UNIVERSITY OF SOUTHAMPTON

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Polished Axes: object biographies and the writing of world prehistories

by

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ABSTRACT

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Polished axes have become an iconic tool representing the Neolithic in the archaeological record. Polished axes are unusual as they are similar in form and design across space and time, found internationally in both archaeological and ethnographic contexts. This meant they have become an easily recognisable item for collectors and have been found in public and private collections from the 18th Century onwards. A common component in many diverse collections, tracing the history of polished axes allows the investigation of the networks of people and artefacts which built the collections of the British Museum. These networks were also crucial in the sharing of information, which especially in the mid – 19th Century may have had a significant impact in the way in which world prehistories were written. The research has focused on the British Museum's collection of polished axes from Oceania, and Europe. Objects associated with the axes, including hafts, labels, diaries, letters and catalogues have been used to reconstruct the 'biography' of each collection of artefacts. This makes it possible to show how the British Museum's collections of polished axes were built and how they have been used to write the prehistory of the world from a Western perspective.

There are three main aims to my research. Firstly I aim to better understand how the British Museum acted as a site of knowledge making during the construction of prehistory as a concept and the construction of archaeology as a discipline. Secondly, I aim to show how ethnographic and archaeological artefacts have been used together, both inside and outside the British Museum, to write world prehistories. Finally, I will show how polished axes have been used to write world prehistories which have influenced archaeologists for

generations and to show object biographies may inform world prehistories in the future.

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UNIVERSITY OF Southampton

Academic Thesis: Declaration Of Authorship

I, ELIZABETH JANE NORTON

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

Polished Axes: object biographies and the writing of world prehistories

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. Either none of this work has been published before submission, or parts of this work have been published as: [please list references below]:

Signed:

Date:

Acknowledgements

I would like to dedicate this thesis to my grandparents who I love very much.

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Chapter 1: Introduction

"The object as a commodity, as artefact, as specimen, as art, as someone else's heirloom, treasured cultural heritage, or sacred emblem: these are very different ways of seeing the same thing. They are all properties or values of the object, all phases in its life. Values may be imposed by those wishing to possess or appropriate the object and others asserted by those claiming moral jurisdiction. The transformation of meaning and use during the object's careers could be better represented in museum interpretations. The longer the career of the object, however, the more segmented its history becomes and the more the knowledge about it becomes fragmented, contradictory, differentiated and fodder for commodification and dispute (see Appadurai, 1988: 56) (Ames, 1992, 102).

The polished axe is a form of artefact which has transcended the boundaries of time and space. It has been a stalwart of European Neolithic archaeology, which has led to its role in modern and early historical ethnographies being closely scrutinised, especially in Papua New Guinea. The ease of its survival in the archaeological record, easily recognised form and the aesthetically pleasing nature of the jadeite axes, combined with petrographic analysis has made the polished axe a frequently studied artefact from the 18th Century onwards. Studied by antiquarians, geologists, archaeologists, and anthropologists, the study of polished axes has also crossed boundaries of scholarly learning, which increased the visibility of these artefacts in societies and literary records and accounts somewhat for their inclusion in the British Museum collections. The "value" and "meaning" of the polished axes has been cyclical in nature – moving from an object shrouded in myth and magic, to a quantifiable object of scientific survey, and more recently in the 20th and 21st Centuries, the polished axe has a plurality of meanings – returning to being an object of myth and folklore, alongside being a commodity and a scientific artefact of study.

My thesis is firmly situated in an emerging field which combines object biographies of historical ethnographies of collections of museum artefacts that views objects as a way of navigating history, negotiating the past and brokering lines of communication between cultures through exchange. This field draws

upon archaeology, anthropology, and the history of museum ethnography in order to explore networks in the past. These works have been supplemented by the historians of science, who during the last two decades have added to the field with institutional histories, which have examined the power and influence that institutions such as the British Museum exert upon society (Alberti, 2005, 559). Where my thesis differentiates itself from the rest of the field is the focus on a single artefact type (the polished axe) to navigate the British Museum's collections as a whole and to disentangle how the British Museum has acted as a site of knowledge- making. By studying the literary connections to the British Museum's collections I aim to show how narratives of prehistory were produced from the polished axes in the collections in the British Museum. My approaches to the British Museum's collections have been heavily influenced by the works of Kopytoff (1986) and Appadurai (1988), by taking biographical approaches to polished axes, examining the stages in the polished axes' lives from manufacture to after the inclusion of the artefacts in the museum's collections.

1.1: Aims of the thesis

This thesis incorporates the time period from the foundation of the British Museum in 1753 to the present day and seeks to understand how prehistory has been written from the collections of the British Museum. Object and collector biographies are used as a tool to achieve this. The object biographies are inescapably linked to the biographies of the people who manufactured them, used, bartered for them, bought, sold, transported and collected them. In this thesis these biographies have become intertwined and part of the story of the British Museum's collections. The collections of the British Museum are so multi-layered and from a diverse set of origins that it was necessary to focus upon a single artefact type in order to extract the inter-personal, inter-institutional and inter-collection levels of interaction within the biographies of each individual collection.

The data set used to achieve this is the British Museum's collection of polished axes. The term "collection" here may be misleading. The British Museum's polished axes do not represent a single concerted collecting strategy, it is instead a grouping of collections formed over the best part of three hundred years. The British Museums collection of artefacts have their roots in the

cabinets of curiosities which gained popularity over the 17th and 18th centuries as a way of displaying, miniaturising and controlling the natural and artificial world. The global nature of the collection of polished axes at the British Museum combined with the longevity of the collections and diverse set of collectors provides a unique standpoint to address this question.

How the British Museum has developed as a collecting institution forms a core part of the literature review. This review seeks to determine what role the British Museum as an international institution has played in the creation of knowledge of our prehistoric past through examining the biographies of the staff, trustees and donors to the British Museum's collections. I am investigating how the collection of a single artefact type can affect the construction of the narrative of prehistory through the creation of personal networks. In my thesis polished axes act as a gateway artefact for the reconstruction of these interpersonal networks. These networks will be reconstructed from both the biographies of polished axes stored in the British Museums collections and of the people who donated them. Finally in my conclusion I will be showing how the British Museum continues to create knowledge from the prehistoric and ethnographic collections and the interplay these two collections continue to have. The aims of my thesis are therefore summed up in the bullet points below.

My aims in this thesis are:

- To understand better the role of the British Museum in acting as a site of knowledge during the construction of prehistory
- To appreciate more fully the interplay, in the history of archaeology, between information derived from ethnographic and archaeological sources

1.2: Research Questions

Although often characterised as a basic human instinct, generalisations of the universal nature of collecting are often not helpful and belie the complex nature of the motivations behind collecting. Archaeology has rightly interrogated whether grouping of objects found buried are truly collections or instead represent "hoards or accumulations" that instead represent objects gathered for

their own functions or perceived meanings rather than for their relationship to other objects (MacDonald, 2006, 82). MacDonald (2006) has argued that as well as their role of public educators, museums, both national and local, were also the catalyst for many to begin their own private collections, particularly in the mid-19th Century. Increased trade and colonialism during this period meant the variety of objects available for people to collect, especially exotic items had exponentially increased. The museum as an entity became part of the cultural consciousness of the middle classes, and the popularity of the acquisition of new collections also went hand in hand with the development of department stores, who often borrowed stylistic organisation from museums (MacDonald, 2006, 86).

It is largely these private collectors who form the majority of collectors considered in this thesis, although institutions are also considered. These case studies were picked through a process of elimination. All collectors that had polished axes in their collection were considered from the departments of Africa, Oceania and the Americas and Britain, Prehistory and Europe. Collectors of polished axes also exist in the British Museum's other departments including the departments of Asia and Ancient Near and Middle East, but in-depth consideration of these collections was not possible in the scope of this thesis. These collections formed a scientific database whose availability was crucial to the London community of scientists and collectors in the decades of the mid - 19th Century when the concept of prehistory was formalised. The collection of polished axes it houses has been formed through a complex web of interactions and decisions. Below are the research questions which have been used to frame my thesis and guide my research.

- How did ethnographic stone tools help in the acceptance of the anthropogenic origin of certain prehistoric artefacts during the Nineteenth Century?

How will I answer this?

Goodrum (2008) proposed that it was familiarity with ethnographic items that made it possible for people to accept the antiquity of prehistoric artefacts. I will be studying the writing of 18th Century authors to see if there is reference to this influence especially Sir John Lubbock and John Evans.

- What light do the biographies of these axes shed on the practice of collecting for an international institution such as the BM?

How will I answer this?

This question will be addressed through the in-depth study of the network of collectors at the British Museum. Any collector who donated two or more axes to the prehistoric and ethnographic museum will be considered.

1.3: Why polished axes?

There are over 4,500 polished axes, adzes and celts in the British Museum's collections that have been sourced and donated from archaeological and ethnographic contexts from around the world. These axes form the primary data set for my thesis. The age of these axes range from roughly 3,500BC to the 1970s. The exact number of axes cannot be correctly ascertained as many have been categorised simply as axe, celt or even just stone or tool. The limitations and parameters of the data set used in this thesis are fully outlined in Chapter 2.

When I use the words "axe" and adze" respectively throughout this thesis I have chosen to use the definitions provided by Darvill (1989):

Axe: *"a true axe is typified by a broad cutting edge, a roughly symmetrical profile and cross section and a tendency for weight to be focused immediately behind the blade….it cannot be assumed all axes were used for the same purpose (Darvill, 1989, 30). Darvill (1989: 32) asserts in his definition that all axes should be large enough for hafting, but I have left this part of the definition out, as many of the polished axeheads, are too large or small to be practically hafted e.g. Alpine axeheads start at 3cm* (Petrequin et al, 2008, 262).

Adzes: "the blade of an adze is mounted at 90 degrees to the haft so that it can be used to pare shavings off a piece of wood in order to dress it. Since the adze strikes the wood at an acute angle, a plano – convex longitudinal profile essential, the "plano" side being set away from the user. The cutting edge is wide and straight rather than convex." (Darvill, 1989, 30).

The polished axe is a globally recognised archaeological and ethnographic artefact. The polished axe is found archaeologically in North, South and Central Americas, Europe, the Near East, Japan and China, as well as ethnographically in Papua New Guinea and New Zealand. The first appearance of the polished axe in Europe was in the Aegean around 7000BC, found in the Franchthi Cave in Southern Greece, where the arrival of polished axes was combined with the introduction of emmer wheat and barley, domesticated sheep and goats, and lentils. Although more traditional flint and bone industries did continue to be manufactured alongside the polished stone axes (Thorpe, 1999, 22).

Polished axes have held a key role in the identification of the introduction of agriculture. The nature of the transition and spread of the Neolithic across the world has been debated for decades but the polished axe has held a position as a marker of this transition across the globe. For example, in Britain and Ireland, the transition from the Mesolithic to the Neolithic is often technologically marked with the replacement of microliths with polished axes, even though if you consider a broader spectrum of Neolithic lithic technology there is a lot of continuity in the form of blades and flake – based technologies (Thomas, 2004, 125). In Atlantic Europe, polished jadeite axes have been strongly linked with the spread of monumentality, from the mid fifth millennium onwards and have become especially characteristic of the Carnac chambers in Brittany and are often found deposited in funerary contexts and has been described as an "emblem" of the Neolithic (Cassen et al, 2011, 233). This emblemised use of the polished axe is not limited to Europe. In China, partial polishing of stone tools has been recognised in the archaeological record as early as 19,000 years ago, although fully polished artefacts are recognised as being part of the transition to the Neolithic (Zhao et al, 2011, 131). It should be noted that the function of the polished axe in the Neolithic transition in China is still uncertain (Zhao, et al, 2011, 135).

The meaning, use and categorisation of these stone tools have preoccupied archaeologists for the best part of three centuries. Although the wider study of lithics is largely synonymous with the study of the technology behind the production of tool and the study of variation , the archaeological and ethnographic study of polished stone axes has always gone beyond the functional, even from the beginnings of study in the 18th Century, as will be

shown in Chapter 6 (Edmonds, 1995, 5). However, despite changes in the aims of archaeology, the behaviour and methods of archaeologists, there remains common threads throughout in the approaches of archaeologists towards the study of stone tools. Edmonds (1995) sums these approaches up well: "*More often than not, prehistoric technology is viewed as 'hardware'—placed between people and nature—which allows for the more or less efficient exploitation of particular resources by human groups. In effect, it is held as an objective field of past social life which presents relatively few problems for the contemporary observer*" (Edmonds, 1995, 6).

The reason for the introduction of polished axes to Neolithic life is contentious and depends on whether the archaeologist interpreting the polished axe views them primarily as a medium for the replication of Neolithic social identities or as a practical response to the increased construction demands of the Neolithic lifestyle. Regardless of the current study of polished axes, this artefact would have been an everyday object in Neolithic life, used for woodworking, tree-felling, digging and other manufacturing tasks (Edmonds, 1996, 51). Polished axes have been found in association with different categories of Neolithic monuments, including causewayed enclosures as well as being a common feature of grave goods in Northern Europe (Edmonds, 1996, 52). Both polished axes and the raw material to make them appear to have been significantly trafficked from the early Neolithic in Britain (3500BC) onwards, both inside the boundaries of modern Britain and across Europe.

Arguably the polished axe has become accepted as a type fossil for the identification of the Neolithic in the archaeological record. The polished axe in European Neolithic society is currently viewed as having a "*high economic, social and symbolic value, as attested by their occurrence in contexts of discard as well as in ritual deposits (graves or hoards)"* (Thirault, 2005, 34). During the mid-20th Century polished axes have been most commonly studied in relation to their distribution in the landscape and the links polished axes may have had to petrographic qualities (Clark, 1965, Cummings 1974, Clough and Cummings 1979 and 1988). However, during the lead up to the new millennium and beyond, the majority of discourse surrounding polished axes in European archaeology attention has turned to the possible social impact of the distribution,

manufacture and discard of polished axes during the Neolithic. In the absence of language the polished axe has been used as a window into the social world of the Neolithic - viewed as a series of encounters with trade and exchange, power and gender roles at play.

Polished axes have been used as one method of applying boundaries to the unknown that prehistory represented, as a type fossil, it joined a compendium of artefacts that became synonymous with each of the tripartite divisions of prehistory and further subdivided the Stone Age. If prehistory is studied in a historiographical manner, it can be shown that the discipline has been preoccupied with the production of definitions, boundaries and the production of an intellectual tradition that could recover meanings, values, societies and events from the archaeological record. Prehistory has been driven by the need to understand humanity, which is rooted into to the enlightenment ideals responsible for the initial steps towards antiquarian endeavour in the 18th Century (Taylor, 2008, 3).

As a material object, the polished axe shows remarkable similarity of form, use and production across the different continents on which it was produced including – Oceania, North and South America, Europe and Asia. This similarity in form has given the polished axe a level of currency in archaeological circles, making it a commonly collected and compared artefact from diverse geographic locations. Polished axes have been used as a comparative artefact between archaeology and anthropology since even before there was a clear dividing line between the two disciplines.

1.4: Why the British Museum?

"*The Museum's raison d'etre is to illuminate and explain the past of the whole world through material culture*" (Wilson, 2002, 8).

