in the late 1920s and had given consideration to the material from Windmill Hill (Grimes 1979). Henry Herbert Thomas (1923) also sourced the Stonehenge bluestones to the Preseli Mountains in South Wales using petrological methods.

Petrology or petrography?

These two terms are used interchangeably to refer to the discipline which seeks to determine exact rock materials and match them to their sources. ‘Petrology’ is the term used historically, whereas ‘petrography’ is technically more accurate. Both terms appear in the literature.

In 1936, Keiller, with Stuart Piggott and C.D. Drew of Dorchester Museum, established the Sub-Committee of the South-Western Group of Museums and Art Galleries on the Petrological Identification of Stone Axes (Keiller 1937: 484-5). The Sub-Committee adopted the technique of thin-sectioning whereby small ‘slices’ were taken from the axe-heads and they defined the first petrological groups based on samples with the same attributes, which today totals nearly 50 including sub-groups. The first report, delayed by the outbreak of war, was published in the *Proceedings of the Prehistoric Society* (Keiller *et al.* 1941) and dealt with over 200 axe-heads. The National Survey was set up to perform an audit on stone axe-heads specifically, excluding those made from flint, and a further four reports followed (Stone & Wallis 1947; 1951; Evens *et al.* 1962; 1972). In 1952, the Implement Petrology Committee was established and included key figures such as F.S. Wallis, F.J. North, and W.F. Grimes. The IPC built on the foundations laid by the aforementioned Sub-Committee of the South-Western Group of Museums and Art Galleries, now known as the South West Implement Petrology Group. In 1977, the Implement Petrology Committee held a conference to commend the success of many years’ work on the petrology of prehistoric stone tools and the proceedings were published as *Stone Axe Studies* (Clough & Cummins 1979). At the same time, it was decided that a full publication of the examinations from petrological thin-sectioning was necessary and this appeared as *Stone Axe Studies II* in 1988, covering a total of some 7600 objects which had been thin-sectioned (Cummins & Clough 1988). A year earlier, Sylvia Chappell had published the results of her thesis for which she measured 1159 axe-heads, again excluding flint (Chappell 1987). In 1978, Adkins and Jackson had also presented a collection of axe-heads from the River Thames and managed to attribute two-thirds of them to one of twenty-four ‘types’ (Adkins & Jackson 1978).

Previously under the auspices of the Council for British Archaeology, the Implement Petrology Committee

became known as the Implement Petrology Group when such committees were disbanded in the 1990s. Increasing involvement with the social sciences opened up a wealth of interpretative possibilities for material culture from the late 1970s and early 1980s onwards (e.g. Hodder 1982; Gosden & Marshall 1999; Tilley 1996; 1999). This was in keeping with ‘fashionable’ perspectives on the Neolithic, which were largely insular at the time (e.g. J. Thomas 1991) as a reaction against ‘old fashioned’ culture history. The insular approach began in the late 1960s as a reaction against J.G.D. Clark’s ‘The Invasion Hypothesis in British Archaeology’ (J.G.D. Clark 1966) and developed in the 1970s with processualism and the search for internal dynamics (e.g. D.L. Clarke 1972; Renfrew 1973a; 1973b). In 1989, an attempt was made to show that the majority of Neolithic axe-heads in Britain were produced from glacial erratic rocks (Briggs 1989) thereby reducing the significance of movement and exchange during the Neolithic. There was a focus on indigenous development and a piecemeal interest in continental contacts. An exception to this was in Ireland, where colonisation remained the accepted theory throughout. The systematic and rigorous approach to implement petrology, and more broadly to stone axe-head studies employed by the aforementioned groups, informed the research design and working strategy of the Irish Stone Axe Project established in 1991, co-ordinated by Gabriel Cooney (Cooney & Mandal 1998). In Britain, it may be said that the proverbial ‘baby had been thrown out with the bathwater’. Archaeologists had stopped looking for continental imports, earlier notes of such finds in regional journals had, in many cases, been forgotten and specialists had fallen into the trap of discounting almost all ‘foreign’ tools as recent collectors’ losses.