Polished axes are not a focus of the British Museum's collections; they are simply a reference point in a wider chronology. However, they do represent an artefact which is in the collections donated by a wide range of benefactors to the museum, whose reasons for collecting and artefacts they collected were diverse. There is not a single coherent narrative for the acquisition of polished axes in the British Museum. Instead, the collection of polished axes works as a

microcosm for the wider museum, and highlights the "Russian doll" nature of the British Museum's collections. Many groupings of artefacts in the British Museum represent collections within collections, interconnected by networks of communication, publication and curatorship. The haphazard and encyclopaedic nature of the collections at the British Museum can be viewed as a product of the ideals of the enlightenment, dominant philosophy at its foundations. As the Museum built its collections throughout the 18th and 19th Century, it has been described as a being a "*virtual encyclopaedia of the state of the knowledge of the world*" and would have had a significant impact upon those who donated items, curated the collections, visited and studied there. The British Museum has the honour of being the first public national Museum and library in the world (Sloan, 2003, 14). Understanding the theoretical and ideological discourse that surrounded the founding of the museum is necessary in understanding the British Museum's role as a site of knowledge-making, but it should also be viewed as a place where views and values are fluid and changing, with the objects holding their position as the "*bearers of meaning*" remaining constant, with their meaning changing in the eye of the beholder (Jenkins, 2003, 177). Public museums have had a complex relationship with the industrialisation and capitalism and governance of society. They have been described as places that "*provide a sense of social heritage, a fund of social knowledge, a sense of development*" just as much as other forms of social memory such as poetry, myth and song (Taborsky 1982, in Hill, 2007, 10). The development of the structure of the British Museum and the roles that key members of staff have had on that development of knowledge making alongside that of external influences are introduced in Chapter 2.

My primary data sources are the polished axes held within the British Museum's collections and the publications produced from them and surrounding them. As stated earlier, contrary to the popular imagination the British Museum's collections cannot be treated as a homogenous whole, rather as a complex stratigraphy of donations from a wide range of sources. Each source of collection is connected to the donor and the original location, manufacturer and user of the artefact as well as the layers in between. The polished axes themselves are attached to secondary sources of information, such as labels, diaries and biographies stored in the British Museum's database Merlin which

give clues to each point in the biographies of the artefacts. The collections are the key to unlocking how the British Museum became a site of knowledge-making in the past. "Big" ideas about the formation and description of prehistory will be explored through the lens of a singular artefact type. The archaeological and ethnographic collections at the British Museum are inextricably linked through joined biographies of collection, curation, interpretation and display. Artefacts are displayed in museum galleries in a way that the collections of artefacts become a "*representation*" of the past. Polished axes in the British Museum are used as a representation of the key artefacts of the Neolithic in Britain. Every Museum, national, university, or local, the British Museum included, have their own agendas that affect the display and exhibition of prehistoric artefacts. (Wood and Cotton, 1999, 28). The authority and power of the public museum over how artefacts are perceived should not be underestimated. Museums can dictate the value of an object or decide what is "*interesting*" or what is deserving of being added to the collections (Pearce, 1999, 13). Polished axes are still on display in the main prehistory gallery in Room 52 of the British Museum.

1.5: Methodology in collection of evidence at the British Museum

The methodology of data collection at the British Museum has been heavily influenced by the studies of Susan Pearce (1994) who organises object study into four areas of interrogation: material, history, environment and significance. The material category encompasses construction, design and raw materials, history is a descriptive category of the use of the artefact, and environment is concerned with the spatial relationship. Finally and most importantly with regards to the social aspects of the biography of the artefact is the category of significance which covers the emotional and psychological aspects to the objects (Pearce, 1994, 126). These categories can be used to tease out the nature of the artefact to both the original manufacturers, curators, collectors and intermediaries. Material, history, environment and significance have formed the foundation of my approach to the polished axes in the British Museum collections. This was chosen as Pearce has an expanded model of artefact investigation which comprehensively covers historical, physical, social and environmental attributes of artefacts which is necessary when considering

artefacts in museum collections far removed from their original environment (Pearce, 1994, 129). The study of material cultures is a truly interdisciplinary affair, one that goes far beyond the boundaries of either archaeology or anthropology, although the social sciences are most strongly associated with the description of objects. The description of objects usually requires scientific investigation and the role of the object of scientific measurement has been one that archaeology has grasped tightly onto as a means of justification of the discipline (Prown, 1982, in Pearce, 1994, 133). Prown (1982) states that the method of studying material culture proceeds from description, to deduction to speculation (Prown, 1982, in Pearce, 1994, 134).

If we are to follow the model of Prown (1982), the descriptive phase of my research was spent physically looking at the collections of polished axes in the British Museum collections. I viewed axes from Africa, North, South and Central America, Europe and New Zealand and Papua New Guinea. However, due to time constraints only the Pacific collections and European collections are discussed in this thesis. The condition of these axes was recorded as well as associated objects, including labels and original catalogues. In order to decide which axes to view, initially I searched the British Museum Database Merlin, for the keywords “adze”, “axe” and “celt” and exported that data to an Excel spread sheet. This data was then put into collections and then further sorted by person of acquisition and I then exported the different collections, e.g. Prehistory and Europe, Asia, into different Excel documents. These initial downloads were later supplemented by additional keyword searches on Merlin and additional exports of data to ensure that no polished axes had been left out of the initial searches because they had been listed under additional search terms including “stone artefact” and “chisel”.

Arguably, the “deduction” phase following the Prown (1982) model, was to choose what collections of polished axes would be chosen as case studies. In order to choose the collections most connected to the creation of prehistory, I have extended my research to include the full collections donated by each collector in order to understand the context in which the polished axes entered the museum. This increase of breadth in study was more sensitive to biography of collectors and the social background to the construction of the collections. The Identification of collectors was achieved through the use of the British

Museum database. Then these were narrowed down by the number of axes donated to the Museum, all donations of two axes or more were considered.

Biographies of individual collectors were then considered, to assess the level of connection to other collectors who donated or sold collections to the British Museum. Certain collectors such as Henry Christy, became obvious starting points for the expansion of case studies and charting the primary and secondary networks of knowledge transference from polished axes in the British Museum. A full list of collectors considered is provided at the end of this thesis in the appendix. A full methodology is provided in Chapter 2.

1.6: The interaction of archaeology and ethnography in prehistory and the British Museum

My thesis investigates the use of ethnographic data by archaeologists, but also how the polished axe has been viewed by ethnographers and anthropologists, whose views of stone technologies are often markedly different from archaeologists, because of the dichotomy between the two disciplines. I will be looking at the collection of ethnographic artefacts from the beginning of the museum. The eighteenth century saw a huge change in the methods and methodology behind the collection of archaeological and ethnographic artefacts due to developments in technology, exploration and the development of the discipline of the natural sciences, including biology and geology (Feest, 1993, 6). The voyages of discovery in the 18th Century opened up new trade routes to the Pacific and allowed a broadening of material culture that returned to Europe, sparking new debate and theorising (Feest, 1993, 6). These collections held in both public and private collections spurred secondary waves of missionary and anthropological work in the mid-19th and early decades of the 20th century.

Although display of ethnographic artefacts in the British Museum was limited due to lack of space initially, interest in ethnographic objects only increased into the 19th Century. In the mid-19th century, material culture began to be studied in the same way that nature had been studied for the previous century. Cultural artefacts came to be seen as a commodity that could be quantified and used as an empirical unit of scientific study, moving far away from the romantic notions of the enlightenment (Spalding, 2002, 16). Darwinist principles were applied to

the progress of civilisation and ethnographic artefacts were used in a museum setting to show the progress of man. Ethnographic artefacts were no longer just listed as curios, miscellany, or souvenirs but were instead used in direct comparison with prehistoric artefacts in order to demonstrate the "progress" of culture (Spalding, 2002, 17). Culture was viewed hierarchically within the British Museum in the mid-19th Century, and can be viewed in the divisions of the departments. Greece and Rome, the pinnacle of artistic achievement were kept apart from the British Medieval, Oriental, prehistoric and ethnographic collections (Spalding, 2002, 17).

I have chosen to study the polished axes retrieved from the Pacific Islands, in particular Melanesia and New Zealand. Since the late 18th Century, when explorers began to collect artefacts from Melanesia, these artefacts have lived what Nicholas Thomas has termed "double lives" (Thomas, 2013, 6). They remain significant objects in Melanesian societies despite the disruption wrought by colonisation, disease and missionary intervention. These problems were further compounded by the suppression and abandonment of certain artefacts and production techniques by colonial forces. In Europe, however, these artefacts have entered a new phase of their existence. They have often been fetishized, classified into categories that remove them far from their original associations and finally displayed or stored in Museums. The collection and treatment of these artefacts, both in museums and in the academic press has created a gulf between the artefacts and their original contexts and meanings. The modern day manufacture of polished axes in Papua New Guinea both for tourists and traditional consumption has made the country an attractive arena for the ethnographic study of technology by archaeologists (e.g. Petrequin and Petrequin, 1993). The British Museum's curators now actively pursue engagement with Melanesian communities, not just at a curatorial level but in a wider public theatre, allowing Islanders engagement with their heritage (Thomas, 2013, 6). The British Museum's collection of Melanesian objects, which totals over 20,000 artefacts, represents hundreds of different language and many cultural traditions. Many of the artefacts are the earliest known examples, and many objects are no longer manufactured by their communities (Thomas, 2013, 8). Melanesian collections have remained under -examined in comparison

to their New Zealand and Australian counterparts in the department of Africa, Oceania and the Americas (AOA) (Thomas, 2013, 9).

1.7: In Summary

This is how the rest of my thesis will be structured:

Part One: The British Museum as a site of knowledge-making

- Chapter 2: Methodology and surveying the collections of polished axes at the British Museum
- Chapter 3: Remote Places: An introduction to the ethnographic collections at the British Museum: This chapter of the thesis is responsible for laying out the beginnings of the ethnographic collections at the British Museum, and the museum's connection to voyages of discovery and early ethnographic research, from the founder of the British Museum, Sir Hans Sloane and an introduction to the Maori collections of polished axes at the British Museum.
- Chapter 4: Remote Times: How was the idea of prehistory incorporated into the British Museum. This chapter introduces the primary protagonist in terms of individual curators at the British Museum: Augustus Wollaston Franks and the acceptance of both British and prehistoric materials at the British Museum.

- Chapter 5: A Collection of Collections: The collections of polished axes at the British Museum: This chapter is structured into three sets of case studies, which highlight the "Russian doll" nature of the collections. The Chapter begins with reviewing the bequest of Henry Christy and the subsequent management of the Christy Fund set up from his donation. The second half of the Chapter examines the legacy of the ethnographic collections of Franks and the presence of expeditionary anthropology in the British Museum's collections.

Part Two: Polished axes and World Prehistories

- Chapter 6: Turning axes into history: This chapter is a review of how polished axes have been treated theoretically by Western European archaeologists in the 20th and 21st Century. This chapter examines the role of the polished axe as a socially defined symbol of the Neolithic.
- Chapter 7: Interplay of archaeology and ethnography: This chapter is a review of historical approaches to the interplay of archaeological and ethnographic artefacts both in the British Museum and beyond.
- Chapter 8: Conclusions: This chapter is structured around the three research questions of my thesis and also examines the future directions of knowledge making from the prehistoric and ethnographic collections at the British Museum.

Chapter 2: Methodology and surveying the collections of polished axes at the British Museum

"*Collecting is also one way in which we hope to understand the world around us and reconcile ourselves to places within it. A collection may be in some sort a tomb, but our responses to it establish our own lives*" (Pearce, 1995, 25).

Polished axes have become artificially separated from other associated material from the Neolithic and modern ethnographic collections through their inclusion in private and public collections. Susan Pearce (1995) has argued that through separating objects into a collection, it gives the objects an almost sacred quality, because they become set apart from other archaeological commodities (Pearce, 1995, 27). At the heart of the thesis is a recognition of the power of individual choice, which is at heart of the collecting process, for every collection both public and private (Pearce, 1995, 28). Personal choice in the collecting process directly affected the process of writing prehistory from museum collections. Disentangling motivations behind the collections process is key, as is the ability to transparently record my own aims and methodology.

This Chapter will outline the research process behind the case studies in the following chapters from the initial approaches to the material to onwards. The research aims of this thesis were supported from two sources of data: archival research in the British Museum and secondary literature. After this we will be exploring the ethnographic collections of polished axes in the British Museum.

What this Chapter aims to show:

- How my primary and secondary data was collected
- How I identified Collectors
- An Introduction to the collection of polished axes through A.W. Franks

2.1: How was my primary and secondary data collected?

The beginning of my research, I initially searched the British Museum database for the amount of polished axes recorded as being in each department and these were the numbers given, for the search terms "adze" and "axe" and "celt":

	Adze	Axe	Celt
Total Number Polished Axes Europe	262	4320	0
Total Number Polished Axes PNG	13	18	2
Total Number Polished Axes NZ	5	2	0
Total Number Polished Axes N Am	3	4	2
Total Number Polished Axes S. Am	0	6	7
Total Number Polished Axes Central Am.	0	3	7
Total Number of Polished Axes India	0	5	13
Under the term "Neolithic" in Prehistory and Europe	58	231	0

Table 1: initial Merlin search figures

Upon reviewing these figures with Museum assistants and curators within the individual departments of the British Museum, that aside from the European figures, the classification of objects in the departments of Africa, Oceania and Americas when initially inputted into the system had meant that polished axes had often been recorded under other categories such as "tool". If you widen the search on Merlin just to encompass "stone axe" "stone adze" and "stone celt", the numbers much more accurately reflect the amount of axes in the collections. These numbers are recorded in the table below.

	Adze	Axe	Celt
Total Number PNG	171	194	83
Total Number NZ	426	62	5
Total Number N Am	180	418	225
Total Number S. Am	20	350	105

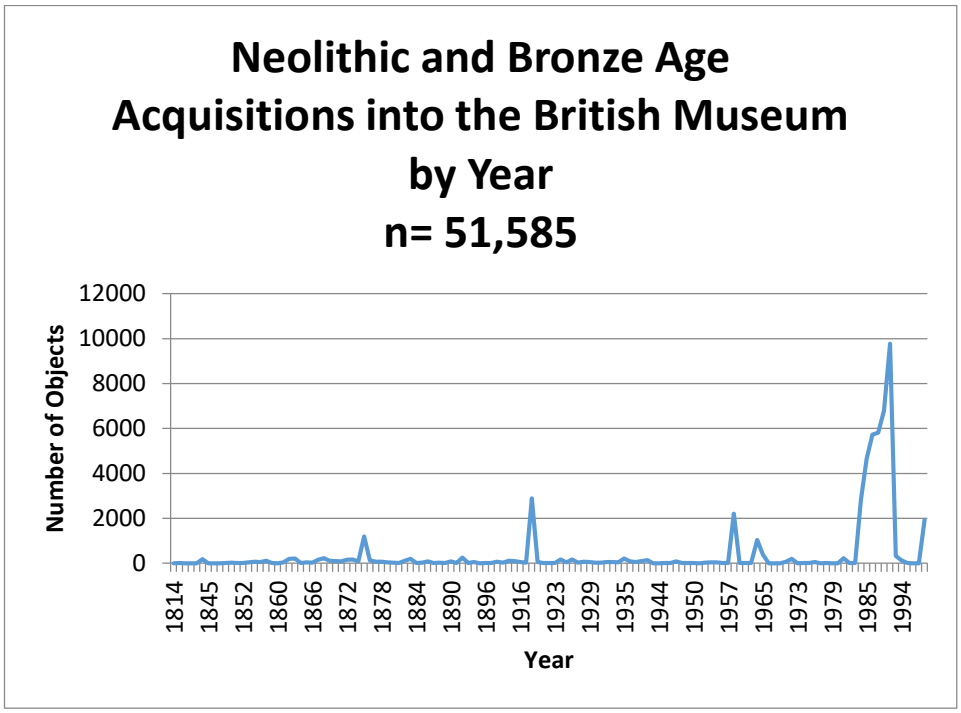
Total Number Central Am.	14	74	106
Total Number in Prehistory and Europe	421	6239	20
Under the term "Neolithic" in Prehistory and Europe	104	832	8

Table 2: Amount of polished axes recorded on Merlin with expanded search terms.

In order to determine what was actually a polished axe for the American, Papua New Guinean, and Maori tools it was necessary to document them manually. The European axes could be viewed remotely using the Merlin database due to the accompanying photography with each record. The African tools were also physically viewed and recorded, though not enough data could be gained before the artefacts were placed into inaccessible storage ahead of their move from Franks House to the main Bloomsbury site.

Primary data in the form of photographs were also collected from the artefacts themselves. I also assessed the amount of polish present. It was often necessary to determine in person whether or not each artefact chosen for the study was polished or not, because that information was often not recorded on the British Museum database. Each adze or axe has been considered to be polished if polish covers more than a third of the surface area of the artefact. I placed no size limitations on the axes I wished to study. I also placed no restrictions on the petrology of the artefacts – axes and adzes of all geological types have been considered for this study, so long as deliberate polishing of the object can be observed, and that this polishing covers a third or more of the artefacts surface area. I believed that if I were to have excluded axes based on terms of their petrological makeup or size, it would provide a biased and unrepresentative sample of the museum's collections. For example the exclusion of flint from previous distribution studies of British polished axes has provided a skewed picture, as identified by Darvill (1989). If the axes in the archives proved to be unpolished, I have still included them in the assemblages of each collector.

I exported the entire databases of artefacts into Excel from Merlin in order to ascertain which time periods may have been most significant, and to identify collectors who the British Museum had purchased from, or had donated polished axes to the British Museum since 1800. The graph below shows acquisitions into the British Museum collection that has been categorised as Neolithic and Bronze Age. I included both time periods as many records of polished axes had been tagged with both key words. This data was pulled from the Department of Prehistory and Europe's records on Merlin, which I had exported into Microsoft Excel. As you can see from the graph below there are significant spikes in 1872, 1916 and the majority of the 1980s. However, this data is problematic.



Graph 1: Total number of Neolithic and Bronze Age acquisitions into the British Museum from 1814 to 2014.

Often the date of accession, is dual with the date it was entered into the system, where the original accession date is unknown. This means that some of these spikes will represent efforts by the British Museum to computerise their collections. This meant that this data alone could not be used as the sole source of data for the trends in artefacts acquisition for the British Museum. The date

of acquisition on Merlin could only be used when verified by other records and wider literature.

2.2: Identifying Collectors

Arguably the greatest challenge the data presented was identifying the collectors and donators of the polished axes to the British Museum and deciding which of those to include. A full list of donators and collectors of polished axes to the British Museum (those who donated two or more axes) is included in the appendix to the thesis. There were no collections donated by individuals where polished axes were the sole artefact donated. It was necessary to consider the entire collection of each donator. The collectors considered broadly fell in to the below categories:

- Institutional Collectors: Franks etc. Who collected on behalf of the institution
- Missionary workers (Common in Polynesia)
- Professional travelling collectors (e.g. ships surgeons, geologists)
- Merchant collectors (those who collect specifically to sell)
- Colonial Administrators/Civil Servants Abroad
- Private Collectors (they may collect in an amateur or professional manner, but the collection is for private display/use only).

When considering collectors for case study the amount of remaining literature and data on the individual was also an important deciding factor. The data considered was museum catalogues and records and articles in periodicals and newspapers and books. If a husband and wife collected together, I have included them together. All collectors have been grouped by region in a master table so that I can compare variables such as age, gender, profession and countries in which they were interested and active in collecting items from.

2.3: An Introduction to the collection curated by A.W.Franks

The collector who occupies the greatest amount of attention in the thesis is Augustus Wollaston Franks. His curatorship during the mid to late 19th Century has had a profound impact on the British Museum collections that is still being

felt today. The table below shows that A.W. Franks oversaw the accession of 1,326 European polished axes alone.

	Number of Polished Axes in Prehistory and Europe	Total Numbers of artefacts in the Museum
Christy Fund	909	8862
Augustus Wollaston Franks	417	33,964

Table 3: Number of polished axes and total number of polished axes that Franks was responsible for in the British Museum.

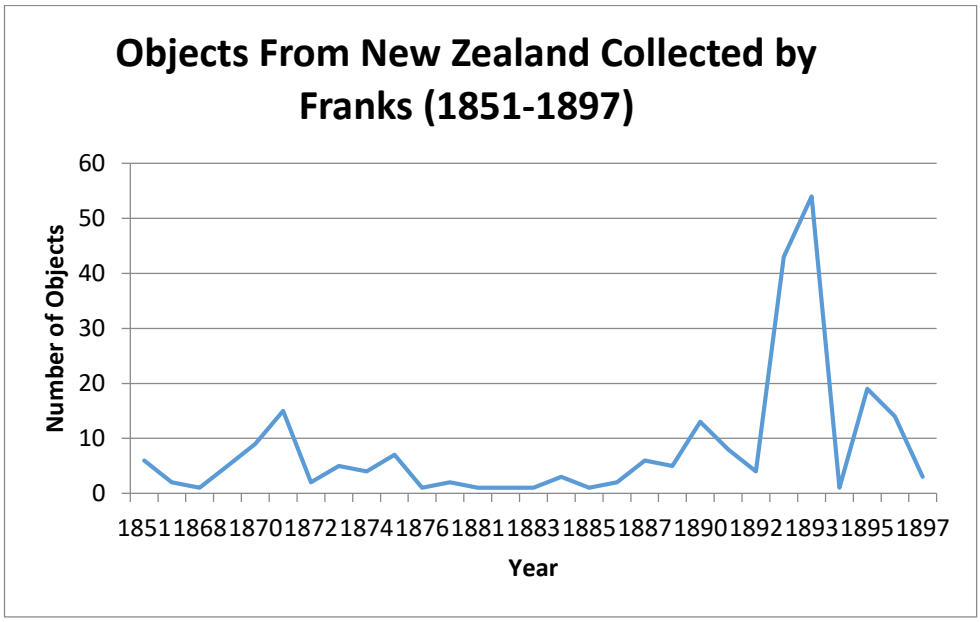
The Maori collections, in which Franks was keenly interested in, provide a snapshot of both Frank's purchases with the Christy Fund and a collection of collections with a high proportion of polished axes.

When I viewed the British Museum's collection of axes and adzes from New Zealand I ascertained that 92.6% of the axes were polished.

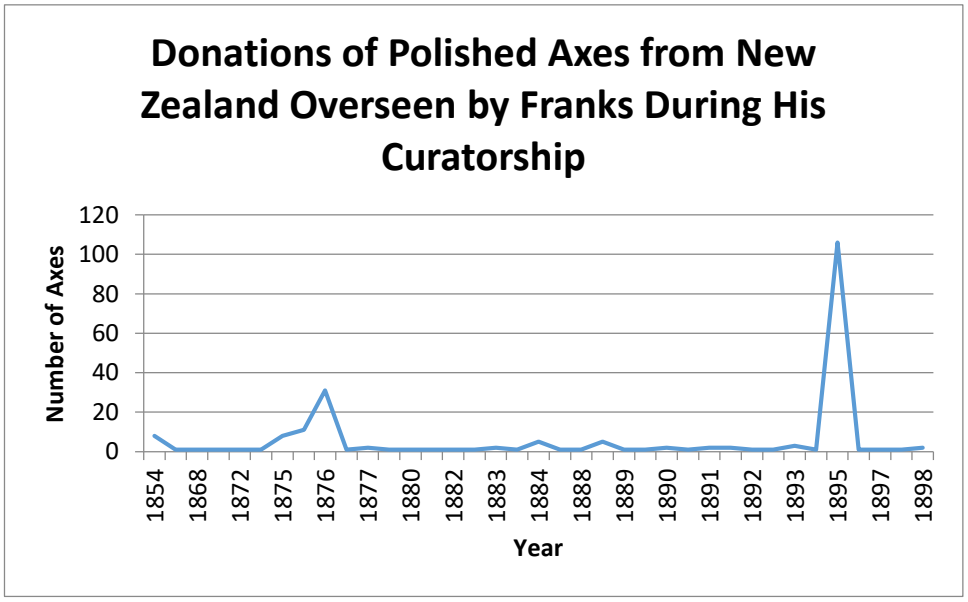
Condition of the axes was rated on a sliding scale from Very good, good, worn, much worn to damage. The majority of the collection is in a good condition – 54% were deemed to be in a good condition, 28.5% of the axes were worn. The condition of the artefacts was evidently a consideration to their original collectors as well as the museum curators at the point of acceptance into the British Museum's collection.

Augustus Wollaston Franks oversaw the ethnographic donations to the British Museum during the majority of the latter half of the 19th Century. In 1866, Ethnographic specimens gained their own departmental subsection, with Franks in charge as Keeper. His interest in Ethnography was probably sparked by the gift from the Admiralty of the Hasalar Royal Navy Hospital collection in 1855, which was mainly ethnographic. His status as trustee of the Christy Collection and Keeper of the Department, as well as his own personal wealth meant that he had considerable influence over the composition of the ethnographic collections and could indulge personal interests in a professional capacity (Starzecka et al, 2011, 14). During his Keepership, many Maori polished axes

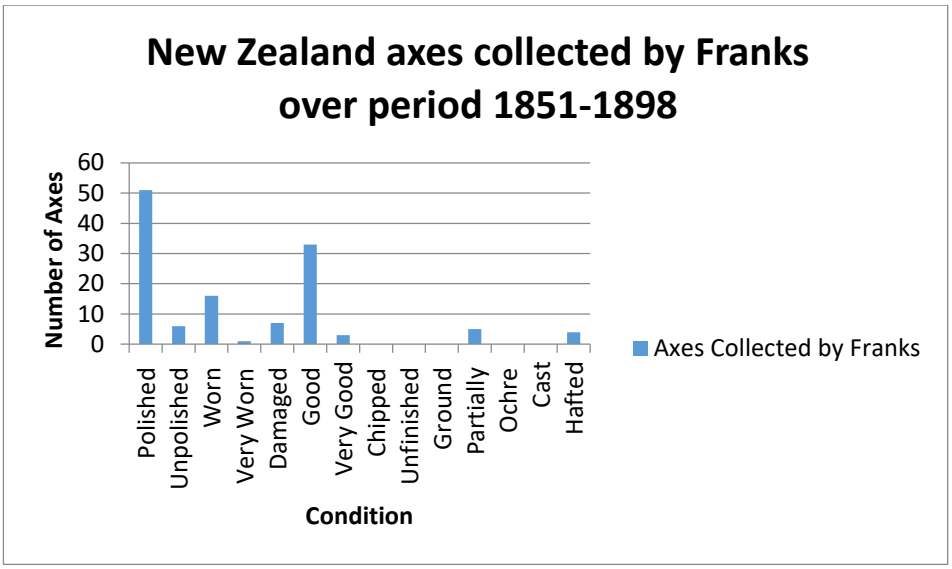
were acquired by Franks and large donations over seen, including the largest donation by Meinertzhagen in 1895, smaller collections of polished axes in 1892-3 by Henry Ogg Forbes (Starzecka et al, 11). Franks dramatically increased the number of ethnographic objects in the museum which numbered approximately 3,700 objects when he joined the department and by the time of his departure in 1896, over 7,000 ethnographic objects in the museum (King, 1997 in Starzecka et al, 15).



Graph 2: Shows Number of Objects collected by Franks in New Zealand Collections at the British Museum

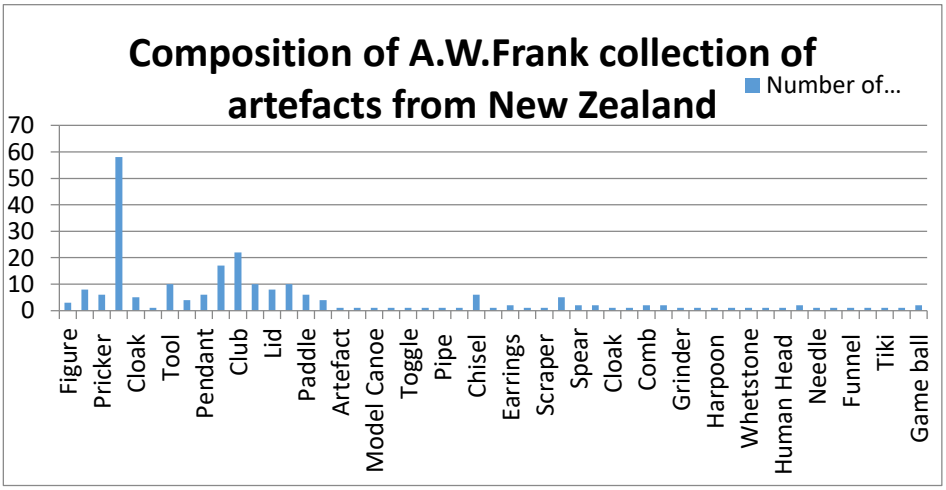


Graph 3: Shows spread of donations of Polished Axes in New Zealand Collections at the British Museum during the Curatorship of A.W. Franks



Graph 4 Shows Condition and composition of axes in New Zealand Collections at the British Museum

Graph 2 and 3 illustrates that the largest donation of artefacts from New Zealand during Frank's Keepership was during the 1890s. There are several reasons for this. Firstly, the donations made by Meinertzhagen in 1895, and secondly the fact that Franks bequeathed a great deal of material to the British Museum, but some of it was already being accessioned into the Museum collections just before his death. Graph 4 demonstrates that the majority of axes collected by Franks from New Zealand were polished.

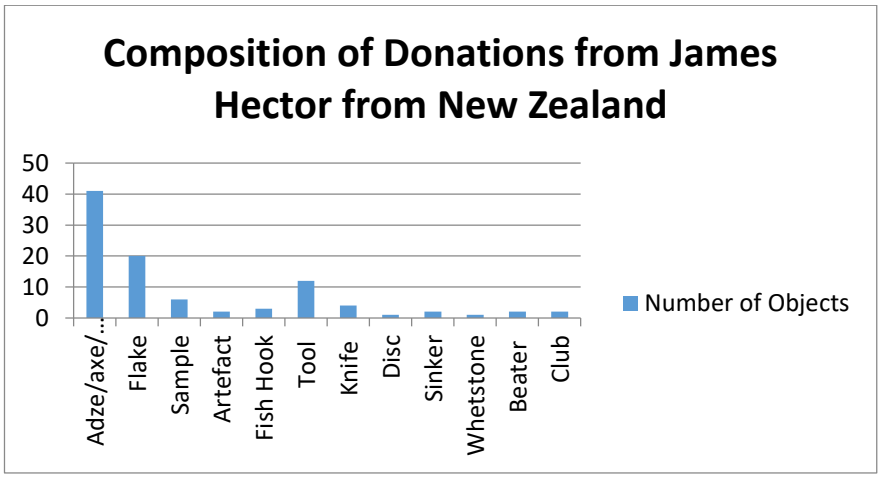


Graph 5: Shows Condition and composition of objects in New Zealand Collections at the British Museum collected by A.W.Franks

Graph 5 illustrates the vast variety of objects (over 50+ types) collected by Franks on behalf of the British Museum. Franks had a lot of contact with other professionals who collected artefacts in New Zealand as can be seen from the collections of James Hector. During the mid-19th Century, the formation of the Colonial Museum was an important part of the colonisation process. The most important figure in the development of the Colonial Museum was James Hector (McCarthy, 2007, 16). Hector arrived in New Zealand from Britain in 1861, which was a turbulent time for the country. Hector was primarily a geologist and arrived in the Wakefield community of Dunedin, which had been largely unaffected by the battles on the North Island and immediately began to collect natural and geological specimens for his collections (Henare, 2005, 167). Hector's passion , motivation and networking skills helped to found the Geological Survey of New Zealand in 1864 and the Colonial Museum of New Zealand in 1865 (though much planning was required before this date) (Henare, 2005, 169). At the end of the 19th Century, New Zealand and wider Polynesian archaeology was a burgeoning academic discipline, but one that was closely allied with ethnology, with very little to separate the two disciplines in this region. A key foundation of archaeological study at this time was the creation of typologies and the classification of material culture. Academic work was disseminated through monographs produced by local museums, including Bishop Museum and Dominion Museum (Kirch, 2000, 17). The foundation of local museums in New Zealand was an extremely important factor in the development of archaeology in New Zealand and also allowed links to be forged with other international institutions including the British Museum. The work and collections of James Hector is an important example of this. In 1867, Hector became Director of the New Zealand Institute, which combined the Geological Survey, Laboratory and the Colonial Museum. The Institute was formed through an act of Parliament, which also provided funding for the establishment of new scientific societies and public museums (Henare, 2005, 171).