The 1990s onwards saw approaches to stone axe-heads in Britain place a greater emphasis on meaning, value, and biography (e.g. Bradley & Edmonds 1993; Edmonds 1995; Whittle 2003). There was also a somewhat jaundiced view of implement petrology due to the damage caused

IPG

IPG is used as an abbreviation for the Implement Petrology Group, established in 1952 as the Implement Petrology Committee under the auspices of the Council for British Archaeology. When these Committees were disbanded in the mid-1990s, the IPC became the IPG (www.implementpetrology.org).

to axe-heads through the process of thin sectioning. Instances such as the axe-head from the hoard at Upper Paper Mill, Llangenny, Brecknockshire (Grimes 1951, 149, no.136) which was sectioned leaving the blade and butt as two disconnected pieces (Grimes 1979: 1), were particularly crippling for its reputation. In 1994, Berridge published a paper expressing concern about the lack of agreement among petrologists examining the thin-sections and attributing petrological groups. Mike Pitts's (1996) paper in *Proceedings of the Prehistoric Society* proposed a new framework for studying stone axe-heads which comprised 'six classes defined by their rock composition and working properties'. He attempted to raise the profile of flint in the role that it played in axe-head manufacture, and he carried out a significant study on axe-head morphology. Pitts's (1996) paper also contained *corpora* of stone and flint axe-head caches, and those found in burials.

After a considerably longer interval than that between *Stone Axe Studies 1* and *2*, the appropriately titled *Stone Axe Studies 3* appeared (Davis & Edmonds 2011) following a symposium on stone tool studies in the Department of Archaeology, at the University of York, in 2007. This volume was different from the first and second monographs as it did more than document the results of ongoing petrological characterisation; it widened the geographical focus and brought together different approaches to material traditions in different parts of the world. While *Stone Axe Studies 3* contains chapters on both stone and flint axe-heads, it is rare to find an individual contribution which discusses axe-heads made from both types of material. Since the start of the National Survey, the work of the Implement Petrology Group has been on non-flint stone, and studies of flint axe-heads have been carried out by the Lithics Studies Society, with few specialists straddling the two groups and little collaboration between them. This is an entirely false division and one which this study takes steps to address.

The premise of this study is that more imported axe-heads exist than have been recognised to date, but these have been falsely identified as British due to macroscopic misidentification, a lack of interest arising from a belief that material culture studies are 'old fashioned', and an insularity in British scholarship which is in part due to language barriers. The insular approach to the Neolithic and, by definition, axe-heads, is changing and much of this can be attributed to the sterling work of *Projet JADE*, a team directed by Pierre Pétrequin (of the CNRS and the Université de Franche-Comté at Besançon until 2009), with Alison Sheridan (National Museums Scotland) leading the British strand of the research (Pétrequin *et al.* 2012). The work by *Projet JADE* on axe-heads made from Alpine rocks has regenerated interest in the long-distance movement of axe-heads and related tools (see *Chapter*

Two for a more extensive summary), and created cross-Channel research partnerships. Following the success of *Projet JADE*, the time is right to explore the evidence for other imported axe-heads. While foreign and exotic Neolithic axe-heads have long been noted within British assemblages, no one has ever attempted to tackle them collectively, as a specific entity. Being able to identify 'foreign' axe-heads, and question those which are 'different', requires and informs a thorough understanding of British specimens and the variation which exists among them.

The research questions of this study

1. What can be recognised as 'imported' among Neolithic axe-heads?
2. Can anything more be said about the dates when imported, typologically Neolithic, axe-heads arrived in Britain?
3. Why did they arrive in Britain when they did?
4. What is the evidence for emulation and copying of imported axe-heads?
5. What do patterns of distribution and deposition reveal about the relationship between imported axe-heads and those made in Britain?
6. Did imported axe-heads contribute to the formation of different Neolithic identities within Britain at different times and in different places?