Through the Colonial Museum, James Hector oversaw the classification and description of artefacts from newly acquired territories. Of special interest was the classification of natural resources which could make the process of

colonisation faster through increased access to important mineral resources (McCarthy, 2007, 16). James Hector was heavily influenced by British Museums and by the Great Exhibition of 1851, and he built the Colonial Museum in a similar style to the Crystal Palace. The building was a reinforcement of colonial social order (McCarthy, 2007, 17). Hector and his colleagues had a good working relationship with their colleagues in the British Museum. James Hector donated a collection of Maori artefacts to the British Museum in 1876, the majority of which were polished axes (see graph below).



Graph 6: Compositions of the collection of James Hectors artefacts in the British Museum collections

The donation of stone implements was not the only exchange between the two museums. Walter Mantell, of the Colonial Museum who worked alongside Hector sent Moa fossils to the British Museum in 1856 and returned to help Richard Owen at the British Museum assemble the bird for display (McCarthy, 2007, 21). There are few photographs of Maori objects in the Colonial Museum during this period; this is due to the fact that the primary focus of the museum, in line with Hector's interests was the natural history of the Islands (McCarthy, 2007, 22). Tools and implements were displayed alongside flora and fauna from the Islands and were recorded as part of the natural history collections in the Annual Returns reports (McCarthy, 2007, 22).

2.4: Approaching Remote Places and Remote Times

Throughout this thesis, the British Museum is presented as a nexus for archaeological and historical research networks, a crossroads for collectors and curators, as well as being a depository for artefacts. The direction of the outward appearance of the museum and galleries was driven largely by the staff and trustees and volunteers who worked at the British Museum. The sphere of people who influenced the composition of the collections of the museum and whom the collections influenced is much wider. The evolution of the Museum's collections was a complex process and research focus and direction of the Museum could well have been very different. A complex web of factors has dictated the way in which the collections have been built. Focusing on a single artefact type has made it easier to disentangle this web and critically assess which factors (e.g. money, space and the research preferences of individual staff members and scholars) has had the greatest impact upon both the development of the Museum's collections and the impact the Museum had on the development of prehistoric archaeology (Wilson, 2002, 9). The British Museum has attracted a diverse range of donors and supports with a wide range of political, social and religious agendas, but regardless of their background, all have contributed to the biographical narratives of the objects in the museum. One of the main aims of my thesis is exploring how the British Museum became a site of knowledge-making during the construction of prehistory as a concept. The way in which the British Museum has acted as a site of knowledge-making has changed dramatically since the mid-19th Century, when the concept of prehistory was formally established in archaeology. How the British Museum's collections have been used to project knowledge into the archaeological publication process and through private study and display will be explored fully in Chapter 5.

Although arguably one of the main streams of evidence in my thesis is the examination of disciplinary history, I am mindful of the pitfalls of such an approach as Schlanger (2004) points out. The scientific nature of archaeology has always sought authentication and an introspective approach aids this. Many have concentrated on the biographic description of the main actors of archaeology and the explanation of their heroic deeds which allows the creation

of “lineages” of archaeologists, tied to museums, universities and government (Schlanger, 2004, 165). Within this thesis the story of the objects must be seen as separate from the collectors, although their timelines have been intertwined at different stages. Polished axes, as part of wider collections have been used to orientate the social position of collectors from the late eighteenth century onwards.

2.5: In Summary

- I have approached the collections of polished axes at the British Museum through the collectors, considering each of their collections as a whole assemblage. Every collector with two or more polished axes were considered.
- Pacific and European polished axes form the primary data of this thesis although other collections were viewed.
- The construction of this thesis was consciously made in the form of a historiography as I felt that the was the form of investigation which could best combine the institutional history of the British Museum, the disciplinary history of the creation of prehistoric archaeology and the individual object biographies and biographies of the collector.

Chapter 3: Remote Places

"*Prehistorians, by the very nature of their task, must inevitably talk in metaphors. With no names or personal motivations around which to construct an account of past events, narrative accounts of prehistory can only describe the past by analogy. Equally inevitably, therefore, the metaphors of one generation seem appropriate to the next one: prehistory is notable for the way in which it is constantly rewritten in the light of current experience*" (Sherratt, 1990, 3).

The quote above emphasises the analogous nature of prehistoric research. A trait forced by realities of the archaeological record and the remote nature of the ages in question. The use of analogy has been a crucial part of the study of all archaeological permutations of the polished axes – manufacture, use (practical), place in society and discard. However, the way in which wider prehistory was constructed from the mid-19th Century onwards owes a great deal to the early voyages of discovery during the 18th Century and the experiences and artefacts that were collected. Alongside this, the beginnings of anthropological research framed the way in which the prehistoric collections were viewed at both the museum and in the wider archaeological community. In Pre -20th century archaeology, Miller has described the first role of the object as being to "*symbolise the people who created it*" (Miller, 1994, 13). The lack of mass photography meant that the object held the theatre for recreating exotic or distant places in the past. Miller states "*The original anthropology was practised in the drawing room, where objects were a convenient symbol for actual peoples whose presence was neither required nor desired*" (Miller, 1994, 13). Ethnographic and archaeological polished axes have been used since the 18th Century to represent extinct communities and communities under threat of extinction. The justified fear that a western sense of progress, trade and technologies would threaten native communities' way of life drove the collection of ethnographic materials, along with a fascination with the exotic, which was driven through private collections, museum displays, and international exhibitions.

This section of the thesis is responsible for laying out the beginnings of the ethnographic collections at the British Museum, and the museum's connection

to voyages of discovery and early ethnographic research. The polished axe has been a consistent part of the British Museums ethnographic collections from the beginning of the museum in the eighteenth century, Additionally, this section also lays out my research questions and aims; how I intend to complete this and the data I will use to achieve this. The "legacy of scientific colonialism" and dangers of the interplay of prehistoric and ethnographic material will be discussed in Chapters 6 and 7 (Hollowell and Nicholas, 2008, 64).

3.1: Ethnographic beginnings

At the time of the foundation of the museum, there was no yearly government grant to support the Museum's purchasing of artefacts, so the Trustee's purchases were made possible by donations of private individuals (Caygill, 1981, 14).This meant that the composition of the British Museum's collections from the outset was heavily biased towards the whims of a diverse range of private individuals, united by the fact that they had the wealth and contacts which enabled them to collect artefacts. Personal wealth was an obvious prerequisite for the ownership of private collections, but private collections more often than not do remain private and throughout my thesis the British Museum can be viewed as a showcase of private collections. The necessity of the presence of personal wealth to own a private archaeological or ethnographic collection, meant that the demographic of early collectors in the 18th and early 19th Century was strongly, almost exclusively skewed towards the middle upper classes. The worlds of public and private collecting have not been so closely connected since the nineteenth century, though in the 21st Century we are still living with the legacy of private donors. The act of the formation of collections, both public and private helped to educate both the collectors and the appointed curators. The formation of the public museums drove increasing prices of artefacts and scarcity of artefacts as private collections became unavailable for sale (MacGregor, 1997, 26).

The background for the collection of ethnographic and archaeological materials had been formed during the Renaissance collections of cabinets of curiosity and wonder. Hooper-Greenhill (1992) describes the foundation: "*Interpretation was*

a knowledge based on similitude. The ordering of knowledge based upon identity and difference" (Hooper-Greenhill, 1992, 135). The contents of cabinets of curiosities collected before the Enlightenment are often hard to reconstruct, many American antiquities in particular, made from metals have been melted down or sold to benefit their new owners. These early collections of ethnographic artefacts were often classified as "Objects of Savages" and often there is little information on the provenance or ethnic origin of the artefacts or their intended function (Yaya, 2008, 173). The display of private collections was away for the noblemen of the time to explore history and begin an ordering of the natural world during a time where there were still many scientific unknowns and biblical knowledge still filled many gaps in human understanding. There were many discourses of curiosity and exploration surrounding the foundations of private cabinets of curiosity. In order to understand the organising principles of collections, it is necessary to understand the intellectual ideologies surrounding their creation (Yaya, 2008, 173). Cabinets of curiosity became highly desirable objects for the upper classes of Europe during the sixteenth and seventeenth centuries and were not just limited to the nobility but also the emerging professional classes of university academics and scholars who constructed international networks, fostering relationships that helped bolster their works as well as their collections (Yaya, 2008, 174). The need to classify and organise the natural world drove collections and their catalogues. The cabinet (or rooms) of curiosity held an important role in a world that was rapidly expanding with the discovery of the Americas; they were an attempt to control and order the world. Objects of rarity became known as *miribilia* and would convey the power and prestige of the owner (Yala, 2008, 174).

Cabinets of curiosity formed the basis for taxonomies and provided the raw material for comparisons and the divisions of the artificial and natural world (Hooper-Greenhill, 1992, 135). Often the British Museum has been described using the cabinet of curiosity as a metaphor for both the diversity of the collections and as an attempt to catalogue the wonders of the world. During the enlightenment, only through the comprehensive cataloguing and creation of typologies could structure be brought to the natural world. Traditionally, in histories of the development of museums, the cabinet is often stereotyped as an archaic form of collecting with little developmental or theoretical value. The

composition of these early cabinets should not be dismissed as mere fancy however, the composition of these early collections were often the basis for later museum collections. They are also a useful barometer of the fashions of collecting (Hooper-Greenhill, 1992, 79).

The cabinets of curiosities served as a medium for bringing a collection of objects to form a mini encyclopaedia of the world (Hooper-Greenhill, 1992, 80). The ordering of these cabinets was not driven by science, but was instead governed by epistemic ordering values of the Renaissance (Hooper-Greenhill, 1992, 84). Cabinets of curiosity were a way of demonstrating the knowledge and power of the keeper of the cabinet. The value and rules of cabinets of curiosity was copied across into the early formation and structure of display in the British Museum when it began as an institution. The British Museum was formed with the intention of glorification of God's work but also the demonstration of the prestige and power of the nation in the ability to gather one of the great collections of the world. The creation of the public museum meant fashioning a space for the separation of science and rationality from the chaos of the outside world. This separation was a powerful one and artefacts have had to be kept away from the public for reasons of space and protection. The artefacts have continued to be used by a select group of researchers and archaeologists. This selective access and display has impacted on the ability of the British Museum to act as a site of knowledge making. Additionally, the biographies of the artefacts have not ended upon accession into the Museum's collection. The British Museum provides a space for the comparison of objects but also the presentation of the past.

At the time of the establishment of the British Museum in 1753, there was no national library or other national museum, at home or abroad to base the museum upon. At the time major collections were usually held by royalty, inspiration was drawn instead from great libraries which were already established in England, such as Bodley's library in Oxford and the University Library at Cambridge (Wilson, 2001, 22). Although the Royal collections in England were held in the Tower of London, this cannot really be considered a national museum, as it was a royal arsenal at the time and the Ashmolean Museum had been founded seventy years previously; it could not be considered a national collection and it charged entry (Wilson, 2001, 23). Initially in the

British Museum, the intellectual focus was dominated and controlled by the Library and Manuscript collections, which formed two out of the three original departments, which were Printed Books, Manuscripts (including coins and drawings) and Natural and Artificial Productions (which contained Sloane's collection of natural history specimens and archaeological and ethnographic artefacts). (Sloane, 2003, 14). The books within the British Museum's collections were meant to complement and help with the research and explorations of the collection. The "Print" Revolution of the enlightenment, the invention of cheaper printing processes was vital to the spreading of knowledge and publishers often presented first editions to the Museum and the King of new texts, and from 1828 the King's Library was combined with the British Museum collections which meant that an extensive collection was now available for study to visitors to the museum (Sloane, 2003, 23).

The presence of ethnography in the British Museums collections began with the donation from Sir Hans Sloane (1660 -1753) which formed the foundation of the collections of the British Museum (Wilson, 1989, 14). Sir Hans Sloane was born in 1660 and moved to London at the age of 19 to become a physician studying at the Apothecaries Hall. An established and well liked scholar, he also held a keen interest in botany in the Chelsea Physic Garden (Wilson, 2001, 11). Sloane quickly made a distinguished academic name for himself and became a fellow of the Royal Society in 1685 and a fellow of the College of Physicians in 1687. His first experience of collecting was through a trip made to Jamaica, to accompany the Governor as his personal physician. He collected many specimens during this trip, both animal and botanical. Upon his return he set up home at 3 Bloomsbury Place, about 200 meters from the modern British Museum. His academic career continued to grow after his return to London and he became President of the College of Physicians in 1719 and President of the Royal Society after Newton in 1727 (Wilson, 2001, 12).

Sloane's collections were not amassed haphazardly. In particular, the acquisition of natural history specimens was carefully planned. He was also given collections by other collectors and purchased others. William Courteen, who died in 1702, left his collection to Sloane, and whilst it was mainly natural history specimens, it also included "artificial productions." The man-made artefacts in these collections were not seen as special on their own, instead, they were seen

as part of a wider ecological system (Wilson, 2001, 15). Sloane's collection of ethnographic artefacts, was large for the period and included some items that had come from first contacts between indigenous communities and Western explorers (Wilson, 2001, 15). Unusually for the period, Sloane had little interest in collecting items of classical archaeology from Grand Tours. He did not have many Roman or Prehistoric British antiquities either, but the ones he did collect are historically interesting. These included an Acheulean handaxe from the Gray's Inn Lane found with mammoth tusks and bones, retrieved from gravel digging. It was thought at the time to be a British weapon used to kill Roman elephants. Sloane also collected flint arrowheads, which he recognised as being man made, but he called polished stone axe heads "*called by some thunder stone*" (Wilson, 2001, 16).

Unfortunately only just over 100 objects from Sloane's ethnographic collection of over 2,000 "Miscellanies" survive today. Although some of the individual artefacts are well known, it was not until King (1994) that a comprehensive analysis of the manuscript catalogue and correspondence received the same amount of attention (King, 1994, 228). Sloane's ethnographic collection was not formed with enlightenment philosophy nor did it influence the study of anthropology. It was Sloane's interest in taxonomy which influenced the collection of ethnographic artefacts, which were collected methodically and recorded scientifically. He was influenced by the works of Thomas Hobbes, John Locke and the botanical taxonomist John Ray (King, 1994, 228). Augustus Wollaston Franks was the first museum member to study the Miscellanies collected by Sloane, who produced an internal guide for Museum curators to use. Like his other catalogues of his natural history and antiquities, Sloane arranged his catalogues of "Miscellanies" in chronological sequence. It is not known exactly when Sloane began to record his ethnographic collections but it may have been shortly after 1700. He recorded provenance and ethnographic origin of most items and items were also numbered and his methodical approaches to recording artefacts were far ahead of his time. Little or no cataloguing of ethnographic artefacts took place in the museum between 1753 and the establishment of the register by Franks in 1861. During the 19th century under the keepership of Franks, these collections were displayed geographically

often in comparison to archaeological artefacts; this included polished axes (King, 1994, 229).

Ethnographic artefacts were not the only artefacts to be classified under "Miscellanies" by Sloane. Medical and scientific raw materials and experiments were also included as were European historical artefacts and natural curiosities, including gemstones and carved items of amber, onyx and ivory. There was also a small collection of beads, and beadworks, equestrian items and a small group of European arms and armour (Kings, 1994, 130). Whereas Sloane's collection was ordered chronologically, this had not been the fashion for earlier collections made by the Tradescant family and the Royal Society which had been ordered and divided into different types of objects, e.g. historical and personal and divided between artificial and natural curiosities (King, 1994, 231). Sloane's collection was organised at the British Museum by his final curator, William Epsom. The first guide to the British Museum produced – "*The General Contents of the British Museum*", published in 1762, reveals some details about the display of Sloane's ethnographic materials and the reasons he collected them (King, 1994, 231). This Museum guide is an important source as it gives explanations behind the organisation of the artefacts as well as the layout (King, 1994, 231). At the time of the writing of The General Contents (1756), there were only three departments: Department of Manuscripts, Department of Medals and Coins and the Department of Natural and Artificial Productions, which contained all the archaeological and ethnographic specimens (Trustees, 1756, 1). The Guide also reasserts the fact that the British Museum's collections were a well-known and well used resource before their bequest to the nation (Trustees, 1756, 2).

There are no specific references to prehistoric tools during the period, however, there were samples of green stone known as "Ophites" displayed in the Museum and the description states that they were known for their healing properties. Ophites were also known as serpentine stones and were thought to be effective against snake bites. Sloane was known to be interested in the connections between mineralogy and medicine and the guide certainly seems to suggest this (Trustees, 1756, 5). The Department of Natural and Artificial Productions is described in the Guide as "*perhaps the largest and curious collections in the world*" (Trustees, 1756, 63). From the Guide we can see that

the Department was focused upon illustrating the progress of man in each nation – "*we may here see the progress of the art in the different ages of the world, exemplified in a variety of utensils from each nation each century has produced*" (Trustees, 1753, 35).

Additionally, what this Guide exemplifies is the breadth of material that was available to scholars in the British Museum in comparison to the modern museum. The juxtaposition of the literary, geological, natural history, archaeological and ethnographic material is not possible in today's museum due to the dispersal of the original collections resulting in the foundation of The Natural History Museum and The British Library. The message the museum would have been able to convey during this period is limited by the lack of space, the lack of money, and the diversity of the collections. However, the breadth of the collections would have conveyed man's control over the natural and artificial world as well as reinforcing classical notions of progress.

At the start of the 19th Century ethnographic collections at the Museum were confined to a single room. Some ethnographic artefacts were also sold in 1803 and 1816 as part of the sale of Sloane's mineralogical collections, some of the ethnographic artefacts that were kept in the basements were further dispersed when a swap was made for "fossil fruits" from the Isle of Sheppey. Some of the ethnographic artefacts lost in this swap, later made their way into the Horniman Museum collections and includes an Eskimo Bow Drill from Captain Cook's Third Voyage (King, 1994, 232). Sloane's ethnographic collection had a wide geographic spread and his success as a collector was due to his wealth, position and his experience in the field during his time in Jamaica. There is little evidence, however, that he made collections of ethnographic material from Jamaica, the only collections he is recorded to have made on the Island were botanical. He collected ethnographic material with the help of private British collectors, colonist collectors and scientists employed by large trading companies such as the East India Company and the Hudson's Bay Company (King, 1994, 233). These scientists often contacted Sloane for help with illnesses contracted overseas and ethnographic artefacts formed links and maintained contact through letters and a system of "*private favours*" (King, 1994, 233).

Joyce (1910) concluded that the ethnographic material collected by Sloane provided a basis for comparison for the interpretation of European prehistoric material and that stone implements were especially suited to these comparisons (Joyce, 1910, 1). The handbook of Ethnographic material records that at the time of the collection of the ethnographic stone implements, the collectors judged tribes to be *"still living in the age of stone, in absolute ignorance of metals, consequently their arts and industries shed an important light on prehistoric times"* (Joyce, 1910, 14). The other main consideration in the collection of ethnographic artefacts in the 19th and 20th Century was to collect as much information as possible to aid trade and the colonial administration of the areas explored (Joyce, 1910, 43).

Polished axes did feature in the ethnographic collections but it is difficult to say how many there were and if they had a significant impact on the museum visitors' view on archaeology or ethnography. There is one hafted example from Central America made from Nephrite, which Sloane was interested in acquiring because he believed that green stones had healing powers (King, 1994, 234). The largest amount of remaining material from Sloane's collection is from Asia, with over six hundred artefacts. Most are everyday items, which could have been acquired from markets and were acquired with a large number of mineralogical specimens (King, 1994, 236).

The majority of artefacts collected by Sloane have been described as "ephemeral" as they were manufactured from natural (animal and vegetable) materials designed to be used to discarded, only a few items, such as axes and American moccasins were designed for considerable reuse. The unusual retention of these items makes Sloane's ethnographic collection combined with his scientific recording an almost unique resource (King, 1994, 237). Sloane's ethnographic collections were led by his scientific interests, which can be seen in his collection of African and Asian medicines and amulets and his botanical interests were indicated by a large collection of tobacco related items and items made from plants (King, 1994, 238). King (1994) feels that Sloane had a greater affinity with Sir Joseph Banks than traditional comparisons of Sir Ashton Lever and William Bullock. Banks, like Sloane was both a scientist and a traveller and maintained an extensive network of correspondence to help him collect

artefacts. Banks, unlike Sloane, did not scientifically record the ethnographic objects which came into his possession (King, 1994, 238).

As well as Sloane's bequest, from the beginning the Museum has received substantial donations, these were especially important in the mid-18th Century as there was no government grants to help buy artefacts for the museum (Wilson, 2001, 33). The most important early donations were a substantial donation of classical and Etruscan antiquities from Thomas Hollis in 1757 and the acquisition of artefacts from Captain Cook's Pacific voyages through the patronage of Sir Joseph Banks in 1772 (Wilson, 1989,14). The Museum was open to the public from 1759, but had been open to distinguished visitors before then. How to provide access to the collections to the public was a difficult matter which was debated between Trustees and curators during the late 18th Century, the safety and security of the artefacts was top priority and no one was allowed to visit unaccompanied during this period (Wilson, 2001, 36). Demand for admission into the museum was often oversubscribed (Wilson, 2001, 38).

Despite the fact that the British Museum did not charge admission, it was not always an easy institution to access in the 18th Century. This limited the impact, initially, that the museum could have on the wider community in terms of knowledge transmission. Appointments for admission had to be made and appointments could only be made through several visits to the museum. Visitors had to give details of their name, address and condition before admittance was granted. Although the British Museum was created with universal access at the forefront of its agenda, during the late 18th/ early 19th Century it was still viewed as an elite resource for gentleman scientists. More popular with the common people at the time, were smaller commercial museums, which were a mix of museum, spectacle and showmanship, one of the most popular of these was the Egyptian Museum owned by William Bullock, which was based in both Liverpool and London at different times (Hill, 2007, 38). However, by 1860 the social and cultural landscape of Britain had changed considerably, the late 18th century objects and art were seen as a commodity for the wealthy, who could afford to have "*cultivated minds*", whereas by 1860 art and science had become a way of engaging the lower classes into being more "*civilised and productive*" and museums were at the forefront of this change (Hill, 2007, 48).

The British Museum was part of a larger national network of municipal public museums being formed in the nineteenth century. Over 211 provincial museums were recorded in a survey by the British Association for the Advancement of Science and just under half had opened in the previous two decades (Hill, 2007, 36). 17 museums were run by universities and colleges, 49 by local societies and 159 were rate supported. A large amount (68) offered free admission and others often offered free days. The model of a rate supported public museum run for the benefit of a wide range of people was a convincing model even in the late 19th Century (Hill, 2007, 36). The social and cultural improvement of the working classes was a motivator behind the formation of public museums and many of the networks of collectors behind the collection of polished axes also shared this ambition, through the public display of artefacts at talks and lectures (Hill, 2007, 37). Through the display of objects and the creation of a new form of culture the middle and upper classes created a new arena for the solidification of social and cultural identities and museums were used as a way of reinforcing hierarchies in the class system artefacts (Hill, 2007, 37). The position of the ethnographic artefact in this arena was that of opposing and "other" way of living, highlighting through juxtaposition with Western artefacts and societal norms, reinforcing difference and supposed technological inferiority in comparison with the west.

3.2: Moving on from Sloane: ethnographic collections and the polished axe at the British Museum before the establishment of prehistory

"*At no period in the world's history has any one nation exercised control over so many primitive races as our own at the present time, and yet there is no institution in Great Britain where this fact is adequately brought before the public in a concrete form. Meanwhile civilisation is spreading over the earth and the belief, customs and products of practically all aboriginal peoples are becoming obsolete under new conditions which, though interesting from an economic point of view, have a secondary importance for the ethnologist. In proportion as the value of anthropology is appreciated at its true worth, the material for anthropological study diminishes; in many cases native beliefs and institutions described in the book have already become obsolete, though it has been found convenient in mentioning them, to use the present tense. Such facts*

alone enforce the necessity for energetic action before it is too late" (Read, 1910, vi).

The paragraph above is taken from the *Handbook to the Ethnographical Collections at the British Museum* (1910), written by Keeper Charles Hercules Read, and shows the driving principles behind the development of the British Museum's ethnographic collections in the early 20th Century: the recording of material culture and customs from rapidly disappearing indigenous ways of life, but secondly the aggrandisement of the British Empire and the display of its power and reach. There have been two major cycles of colonialism in the last 600 years. The first cycle starts at the end of the 15th Century and finished at the end of the 18th, and the second began in the early 19th and didn't end until the middle of the 20th Century (1950s). The mid-18th Century is a crucial dividing point between these two periods, with several factors making this period significant and it coincides with the founding of the British Museum (Etemad, 2007, 119). The advent of the English Industrial Revolution during this period gave the British a myriad of new systems with which to manage and control colonies. The growing industrial economy also drove an insatiable need for raw materials which had to be found outside of the British Isles. Archaeological and anthropological expeditions were often funded with the retrieval of these raw materials in mind. The Seven Years War (1756-1763) was also an important factor as it led to a massive redistribution of colonies amongst European powers. The mid-18th Century also saw the focus of European colonialism switch from the Americas to Asia (Etemad, 2007, 120).

The rationalisation behind the collection of ethnographic artefacts during the 18th and 19th Century has been well studied by anthropologists and is traditionally categorised as one of three things. It is either seen as an attempt to create national identities with the formation of a national museum collection, or it is shown as a response to the need to classify and categorise unknown artefacts and cultures in a system that fits Western preconceptions. Thirdly, the collection of ethnographic artefacts is viewed by anthropologists as simply as being a part of a Western economic system and consumption of exotic goods in a manner closely connected to the collection of art (O'Hanlon and Welsch, 2000, 2). Arguably the ethnographic collections at the British Museum represent a combination of all of these reasons. The ethnographic collections, like the

majority of the collections at the British Museum are representative of a mosaic of collectors and motivations without an overarching narrative of acquisition.

Ethnographic polished axes have been brought into the British Museum since the voyages of Captain Cook in the 18th Century. Discovery, colonisation, missionary work, curiosity and trade drove the collection of artefacts. Objects were crucial to the maintenance and negotiation of new relationships in Polynesia and Melanesia. Polished axes would have been a familiar object amongst the exotic, so it unsurprising that they were often collected alongside other popular objects familiar to the European imagination, including fish hooks. However, the movement of objects did not always break down barriers between communities, and often it only bolstered the belief of difference between the two communities (Gosden and Knowles, 2001, 6).

The eighteenth century saw a significant change in the methodology behind the collection and interpretation of archaeological and ethnographic artefacts. Approaches shifted due to developments in technology, exploration and the development of the natural sciences, including biology and geology (Feest, 1993, 6). The European exploration of the Pacific, was already well underway, having been begun by the Spanish in the early 16th Century, but little real knowledge was gained until the voyages of Captain Cook which took place between 1768 and 1780 (Kirch, 2000, 4).

The voyages of discovery in the 18th Century opened up new trade routes to the Pacific and allowed a broadening of material culture that returned to Europe, sparking new debate and theorising (Feest, 1993, 6). Artefacts collected from Captain Cook's Second Voyage of 1772-75 make up the earliest acquisitions from Melanesia to enter the British Museum's collections. A total of 50 objects were originally donated, mainly weaponry, from New Caledonia but have now been dispersed around other European Museums including, Vienna, Stockholm and Oxford (Thomas, 2013, 6). It is unfortunate that a great deal of Captain Cook's collection remains unidentified and dispersed in the British Museum's collection due to problems of missing documentation.

There is almost no documentary evidence of the ethnographic artefacts collected as a part of Captain Cook's Voyages and their collection was incidental to the other aims of the voyages of geographic explorations, testing of scientific

instrumental and navigational technologies and the collection of biological samples. During the time of Captain Cook's voyages, greater emphasis was placed upon the recovery of "natural curiosities" and not the "artificial curiosities" that the ethnographic specimens represented – this could be the reason behind their poor documentation both before their inclusion in the museum collection and afterwards. There were several different collectors of ethnographic specimens throughout Captain Cook's voyages: Sir Joseph Banks and Sydney Parkinson on the First Voyage, William Hodges and George Forster on the Second Voyage and John Webber on the Third. These artefacts were not formally catalogued like the plant and animal specimens were (Kaeppler, 1979, 168). The British Museum did not formally record any ethnographic specimens that were given from the Cook expeditions as gifts. Evidence for the British Museum collection of ethnographic artefacts has come through careful reconstruction using the drawings commissioned by Sir Joseph Banks and from the journal of Forster (Kaeppler, 1979, 169).

Upon the collectors' return to England the ethnographic specimens were commonly given to patrons, family and friends, or found their way into the Cabinets of Curiosity of the upper classes. Many objects made their way into the British Museum's collections through the Lords of the Admiralty or directly through Cook, Banks or Furneaux. However, a great deal of the artefacts were bought privately off the boat by collector and dealer George Humphrey, who sold the best known current collection of Cook Voyage artefacts to the University of Gottingen, Germany in 1872. Forster, who collected artefacts on the Second Voyage, gave most of his collection to the University of Oxford, after disagreements with the scientific elites and the Admiralty. The British Museum does not appear to have bought any artefacts from crewmembers (Kaeppler, 1979, 169). The Cook objects were placed on exhibition in the British Museum, but only the major donors were mentioned and none of the artefacts had any labels, the absence of which was noted in comparison to other museums, particularly that of the private museum of Sir Ashton Lever (Kaeppler, 1979, 170). Artefacts from Cook's voyages were catalogued much later by James Edge Partington. There may have been lists or accession information at some point but they have not survived until the present day (Kaeppler, 1979, 171).