Methodology

The methodologies chosen were intended to tease out the finer details of the life histories of the axe-heads, from their material origins and production to understanding when, how, and why they may have ended up in the ground, or in rivers, in Britain. Identification of imported axe-heads is based on a comparison of materials, metrics and forms. Initially, to be able to identify imported axe-heads from those made in Britain has involved a vast amount of work with the literature, studying museum collections for reference in France, Jersey, and Denmark, and a close working relationship with co-members of the Implement Petrology Group, Lithics Studies Society and Neolithic Studies Group. Specifically, the museums consulted throughout the duration of this study have been Penmarc'h Museum in Finistère, Musée de Préhistoire de Carnac, Château Gaillard in Vannes, La Hougue Bie Museum in Jersey, and the National Museum of Denmark in Copenhagen. Specialists of French and Danish axe-heads provided helpful knowledge during meetings. A field visit to Brittany with IPG colleagues to study the main raw material sources of Breton axe-heads and search for possible British exported Neolithic axe-heads (outlined in *Chapter Five*) was hugely beneficial. Not only was it necessary to be familiar with the Breton axe-heads in the forms in which they were recovered, it was essential

to have an understanding about how they were made, the techniques used, and the waste material or *débitage* from their production. Being able to identify how an artefact is made forges a closer engagement with it, and traces of its manufacture can be incredibly telling about its origins and history. Learning to knap, with John Lord as a teacher, proved invaluable. A paper was delivered by the author at a conference: *Human Development in Landscapes*, in Kiel, Germany, in the formative stages of this project, in which the basis of *Chapter Seven* was presented and useful feedback was received (Walker 2010). A conference on *Continental Connections: exploring cross-Channel relationships from the Lower Palaeolithic to the Iron Age* was also attended, in June 2013, at the University of Liverpool and was particularly relevant to this study (see Anderson-Whymark *et al.* 2015).

To obtain the most complete picture of this dataset, *corpora* have been compiled of imported axe-head specimens of various types to correspond with each of the chapters. Specifically, these are: Alpine axe-heads; Breton axe-heads; ‘Crudwell-Smerrick’ axe-heads; and rectangular-sectioned axe-heads most closely linked with Scandinavian forms. The data derives from both primary and secondary sources. It is an assimilation of ‘grey’ and published literature with a particular emphasis on regional journals, notably some of the earlier editions in which axe-heads were recorded and then forgotten. It includes axe-heads in museum collections, those documented in Historic Environment Records, some recorded by the Portable Antiquities Scheme, others in Mike Pitts’s stone axe archive at English Heritage, and a number in private possession. The *corpus* for Alpine axe-heads had already been compiled by *Projet JADE* and exists in the public domain in two parts: one is accessible online as an excel spreadsheet (<http://jade.univ-fcomte.fr/>) and the other is in Sheridan and Pailler’s (2012) contribution to the main *JADE* publication (Pétrequin *et al.* 2012). The table included as *Appendix One* in this book is a summarised version of these two sources combined, following a similar format, with information selected to suit this study. The tables of Breton fibrolite (silliminite) and Breton Group X axe-heads (*Appendix Three*) are taken from reports by the Southwest Implement Petrology Committee published in the *Proceedings of the Prehistoric Society* and *Stone Axe Studies 2* (Stone & Wallis 1951; Evens *et al.* 1962; Clough & Cummins 1988) with an addition from the British Museum catalogue. The *corpus* of published marbled flint axe-heads of ‘Crudwell-Smerrick’ type has been compiled from a range of literature and Mike Pitts’s archive. The *corpus* of rectangular-sectioned axe-heads has been constructed from diverse sources including published and ‘grey’ literature, Historic Environment Records, examination of museum collections and information from colleagues.