Cook's voyages are far from the only voyages of discovery to be featured in the British Museum's collections. The military, in particular naval officers make up a significant proportion of those who donated ethnographic polished axes to the British Museum. An extensive voyage of exploration and discovery of the Pacific and the North Western coast of America and the interior of Canada, was the voyage of Captain George Vancouver from 1791-1795 on the HMS Discovery and the HMS Chatham. This was the longest voyage undertaken in the Pacific in the eighteenth century. At the time, Captain Vancouver was disliked due to his stringent approach to discipline on board but he is recorded as being noted for his sympathetic approach to the indigenous communities and how he interacted with them. Vancouver's collection of ethnographic artefacts from this mission went to the British Museum in 1796, but the inventory was lost amongst the papers of Sir Joseph Banks (King, 1994, 35). Very little information remains about the collections of Vancouver or his officers. The largest collection from this mission to survive was collected by the ships' surgeon's mate George Goodman Hewett, which Franks bought for the museum in 1891, and represents the largest collection of ethnographic artefacts in the British Museum collection to be collected before 1800. The collection includes a hafted polished axe from Tahiti and totals 458 known objects (King, 1994, 35).

The remaining earliest items in the collections from Papua New Guinea were collected by British Naval officers and crew members. These expeditions mapped previously uncharted territories and in particular recorded details of the natural resources available in the area (Bonshenk, 2013, 4). The museum made early acquisitions from the HMS Fly, whose crew members and Joseph Beete Jukes, a British Geologist and Naturalist collected artefacts from 1842-1846 (Bonshenk, 2013, 4). Jukes collected two polished axes from this expedition. 35 items collected by him remain in the British Museum collections, according to the British Museum database, Merlin.

248 artefacts collected from Melanesia were also returned with the HMS Rattlesnake in 1849, from the Milne Bay area, collected by Captain Owen Stanley. There was one greenstone polished adze collected from this trip, but unfortunately only the haft remains in the museum collections. The crew of HMS Basilisk collected 112 objects which were bought by the British Museum. The

polished axe from this expedition was transferred from the Natural History Museum in 1893 (Bonshenk, 2013, 4).

A study (Philip 2013) has been made of the artefacts given to the museum collected by the crew of the HMS Rattlesnake, the attitudes they reveal towards Papua New Guineans in the mid-19th Century and the trades that took place in order to compile the collection. The HMS Rattlesnake surveyed the coast from Redscar Bay to the Islands of the Louisiade Archipelago in the East. Over the next thirty years, repeated contact with Western communities, military, colonial and missionary would dramatically change these regions, so the records of the Rattlesnake are an important resource (Philip, 2013, 39). Although these objects held an exotic and ethnological curiosity too many, they also represented a valuable business commodity for the British Empire. Some of the items traded were used by Victorians for clues about natural resources in the area. For example, the mineral composition of pottery was examined for traces of alluvial gold that Western business men hoped to exploit. The region explored is incredibly culturally diverse, but shared similar values for the trading of commodities and a wide range of products, such as shell goods and agricultural products, were traded across the Arafura Sea and into the Papua New Guinean mainland (Philip, 2013, 39).

The appearance of the HMS Rattlesnake was not the first appearance of Westerners in the area and locals had already gained experience of trading with them and local communities offered them commodities which had been previously popular with foreign visitors, such as un-worked turtle shell plates (which the indigenous communities did not trade). A nephrite adze was bartered for in the Louisiade Archipelago alongside a canoe figure head and a jaw bracelet, which are all in the British Museum's collections (Philip, 2013, 41). Although the collection of the HMS Rattlesnake may seem an accidental and haphazard collection, Philips (2013) has shown that it reveals "*clues to the identities of the traders within their own societies and the kinds of relationships that the Papuan peoples were seeking to forge with the arrivals*" (Philips, 2013, 3). In the earliest days of colonial administration in the Pacific, colonial presences often aggravated existing hostilities between communities which meant that early scientific missions were often "quasi-military operations" (Kuklick, 2011, 5). In areas that had been "pacified" it was easy for European

visitors to access a network of people, such as translators and fixers who could help with the acquisition of material culture (Kuklick, 2011, 5).

With regards to the polished axe collections from New Zealand; the British Museum's collections of Maori artefacts is world leading. Artefacts began to be returned to the British Museum when permanent British settlement in New Zealand began in the 1840s, although there had been missionary activities before then. There was armed resistance by the Maori's lasting from between 1847 – 1860s. The resistance of the Maori helped to conserve their culture, mythology and folklore, which in many parts of North America and Australia was lost during colonisation (Trigger, 2008, 193). Stone artefacts from New Zealand quickly came to the attention of European archaeologists, particularly those that had been discovered in association with the remains of the prehistoric bird, the moa. Research in the late 19th Century into the origins of the Maori, their mythology and physical anthropology, spurred on enormous cultural change in New Zealand (Trigger, 2008, 193). International commerce in New Zealand also began in the nineteenth century, expanding existing networks between Polynesian Islands and forging new routes of exchange. Colonial settlement also brought ideas as well as objects, especially ideas of materialism and improvement imposed upon New Zealand society (Henare, 2005, 109). Despite the heightened colonial activity of this period very few Maori objects were brought into the British Museum between the voyages of Captain Cook and 1854 (Starzecka et al, 2011, 10).

The British Museum now holds over 2,300 Maori objects within its collection and represents the largest number of artefacts outside New Zealand (Starzecka et al, 2011, 7). The majority of items were donated or sold by colonial administrators, military men and missionaries, but the first planned Maori field collection of artefacts by the British Museum did not occur till 1993. There is very, very limited information about provenance of the Maori collection for items collected in the 19th and 20th Centuries, this is because curators were primarily interested in collecting artefacts which completed a series of a type of artefact, and provenance was less important (Starzecka et al, 2011, 7). 92.3% of the adzes collected from New Zealand are polished, this represents a much larger percentage than any other geographical grouping of axes at the British Museum. Adzes and axes from New Zealand were on display in the Museum during this

period, as described in the 1838 book, *A Visit to the British Museum* (Chapman and Hall, 1838). Maori adzes are described as still being in use at the time of colonial contact. Jadeite axes made by the Maori are compared to those as used by "Ancient Britons" and hafted on the Wiltshire downs. The authors believed that steel implements would soon take precedence – "*wherever they could obtain knives and hatchets of European manufacture, by barter with their visitors their own ruder tools have fallen into disuse: they will of course, in time make their own steel cutlery…and a jade hatchet, may become as much a rarity in New Zealand, or Owhyhee, as a stone celt is in this country*" (Chapman and Hall, 1838, 18). The language used to describe the Maori minimises their technological and intellectual capabilities in the mind of the reader, firmly associating these adzes with a pre-industrialised society.

Sir Hans Sloane and Sir Joseph Banks formed the beginning of a vanguard of a new type of collector who were deemed to be "entrepreneurial." Sir Hans Sloane endeavoured to improve medicinal practice through the study of his collection. This was also a way of improving his own social standing though innovation of medical practice (Huxley, 2003a, 88). Sir Joseph Banks aimed to use the discoveries made in science and natural history through exploration and expansion of the British Empire to augment the trading capabilities of the Empire. Educated at Harrow, Oxford and Eaton and coming from a wealthy land owning family, Banks had an advantageous start to life. He began collecting during an expedition on board the HMS Niger to Labrador and Newfoundland. He is arguably best remembered though for his part in the first voyage of Cook on board the HMS Endeavour. Although they encountered hostility from aboriginal Australians, Banks collected what remains one of "the most significant natural history collections ever made" during that voyage (Huxley, 2003a, 89).

Sir Joseph Banks was a force in the Museum after his appointment as Trustee in 1778 and remained so until his death in 1820. His primary interest was natural history but did also acquire a small collection of antiquities and studied monuments. Along with Solander and Maty, he was responsible for the acquisition of many ethnographic specimens from the Cook Voyages, but as discussed in the previous Chapter, the treatment of these objects was problematic and verged on neglectful (Wilson, 2002, 44). Banks helped in advising on the purchase of many different artefacts and was used

"*unmercifully*" by the other Trustees. His opinion would certainly have influenced the direction in which the collections took during this period and he was committed to the botanical and zoological collections of the museum during the late 18th Century. His influence, combined with the power of the librarians in the Museum and the popularity of classical archaeological material, could be responsible for the lack of European polished axes accessioned during this period (Wilson, 2002, 45). There are no polished axes in the British Museum collection donated by Banks, but there are several artefacts remaining from the Cook collection donated by Banks. It is possible there was a wider collection that has been lost; many of the artefacts from Cooks voyages and Sloane's ethnographic collections are no longer in the Museum's collections due their poor cataloguing and insect pests which were incredibly problematic during the early years of the Museums storage. He is included here because of his power in the government and military and his ability to purchase artefacts and connections to other researchers at the British Museum.

3.3: In Summary

- Due to the nature of the development of the British Museum's collections, it is impossible to fully separate the prehistoric and ethnographic collections
- As opposed to the carefully planned collections of Sir Hans Sloane, there was not a concerted plan or strategy for the collection of ethnographic material at the British Museum in the 18th and 19th Century, a lot of collecting was opportunistic and piecemeal. The Maori collections are an example of the colonial influences on the ethnographic collections at the British Museum.
- For the most part, the ethnographic collections predate the majority of the archaeological collections of polished axes at the British Museum, however, the polished axes were known due to their ties to mythology and folklore which will be explored in the section "turning axes into history".
- From the beginning of the British Museum's collections, comparisons have been drawn between ethnographic and polished axes.

Chapter 4: Remote Times

"H*e was....a grey dreamy person, with an unexpected dry humour and an incurable habit of addressing himself to a top waistcoat button. These buttons, indeed served as a barometer of enthusiasm. If he were looking at an antiquity which he liked very much, he fingered the top one, if very much, the next; if moderately, the next and so on down the scale. There were few objects of antiquity which failed to evoke a response of some sort, for his knowledge was incredibly wide*" (Evans, 1943, 143).

The British Museum is primarily viewed as a storehouse for the physical remains of the past, a form of passive vessel to be filled with the evidence of human history. Internally, the Museum is far from a static entity, however, in the collection of artefacts for display and protection. The British Museum collection cannot be viewed as a homogenous whole. Fluctuation in museum collections may not be outwardly visible, but occurs all the time because the way in which the objects contained within the collections are interpreted are in a constant state of flux. Keeping visitors' interests balanced with those of the curators and the historic collections available for purchase and display is a delicate dance (Spalding, 2002, 13). The British Museum is a collection of collections. Each collection is the result of the collaboration of many different decisions, relationships and transactions. Each of these factors continue to affect the objects after their accession into the museum's collections. This chapter is a consideration of the internal forces that govern the construction of the museum collections, as well as emphasising the effect that one curator had upon the direction of the British Museum's collections, an effect that would not be possible within the management structure of the British Museum today. As introduced in Chapter 2, for A.W. Franks the line between personal and national collections became blurred due to the advantages of having a personal fortune. Modern curators at the British Museum are dealing with the legacy of Franks' curating decisions.

This Chapter will show:

- Examples of the collection of prehistoric and ethnographic polished axes during the curatorship of Franks

- How Franks curated a network of contacts to significantly build the British and ethnographic collections

4.1: 1851-1898: The reign of Franks

Arguably the most influential years in terms of the composition of the collections and the organisation of the Museum as a whole were the decades in the mid-19th Century. From the mid -19th Century onwards, several important factors were to fall into place – government money was made available for the purchase of objects, the bequest of Henry Christy was made available to the Museum, the professionalization of the position of curator and consequently the museum was involved nationally in the development of archaeology as a discipline (Wilson, 2001, 10). Previously, before the 19th Century "culture" had been a luxury that could not have been afforded by anyone apart from the aristocracy or those upon whom the aristocracy had bestowed patronage. However as a consequence of the growing disposable incomes of the middle classes more and more people could afford cultural transactions, including buying art, archaeological artefacts and ethnographic objects. But access to some facets of culture was still policed by the aristocracy, and in particular art was still seen as the preserve of the gentry. Science was seen as a pursuit that could be pursued by an interested amateur and science and culture began to have closer ties to the industrial economy in the 19th Century (Hill, 2005, 39).

This led to a rise in amateur professionals, who led successful business lives but also pursued science in their spare time. Interest in evolution, history and archaeology drew many such people together, the most important for the museum arguably being Sir John Lubbock and Sir John Evans, and earlier in the 19th Century, Henry Christy, before his untimely death. The mid-19th Century was their greatest period of their influence upon the museum, as the roles of the curators became increasingly professionalised, British Museum Keepers and curators maintained a network of friendships between these amateur professionals. By 1860, disseminating art and culture to as wide an audience as possible was seen as a necessity in order to produce a civilised society. The middle classes accelerated the market of archaeological artefacts and art and Museums became spaces for middle class employment and leisure activities. Museums provided a space for culture to stand apart from the market place

whilst still reinforcing the value of the artefacts contained within them in the wider world (King, 2005, 48). Overall in Britain, there was a rise in donation of manmade artefacts to public museums after 1890, whereas previously the most common donations to municipal museums were natural history specimens. There was an expansion in the amount of archaeological artefacts donated due to an increase in archaeological excavations due to the increasing professionalization of the discipline. (King, 2005, 75).

Arguably the greatest catalyst for change in the volume and range of the collection of British prehistoric antiquities and ethnographic specimens at the British Museum was the arrival of Augustus Wollaston Franks at the British Museum in 1851. When he became a member of staff, the Museum was still dominated by the library collections and there was a heavy bias towards Mediterranean antiquities. However, by the time Franks died in 1897, only a year after retirement the Museum was a dramatically different place in terms of both structure and content. His influence can be seen in both the arrangement and breadth of the European and Ethnographic collections. Franks died on 21st May 1897 being one of the least well known collectors in Britain, despite the fact that he held multiple honours (KCB, FRS, president of the Society of Antiquaries, honorary doctor of Oxford and Cambridge). He remained a bachelor and his heirs were his sisters, nephews and nieces, with little personal memory and now no familial memory (Wilson, 1984, 7). For this reason he is often seen as an enigmatic individual and the remaining biographical information regarding Franks comes from the notebooks connected to his collections and his relationship to others in the archaeological and scholarly communities of the time.

By the 1890s, whilst the Museum still held considerable literary collections and the traditionally recognised pillars of antiquarian learning of coins, medals and classical antiquities, the Natural History collections had been moved to South Kensington and in their place a plethora of global artefacts had been introduced including British antiquities and artefacts from the Americas and the Far East (Wilson, 1997. 1). Franks' collecting strategies had had an irrevocable effect on the British Museums collections. An example of the scale of Franks' collecting can be seen in the number of ethnographic specimens acquired. In 1851, 3,700 ethnographic artefacts had been brought under the umbrella of the Department

of Antiquities, but by the time of Franks' retirement, 45 years later in 1896, 38,000 items were in the collection and now formed a subsection of its own Department – the Department of British and Medieval Antiquities and Ethnography (King, 1997, 137). He was also responsible for the systematisation of the European archaeological collections and was in correspondence with J.J Worsaae who was his counterpart in the National Museum in Copenhagen, and had already undertaken a systematisation of the European collections there (Wilson, 1997, 1). His effect on the Museum cannot just be measured in the amount of artefacts acquired, but also in the advances in curation, recording and storage he spearheaded at the museum during this period of professionalization of the historical and archaeological sciences (Wilson, 1997, 4).

Franks approached British prehistoric material cautiously, often referring to them as "*British*" or "*Celtic*." Before joining the museum, although his background was in Mathematics, Franks had held membership of the Cambridge Antiquarian Society and the Archaeological Institute. Franks had a lot of experience in recording, but he did not have a great deal of familiarity in the beginning with stone tools, which shows through as the first object he collected for the museum, an axe, turned out to be a naturally modified rock (Cook, 1997, 115). In his early years at the museum, Franks' development of the museum's collection of prehistoric artefacts was limited by the short chronology of the pre-Roman era that was popular in the early Victorian period. The caution also extended to the arrangement of the prehistoric material as Franks did not immediately adopt the Three Age System in the display of artefacts in the museum in 1853, as it was still a contentious system amongst some early English prehistorians instead preferring to arrange his specimens geographically (Cook, 1997, 116).

Franks was at the centre of a complex web of amateur collectors, military and mercantile connections. The British Museum's collections provide a gateway into this network as the British Museum was often one of the final repositories for private, military and missionary collections collated during the mid-19th Century. The data and case studies collected for my thesis is heavily biased towards this period for the European archaeological collections because of Franks' influence on the British Museum and the amount of artefacts amassed during this period. David Wilson (2002), a former Director of the British Museum

believes that Franks should be considered a "*major innovator in the study of archaeology*" for the two decades of his work in the British Museum in the 1860s and 1870s (Wilson, 2002, 163). Franks travelled widely during this period, especially in Scandinavia and was heavily involved in academic communities and societies. It should be noted however, that although Franks achieved the growth in the museum collections through purchasing objects and donating artefacts and gifts to the Museum. He was not directly involved in archaeological excavations himself (Wilson, 2002, 163). The Museum acquired several major acquisitions from archaeological sites, during this period, the impact of which will be discussed in later chapters including: the controversial Palaeolithic implements from the Somme, Brixham and Kent's Cavern and most notably for the collection of British polished axes, the donations made by Canon Greenwell after his excavations at Grimes Graves and of Neolithic burial sites, which came to the British Museum from 1879 to 1893 (Wilson, 2002, 164).

This period also saw the formation of large national museums across the world, which impacted upon the British Museum's collections. The Smithsonian was founded in 1829, and became a national museum in 1846. The foundation of the Dominion Museum, New Zealand in 1865 led to important exchanges of artefacts and networks were formed. Importantly for the study of ethnographic collections, the Museum fur Volkerkunde in Berlin was founded by 1873, and expanded rapidly fuelled by Germany's imperial expansion and the patronage of the Kaiser. When a member of British staff visited, they estimated the ethnographic collections at the Museum in Berlin to be eight times larger than those held by the British Museum (Wilson, 2002, 192).Franks retired from the Museum's service in 1896, but his legacy to the Museum has continued to last and the after his death, the bequests made by the friends he kept continued to fuel the Museum's collection (Wilson, 2002, 192). There have been criticisms of Franks' work at the British Museum, which have had an impact on the Museum as a site of knowledge creation. These are elucidated in *An Apology of my Life*, a short autobiographical account, recently discovered and published by Marjorie Caygill (1997). The criticisms include overcrowding of display cases, poorly detailed guidebooks and haphazard labelling of artefacts, but these do not overshadow his work for the Museum and the generosity of the artefacts he bequeathed to the British Museum (Wilson, 2002, 194).

4.2: The impact of the mid-19th Century on the British Museum

"Collecting is a hereditary disease, and I fear incurable" (Franks, 1893, 1).

Table 4: Collections and Donations of A.W. Franks in Numbers 1851- 1896 (including Christy Collection)

Total Number of artefacts attributed to Franks in British Museum	*36,811*
Number of artefacts in Britain, Prehistory and Europe	*13,873*
Number of polished axes bought/donated by Franks (Archaeological)	*452 (3.3% of total collection)*
Number of items purchased with Christy Collection by Franks	8,887

The table above show cases the quantity of artefacts Franks donated to the British Museum. The influence of Franks on the collecting policies of the British Museum should not be underestimated and he is considered by many (Caygill and Cherry, 1997) to be a "*second founder*" of the Museum (Caygill, 1997, 52). Franks was involved in archaeology before joining the Museum. Collecting was an interest for him fostered from childhood. He was elected a member of the Archaeological Institute in 1848. He also gained acclaim for his role of Honorary Secretary of The Medieval Exhibition in 1850. The Exhibition was very successful and provided Franks a valuable opportunity to form a network of contacts that would be vital to his work at the Museum (Caygill, 1997, 57).

Shortly before Franks joined the British Museum, the structure of the British Museum went through a series of significant changes which paved the way for the amount of autonomy that Franks ultimately had over both the prehistoric and ethnographic collections. Throughout the history of the British Museum, the structure of the Museum has played an important role in defining the collections policy. The Department of Antiquities had been created in 1807; became autonomous from the Department of Prints and Drawings in 1836 and also encompassed the large collection of ethnographic material that had been

acquired by the Museum. Within the Department, the classical and Egyptian antiquities were the most popular with the public and took up the most physical space. The numismatic collection was known to be under the personal control of the Keeper of the Department. The British Museum staff did not have any formal teaching responsibilities or formalised links to universities but they were supposed to respond to enquiries from interested members of the public (Caygill, 1997, 61).

When Franks joined the Department of Antiquities in 1851, the Department was under the control of Keeper Edward Hawkins, who was a well-respected numismatist. Franks joined the Museum with the intention of pursuing the cause of the expansion of the display of national antiquities within the British Museum. He spent time in 1852 preparing objects for the first display of British and Medieval Objects (Caygill, 1997, 62). The acceptance for the acquisition of British artefacts antiquities into a national museum was not automatic. Franks' appointment at the Museum was part of a wider change of opinion, some public and private to broaden the Museum's horizons beyond the classical narratives of Greece and Rome (Caygill, 1997, 58). The British Archaeological Association's meeting in 1845 had put forward the idea of a museum for national antiquities prompted by the discovery of a collection of Iron Age Bronzes by Lord Prudhoe the previous year. The era that Franks had the most control over how the collections at the British Museum were built was during 1866 – 1896. In 1866 Franks became the Keeper of the Department of British and Medieval Antiquities and Ethnography.

All of the prehistoric axes discussed during the period of Franks' curatorship were collected alongside both the ethnographic collections and alongside Franks' other interests including ceramics, coins and medals. Polished axes or stone tools in general could not be seen as having been the collecting priority of Franks. It could be argued, however, that he saw the value in recording and classifying them and keeping them for future study. Arguably, Franks' preference was for the collection of later antiquities and he is noted to have told John Evans, "*How could people collect such odious things?"* (Franks, 1877, in Cook, 1997, 125).

Though this comment may have been in part been prompted by the stress of the move of the prehistoric component of the Christy collection from Victoria Street to Bloomsbury (Cook, 1997, 125). Franks could be considered a "serious collector" of prehistoric material and was responsible for far more than simply the addition of stone tools to the Museum's collections (Wilson, 1984, 26). He was responsible for addition of the Worsaae Collection, material from the Swiss Lake Villages and substantial collections from Hallstatt and La Tene (Wilson, 1984, 26). Franks was involved at the birth of the concept of prehistory, having visited Prestwich's home with Evans to view the flints from Abbeville that had been brought back a few days previously in 1859. It is also believed that Franks was present at the reading of Evans paper at the Society of Antiquaries (Wilson, 1984, 26).

We are left with Franks' diaries, and an autobiographic essay, *An Apology of my Life*, which is all too brief and cannot be used to fully explore the impact of Franks on the development of the British Museum and the development of prehistory (Mack, 1997, 35). Although he may not a have written a work in the same vein of Lubbock and Evans, Franks consistently wrote catalogues for the exhibitions held by the Museum and wrote an annual review of his work for the Archaeological Journal and then the Proceedings of the Society of Antiquaries. (Wilson, 1984, 14). He also wrote the *Guide to the Christy Collection* published by the British Museum (1865). In 1868 Franks wrote on the Stone Age of Japan at the International Congress of Prehistoric Archaeology (Wilson, 1984, 16).

Structurally, the 1860s was a period of intense change for the Museum, and the period in which Franks gained his keepership. Panizzi, the principal librarian had proposed splitting the Antiquities department into four departments in 1860. Panizzi had hoped to split the Antiquities department into Greek and Roman; Oriental Antiquities; Coins and Medals and then Ethnographic, British and Medieval Antiquities would make up a fourth. Panizzi had hoped that the Ethnographic, British and Medieval Antiquities could be relegated to a sub-department of Greek and Roman Antiquities as he did see the importance of these collections in comparison to the literary and classical collections held by the Museum (Wilson, 1974, 299). The sub-committee of trustees allowed the division of the departments into four rather than three as Panizzi wanted, but did attach Oriental antiquities to British and Medieval Department to save

money. Oriental antiquities had previously been a department on their own (Wilson, 1974, 299).

Wilson (1984) believes that it is difficult to decide whether or not Franks considered himself a scholar of archaeology, or whether more of a "connoisseur" of collecting. He was however, foremost a museum professional in a world where there were very few professionals of museums and of archaeology. Archaeology was largely being developed by interested amateurs with the disposable income to pursue a hobby like collecting objects and archaeological excavation (Wilson, 1984, 17). It is an indication of the esteem Franks was held in by his contemporaries that he was twice offered the directorship of the Victoria and Albert Museum and the directorship of the British Museum and turned them both down, and was elected President of the Society of Antiquaries (Wilson, 1984, 19).

Franks built the British Museum's collections across the different areas of his Department during his keepership. It was a mixture of "*gradual accumulation, encouragement of benefactions, large purchases and personal gifts*" (Wilson, 1984, 23). For instance, Franks was the driving force behind the acquisition of the British Museum's majolica collection. Franks appealed for a small collection to be added to the Museum, buying a few pieces from auction, including a plate from the Pugin Sale. Then when Ralph Bernal's collection was being dispersed, Franks petitioned for £6000 from the Trustees to buy it. The Trustees received £4000 from the Treasury to purchase it. Franks also donated 23 additional pieces of majolica to the British Museum's collections from his personal collections (Wilson, 1984, 20).

Caygill (1997) believes that there was almost little chance of Frank's personal collection, which was built alongside the Museum's collections, not being given to the British Museum. Franks did not marry and had no children and therefore it was unlikely to be bequeathed to family. The lines between personal and public collecting on behalf of the museum became blurred. Franks left all his personal papers to Charles Hercules Read in his will, to use as Read saw fit. Apart from several notebooks and official correspondence on behalf of the Museum, most written evidence of the evolution of Frank's personal collections have been lost. The absence of many of Franks' private papers has meant that the

provenance of many of the objects Franks collected has been lost (Caygill, 1997, 76). As well as the Christy Collection, Caygill (1997) has found letters explaining that Franks' own personal collection was used as a source of duplicates for acquiring specimens for the Museum through trade (Caygill, 1997, 78). In the sections below, I will be exploring some of the most important acquisitions made by Franks in terms of collections of polished axes. Additional purchases of ethnographic axes made by Franks during his time at the British Museum are discussed fully later in the thesis.

One of the most important acquisitions of British archaeological artefacts during the early part of Franks' keepership was by Charles Roach Smith. The Trustees sanctioned the purchase of the entire collection in 1856. There had been public petitions to parliament to ensure that the Museum purchased this collection, which had been built over 20 years in mainly in London, but also included pieces from other areas of England and comparative pieces from Europe (Kidd, 1977, 105). The collection is nearly five thousand pieces strong, spanning time from the Neolithic to medieval period. Roach Smith retrieved artefacts from commercial excavations during the course of building works. These objects were collected with the intention of preserving them as "everyday material culture of the past, rather than selected works of artistic merit" (Kidd, 1977, 105). Roach Smith had partially catalogued the collections, and had recorded some information on provenance and the context in which the object was found. The acquisition of this collection by the British Museum marked an important moment in the recognition of archaeology as a scientific discipline, growing out of its amateur beginnings. The acquisition also recognised the need for British Antiquities to display in the national museum (Kidd, 1977, 108). The acceptance for the acquisition of British artefacts andantiquities into a national museum was not automatic. Franks' appointment at the Museum was part of a wider change of opinion, some public and private to broaden the Museum's horizons beyond the classical narratives of Greece and Rome (Caygill, 1997, 58). The British Archaeological Association's meeting in 1845 had put forward the idea of a museum for national antiquities prompted by the discovery of a collection of Iron Age Bronzes by Lord Prudhoe the previous year.

Charles Roach Smith was born in 1807 on the Isle of Wight and began as training as a chemist and pharmacist in Chichester in 1822. This is where he began his

archaeological collecting. He collected Roman coins during his three year stay in Chichester and also had access to Pinkerton's *Catalogue of Roman Coins* (Kidd, 1977, 108). After his move to London in 1827, and an attempt to begin an acting career, his interest in the archaeology of the city of London grew further. He observed the excavation of the extension site of the Bank of England in 1834. Roach Smith began to collect from these professional excavations. He was elected fellow of the Numismatic Society in 1837 and became Honorary Secretary in 1840. He was one of the founder members of the British Archaeological Association in 1843 (Kidd, 1977, 109). In the same year, he began to publish information on his collections, in a series of publications called *Collectanea Antiqua* (Kidd, 1977, 109). Whilst Roach Smith was compiling his collections, London was undergoing physical transformation during a period of redevelopment. The construction of new offices of deep cellars of new offices and large administrative building was fuelled by the profits of colonialism, but also allowed limited archaeological investigation. Attempts to retrieve archaeology were largely uncoordinated, and relied upon interested individuals like Roach Smith to retrieve and try and interpret objects. There was no support from the local government in the city for the retrieval of artefacts and the learned societies of the time showed limited interest in the collection of artefacts from the excavations (Kidd, 1977, 112). Dealers in antiquities and antiquarians were not always welcome on commercial excavations either as they slowed the progress of the build. Those labourers who did chose to retain items, were often under fierce competitive pressure from other labourers who destroyed objects to stop others getting profit from them (Kidd, 1977, 113). Many of the items collected by Roach Smith were in an exceptional state of preservation due to the water logged soil and deep mud in London, especially near the Thames (Kidd, 1977, 116). Rare copper and bronze pieces were well preserved, including the copper Lothbury bowls, which were singled out by Franks as being important beyond their aesthetic place in the history of art (Kidd, 1977, 116).

There are 13 polished axes in the British Museum from Charles Roach Smith. Five of those axes are from Britain, the remaining axes are Danish. Of the British axes, two were collected on the Isle of Wight and three were found in London. In total Charles Roach Smith's collection purchased by the British Museum

totalled 5430 objects. Charles Roach Smith collected only a small number of polished axes and no earlier Palaeolithic stone tools. Despite their small number, the inclusion of Danish axes shows the deliberate acquisition of the material, as those axes were unlikely to be a by-product of his excavations in London. The power in Charles Roach Smith's collection of artefacts was in their inclusion in the British Museum's collection, signalling the need for the Museum to make national antiquities a greater part of their collection.

Following on from the introduction of Maori material given in Chapter 2, the Sir George Grey collection of Maori artefacts was acquired by the British Museum in 1854. Sir George Grey was the Governor of New Zealand between 1845 and 1854. This collection included many polished axes and gifts given to him during his governorship (Starzecka et al, 2011, 10). The British Museum acquired a gift of stone implements from the Chatham Islands and New Zealand in (NZ and CHAT Museum Numbers) from Sir James Hector on behalf of the Colonial Museum of New Zealand (now called Te Papa) in 1876 (Starzecka et al, 2011, 11). Shortly after they were donated, at least some of the artefacts presented by George Grey were displayed in the museum. Their inclusion is described in the *Synopsis of the Contents of the British Museum,* although the guide does not say which artefacts were chosen for display, it does show the level of respect given to these artefacts.