The archaeological journals consulted during the construction of these *corpora* comprised all those in paper format, both national and regional, and international if British material was included, held by the Sackler Library, University of Oxford, published up to and including 2013. These were browsed systematically during a series of visits. The museum collections in Britain that were examined thoroughly for the purposes of this research were: Brighton Museum and stores; Bristol Museum and Art Gallery and stores; Canterbury Heritage Museum and stores; Ipswich Museum and stores; Maidstone Museum; National Museum Wales, Cardiff and stores; Norwich Castle Museum and stores; Ryedale Folk Museum and stores, Hutton Le Hole; Sea City Museum and Southampton City Council Arts and Heritage Museum stores; The British Museum and stores; Museum of Archaeology and Anthropology, Cambridge and stores (a selection only); The Rotunda Museum, Scarborough and stores; and Yorkshire Museum and stores. Historic Environment Records were accessed online via the Heritage Gateway and, in addition, an officer for every county Historic Environment Record in England was contacted and in every case a reply was received. For Scotland, *Canmore* (<http://www.rcahms.gov.uk/canmore.html>) was used to access the database of the Royal Commission on the Ancient and Historical Monuments of Scotland online. The website of the *Portable Antiquities Scheme* (www.finds.org.uk) was also consulted frequently and, with its colour photographs, proved to be a very valuable resource. Distribution maps plotting this data were produced by the author using CorelDRAW X5 on a base map kindly provided by Sue Grice, University of Bristol. In some instances, images and maps have been redrawn. While some would argue that it is more reliable to use the originals in order to avoid introducing errors, and in cases where authors have redrawn images they have been accused of doing so to avoid copyright issues (see for example Sheridan’s (2007c) review of Gordon Noble’s (2006) book on Neolithic Scotland), the choice to do so has been considered carefully and aims to give consistency to the style.

Wherever possible, the axe-heads were located so that first hand examination could be performed and the greatest level of accuracy could be achieved. This was not necessary for all of the Alpine axe-heads due to the recent in-depth work of *Projet JADE*. The examination for this book was primarily macroscopic, with the occasional use of a small hand-held microscope. Each axe-head was measured and drawn, and photographed using a Nikon D3000 DSLR camera with, when necessary, a macro lens. When axe-heads were unable to be located either through them being misplaced in museums, or in private possession, measurements were taken from photographs and drawings with scales, and this was noted in the *corpus*. Extracting data from photographs and drawings is less accurate than first

hand examination, as has been noted in a critique of Sylvia Chappell's BAR (see Pitts 1996: 337). She found 'the time and cost involved in personally inspecting implements in public museums were greater than expected' (Chappell 1987: 126) so derived her statistics from other workers' photos and drawings. Pitts suggests that as these images were not intended for this purpose, Chappell's results should be ignored (Pitts 1996: 337). When drawings and photographs are the only sources available however, it is essential to include them. As Mike Pitts's drawings with measurements were intended for academic study, and were produced with a high level of metrical precision, their use to extract data for this book can be justified. Pitts's archive, housed at Historic England in Swindon and digitised in 2016 by the Implement Petrology Group, comprises data from more than 2000 axe-heads in 95 museums in England and Wales (Pitts 1996).

To be able to identify collectors' pieces from genuine Neolithic imports was not straight forward. Time was spent researching the history of collecting, and prolific collectors and their networks. Auctions and sales of old collections were studied online to find out what types of axe-heads were most desirable and from which countries they originated. In terms of recognising fakes, discussion with the makers of replica stone tools and time spent examining the work of the notorious 'Flint Jack', in Yorkshire Museum, were both useful, as was reading Victorian accounts of the practice.

Typology is essential in archaeology as a way of understanding a relative dating sequence based on the style of a particular object considered to be characteristic of a specific period or culture. Within this is an inherent assumption that style reflects cultural identity. As yet, there is no detailed, serviceable, axe-head typology for British axe-heads; however these do exist in some other parts of Europe. For example, both Alpine axe-heads and rectangular-sectioned axe-heads of Scandinavian type have working typological schemes. In terms of ascertaining when a particular axe-head may have been deposited relies on them coming from datable contexts. While a few of these exist, the majority are stray finds making dating their deposition more difficult. In these cases, when a reliable and precise enough grid reference exists, the archaeology of the immediate environs has been examined. For the Alpine axe-heads, maps were produced to display this data and for the purposes of performing spatial analyses (see *Chapter Four* for a more detailed description). Tracing the contexts and circumstances of discovery involved the consultation of both published and grey literature including Historic Environment Records and museum accession notebooks. The topographic locations of the find-spots were researched and, in the case of the Alpine axe-heads, topography was a feature of the ArcGIS maps which were produced using Ordnance Survey data.

Scope

The geographical scope of this study covers the present day countries of England, Scotland, Wales, and Ireland, both Northern and the Republic. The Channel Islands have been excluded as their archaeology is most closely associated with that of France; however an awareness of them and their inclusion in wider discussion is essential. While the focus is on 'imports', chapters in this book include only those coming from east to west and, as has been noted already, do not include Irish axe-heads found in Britain. This is not to deny the importance of these axe-heads and the connection which they represent, with many accounts of the Neolithic assigning a priority to the Irish Sea. Rather, it is simply a matter of feasibility as this alone is a large body of material and would constitute a book in its own right. Temporally, the study spans from 5300 BC, the earliest date for Alpine axe-head production in Europe, to 2400 BC, the nominal end date for the British Neolithic. The use of 2400 BC rather than 2200 BC, which is sometimes used, keeps this study as 'pre-Beaker' in its intended scope and without the inclusion of a Chalcolithic phase; however these are touched upon in the discussion as they help to inform the Neolithic evidence. It does not include battle-axes which are a 'type-fossil' of the British Early Bronze Age (Saville & Roe 1984: 19). The material scope of this book is necessarily broad. Any one of these axe-head types could have been chosen as the subject; however, it is not possible to understand a single type of axe-head in isolation without first giving detailed consideration to its place in relation to others and within the bigger picture.

Structure

In *Chapter Two*, the relationship between axe-heads and identity is explored, and a connection between Britain and the Continent is established as context for the study, with a summary of what is already known about jade axe-heads. Leading on from this, *Chapter Three* takes a close look at what are known as the 'afterlives' of axe-heads. The main body of new and original work in this book is structured in four successive parts. This is followed by a discussion and conclusion, entitled *Answering the original questions*, giving a total of eight chapters. It should be read as a single volume of work, though each of the four main central sections is discrete enough to stand alone. The first of these parts addresses the problem of lack of context and develops a methodology for investigating the find-spots of the body of largely unstratified jade axe-heads found in Britain. The second section presents work that is currently being undertaken by the author as a member of the Implement Petrology Group in improving knowledge about Breton axe-heads in Britain. The third section addresses the problem of the 'Crudwell' type (Pitts 1996) or 'Smerrick' type marbled flint axe-

head, its distribution, origin and possible significance. The fourth section deals with rectangular-sectioned axe-heads ‘of Scandinavian type’ and includes a critical re-consideration of the axe-head from Julliberrie’s Grave (S. Piggott 1939), the only example of such an axe-head in a ‘secure’ archaeological context in Britain. The rationale of this structure of stand-alone parts is that it is intended to deal with the difficulties of dating and chronology of many of these axe-heads. It makes it

possible to discuss them in broad chronological terms without getting into problems of absolute dates where few exist. In *Chapter Eight*, these strands are drawn together to create a narrative about the changing roles of imported axe-heads in identity formation in Neolithic Britain. The research questions outlined in this chapter are answered, and topics are posed for future research. Seven appendixes of data presented in the same order as the chapters which they support.