George Grey received his collection of New Zealand artefacts in a presentation marking the end of the governorship. Maori chiefs, elders and colonial officials met at a schoolhouse in Otaki (North of Wellington) in order to say goodbye to Grey, whose governorship had lasted eight years (Henare, 2005, 58). The exchange of artefacts in Maori culture is a complicated process. The artefacts given to Grey were considered to be "*taonga*", which is defined as "*a treasure, something precious, hence an object of good or value.*" Taonga is not limited to physical objects, but also knowledge, people and very often the things being exchanged are thought to be endowed with ancestral properties (Henare, 2005, 47). The Maori wrote the protection of their taonga into the treaty of Waitangi in 1840. Although, never fully made law, the treaty makes it clear that Maori elders "gifted" rights to the British being on their land in return for the same citizenship rights that the Queen extended to British colonists (Henare, 2005, 48). The taonga that George Grey received came with their own ancestral

histories, and had been passed down through generations of Chiefs. Each taonga had its own name and one of the taonga is recorded as being a greenstone adze, handed down through generations and linked to the ancestry of the Maori people (Henare, 2005, 59). The taonga given to Grey and those exchanged with the Treaty of Waitangi established relationships and the British were expected to reciprocate, not necessarily in material goods, but in thoughts and actions. This relationship continues to the present day, with taonga being received by Queen Elizabeth II (Henare, 2005, 60).

The importance of these taonga was passed into the display at the British Museum. "*These objects all have a proper name of their own by which they are individually distinguished , derived from their former predecessors and were preserved with great care by the warrior tribes to which they belong*." (Hawkins, 1856, 267). The synopsis notes that George Grey had personally recorded the histories of these artefacts and these histories were given to the museum. These artefacts were displayed in the Ethnographical Room, alongside an eclectic mix of global antiquities. These included a Chinese bell from a Buddhist temple, gifted to the Museum by Queen Victoria and Indian and Mexican antiquities (Hawkins, 1856, 267). In a separate case, other Maori artefacts donated by Captain Sir E. Home of the Royal Navy were displayed, again no polished axes are listed, and instead the focus is upon weaponry, notably spears and clubs, with the artefacts being described as "*warlike.*" The choice of objects used to represent the Maori focuses upon the "warrior" stereotype, and the wording makes the Maori seem a very brutal people. For example, the use of a saw, whose teeth are made of shark's teeth, is for "*dismembering the bodies of their slain enemies"* (Hawkins, 1856, 278). Three cases are dedicated to George Grey's collection in total, out of 74 cases in total. The categories of artefacts on the display from his collections are unfortunately not detailed (Hawkins, 1856, 278). The Grey collection of artefacts are an example of early biographic recording of objects at the British Museum, which was first recorded in the Guidebooks and catalogues.

A Guide to the Exhibition Rooms in the Departments of Natural History and Antiquities was published in 1859 and provides further insight into the composition of the ethnographic collections on display during this period and shows that objects collected by George Grey were still on display in the same

cases 3 years later (Hawkins, 1873, 104). However, the majority of the objects now on display from New Zealand are natural history specimens, namely birds and reptiles. Honey-eaters (found only in New Zealand, Australia and New Guinea) are displayed as well as more common birds such as Crows and Jays (Hawkins, 1873, 9). Polished axes and celts were on display during this period in the British Antiquities room and were placed alongside "*analogous examples, still in use amongst nations in a savage state to have been mounted in split wooden handles and bound round with leather thongs so as to form axes*" (Hawkins, 1873, 98). Four cases were dedicated to stone celts, but no information is given in the guide to the provenance of the ethnographic examples (Hawkins, 1873, 98). George Grey also exhibited his collection in New Zealand, most notably at the New Zealand Exhibition (1865) which was based upon the Great Exhibition of 1851. The New Zealand Exhibition was a large scale display of "*progressive*" colonisation, wealth and aspirations held by the Colonists (McCarthy, 2007, 15). Grey's artefacts were exhibited in a section of "Maori and other Aboriginal manufactures and implements" and could be viewed as Grey and the other European exhibitors exerting power over the material culture of the native population after successfully divorcing them from their land. However, it was recorded that Maori also participated in the Exhibition, with chiefs lending tools, weapons and carvings. The histories and names of these objects were also recorded and displayed. The Maori did have a voice in this exhibition of colonial conquest (McCarthy, 2007, 16).

One of the largest British donations of polished axes from a private individual comes from Reverend William Collings Lukis. In 1875, a large collection of polished axes was purchased by Franks from Reverend William Collings Lukis. There are 212 polished axes in his collection, which represents 21% of the total collection. The British Museum has 998 objects donated by Reverend Lukis. The whole collection is European in origin, with the majority of the artefacts from Guernsey, but France (especially Brittany) and Southern England are well represented. The collection spans from the Neolithic to the medieval era. Overwhelmingly, however, the collection derives from Neolithic artefacts (937 artefacts, 94%). This accurately reflects the archaeological activities of the Lukis family. Reverend Lukis came from a very archaeologically focused family. His father and three brothers were all involved in archaeological excavations or

collecting. The Lukis family are a good example of how trained middle class professionals could significantly influence the development of archaeology as passionate amateurs in the 19th Century.

The majority of the collections of the Lukis family currently reside in the Guernsey Museum. His father, Frederick Corbin Lukis (1814 – 1863) is remembered for his contribution to early megalithic archaeology. Frederick Lukis who was interested in the megalithic architecture of Wiltshire and Brittany was elected a fellow of the Society of Antiquaries in 1853. He was an active member of the archaeological community and published a significant amount of work including, "*Observations on the primeval antiquities of the Channel Islands*" in the Archaeological Journal (1844). This paper was later used by both Daniel Wilson (who wrote "*The Archaeology and Prehistoric Annals of Scotland*" 1851) and W Thoms, in his English translation of Worsaee's *Antiquities of Denmark* (1849, original Danish work published in 1843) (Seibre, 2008, 129). Frederick Collings Lukis (the eldest son, 1814 - 1863) although a doctor by training was responsible for excavations in Guernsey with his father, who also excavated in Norfolk, and the second son, John Walter Lukis trained as an mining engineer but also excavated with the family in his spare time(Seibre, 2008, 130). William Collings Lukis reported extensively on the megaliths at Stonehenge and Avebury to the *Proceedings of the Society of Antiquaries* (1883), who paid him to make detailed plans and elevations on the megalithic monuments there (Seibre 2008, 131). These plans are incredibly valuable to modern archaeologists, as they show the affect that man has had on Stonehenge landscape since the 1880s with the movement and removal of stones (Seibre, 2008, 133). He was a founder member of the Wiltshire Archaeological and Natural History Society in 1853 (Seibre, 2008, 133). In his obituary, he is described as an "*archaeologist of world – wide eminence but was also a considerable authority on geology, botany and other branches of natural sciences*" (Gregory, 1893, 63).

4.3: 1865-1898: The Age of Augustus Wollaston Franks and the rise of anthropology

"*Many tribes at the time of their discovery were living in the age of stone, in absolute ignorance of metals; consequently their arts and industries shed an important light upon those tribes inhabiting our country in prehistoric times,*

from which remote period implements of stone have alone survived" (Read, 1910, 14).

Franks had entrusted the ethnographic portion of the Christy Collection to Charles Hercules Read to catalogue. Franks was succeeded as Keeper by his close friend and protégé Charles Hercules Read. Read had come to work for Franks at the age of seventeen. He became an Assistant in the Department of British and Medieval Antiquities in 1880. Under the guidance of Franks, Read became a keen ethnographer and antiquarian scholar and became assistant keeper to Franks in 1895, just a few years before the death of Franks. Read published comprehensive catalogues and guides to the Museum's collections (Wilson, 1974, 316).

Ethnographic artefacts formed a significant proportion of the artefacts curated by Franks. The final decades of the 19th Century, along with the first few decades of the 20th there was a marked increase in both anthropological fieldwork and interest in ethnographic artefacts in museums. During this period, museums were one of the main areas for both knowledge generation and dissemination in anthropology (Larson, 2007, 90). Scholars during this period, much like archaeologists, saw themselves as scientists and the objects they collected and curated as objects of scientific evidence, quantifiable units of scientific measurements that could be plotted on maps of a global scale. Ethnographic artefacts were also viewed as conceptual markers that could be slotted into evolutionary schemes. Henry Balfour, who was the first curator of the Pitt Rivers Museum, created maps based on the spatial and temporal distribution of artefacts at the museum (Larson, 2007, 91).

Like in the initial stages of archaeology as a discipline, the first anthropologists came from a variety of other scientific backgrounds, transferring their previous scientific expertise into the conduct of fieldwork and the professionalization of the discipline (Kuklick, 2011, 6). Commonly, professional natural historians became ethnographic fieldworkers aided by the creation of academic careers supported by universities (Kuklick, 2011, 8). The professionalization of the field sciences at the turn of the 20th Century, including archaeology and anthropology, but alongside botany and biology, meant that the contributions of interested amateurs were increasingly not seen as credible (Kuklick, 2011, 4).

Traditional histories of anthropology, often emphasise the early decades of the twentieth century as the beginning of anthropological fieldwork and the key period for the development of social anthropological methods. Whilst, this is the most intensive period of fieldwork, the fieldwork of Malinowski was actually the end of fifty years of development of fieldwork methods which can be viewed in the editions of Notes and Queries on Anthropology. This book ran for four editions spanning the years 1870 – 1920 and is a good barometer of attitudes to fieldwork of that period (Urry, 1972, 45). The groundwork for this guide was set in 1839 by the British Association for the Advancement of Science (BAAS) who created a committee to debate the questions that needed to be asked during salvage ethnography. The committee included leading members of the ethnology movement including Thomas Hodgkin and James Pritchard (Urry, 1972, 45).

Franks and Lubbock contributed to the 1872 edition of Notes and Queries, despite neither man having conducted fieldwork. Their contribution was considering the questions on the "culture" of the societies under study. Lubbock's section was specifically concerned with the recording of relationships and marriage (Urry, 1972, 47). It is not really possible to estimate the reach of each edition of Notes and Queries, because records of how many of each edition "*progressive* were not recorded. However, the journal Nature recommended in 1872, that its readers should send copies of Notes and Queries to those who lived near "uncivilised countries" (Urry, 1972, 47). Despite his comprehensive study of ethnographic artefacts ultimately Lubbock reaches a damning conclusion about indigenous communities that is tied into the imperialist and colonialist justifying agendas of the era; he states: "*But after making every possible allowance for savages, it must I think be admitted that they are inferior, morally as well as in other respects to the more civilised races*" (Lubbock, 1872, 565 In Urry, 1972, 47).

Despite these negative attitudes remaining the last quarter of the 19th Century saw anthropology's popularity as a discrete subject rise substantially. 1884 saw anthropology become a separate section in the British Association for the Advancement of Science. Before this, anthropology had been under the umbrella of Section D which incorporated botanists, zoologists and physiologists. This sub-division had been created on the understanding that the study of man

was very much part of the wider study of nature, which can be firmly seen in the work of Tylor (1871) (Larson, 2007, 95). This is also reflected in the fact that many of the leading anthropologists in the decades immediately before the First World War were trained scientists, Haddon was a trained zoologist and Charles Seligman was a trained pathologist (Larson, 2007, 96). There was also a divide during this period from those who collected the ethnographic data and those who analysed it from a theoretical perspective. It was argued by anthropologists such as Sir James Frazer, that this separation gave anthropology an extra degree of scientific rigour (Larson, 2007, 96).

Additionally, in terms of the participation of the British Museum, Charles Hercules Read contributed to the 1892 and 1899 editions of *Notes and Queries*. He writes the introduction to the section on ethnography. Read was not a fieldworker himself, but his commentary provides an insight into the production of ethnographic knowledge at the time (Urry, 1972, 48).Read is concerned with how ethnographic information gained through fieldwork could have wider applications. The idea of transferring ethnographic information into colonial governance had previously only been hinted in prior editions, but now it is being explicitly stated (Urry, 1972, 48). The role of anthropology in imperial competition is also contained within the Notes and Queries. Competition between imperial powers, was shown through the size of ethnographic collections in National museums, e.g., those in Berlin were compared to those in London (Urry, 1972, 49).

During this early period of anthropological research material culture was used as a touchstone between those who created the anthropological theories and the cultures they were studying. These theorists such as Tylor (known as an "armchair anthropologist") relied on ethnographic reporting and artefacts as a form of scientific database (Larson, 2007, 98). One of the few New Guinea collections accessioned during this period was Sir William MacGregor's collection which has been described as a "*nineteenth century colonial construct*" and a very political collection of artefacts (Quinnell, 2000, 82). Macgregor used his collection to extend the *Pax Britannica* which was based upon British naval superiority and control of trading routes during the end of the 19th Century and lasted until the outbreak of World War 1 (Quinnell, 2000, 81). MacGregor was a colonial officer who had served for nearly 50 years and who had held many titles

and roles before his appearance in New Guinea including doctor, administrator and Governor in the colonies of the Seychelles, Mauritius and Fiji. Macgregor purposefully set out to create a collection of ethnographic artefacts and natural history specimens for scientific study that he wanted to use in his colonial explorations "*to make himself useful in science*" (Joyce, 1971, 6 in Quinnell, 2000, 82). 103 artefacts from William MacGregor were incorporated into the museum's collection, including polished axes in 1897 – but how they came to be there is confused. It is thought they may have been part of the Franks Bequest or purchased with the intention to be part of it.

In 1866, Ethnographic specimens gained their own departmental subsection, with Franks in charge as Keeper. His interest in Ethnography was probably sparked by the gift from the Admiralty of the Hasalar Royal Navy Hospital collection in 1855, which was mainly ethnographic. His status as trustee of the Christy Collection and Keeper of the Department, as well as his own personal wealth meant that he had considerable influence over the composition of the ethnographic collections and could indulge personal interests in a professional capacity (Starzecka et al, 2011, 14). During his Keepership, many Maori polished axes were acquired by Franks and large donations overseen, including the largest donation by Meinertzhagen in 1895, smaller collections of polished axes in 1892-3 by Henry Ogg Forbes (Starzecka et al, 11). Franks dramatically increased the number of ethnographic objects in the museum which numbered approximately 3,700 objects when he joined the department and by the time of his departure in 1896, there were over 7,000 ethnographic objects in the museum (King, 1997 in Starzecka et al, 15).

The last collector of this period was the most prolific largest. The largest collection of Maori artefacts in the British Museum was collected by Frederick Huth Meinertzhagen, which the Museum purchased from his daughter in 1895 (Starzecka et al, 2011, 10). Meinertzghagen was born in 1845 to a wealthy German banking family who lived in England but moved to New Zealand in 1866. He took a lease of land in Hawke's Bay with a school friend, Walter Campbell. He moved back to England in 1881 and after his return his wife, two out of his five daughters and adopted Maori son all died from scarlet fever (Starzecka et al, 2011, 17). Very little is known about the collecting activities of Meinertzhagen in New Zealand, he did not publish during the period he lived in New Zealand and

the only accounts of him are descriptions in the unpublished journal of Walter Campbell (Starzecka et al, 2011, 18). Walter writes that Meinertzhagen began collecting natural history specimens whilst at school and he records Meinertzhagen buying a greenstone adze and greenstone so that he could manufacture an adze for himself (Starzecka et al, 2011, 18). Campbell also records that Meinertzhagen had several of the adzes he collected rehafted and that Meinertzhagen took an active interest in learning the customs and history of the Maori, that he learnt the language and that both he and Meinertzhagen both got Maori tattoos (Starzecka et al, 2011, 18). During a visit to London in 1870, Meinertzhagen met with Franks and viewed the Maori objects on display at the Museum and in the Christy collection on a separate visit. It is also recorded in Campbell's diary that great interest was taken in specimens of polished axes Meinertzhagen had brought with him. Campbell states "*He (Meinertzhagen) says his collection of stone adzes were very much prized at home – All the big wigs were in raptures about the big Okai Hau axe* (Campbell, 24 February 1872, in Starzecka et al 2011, 19).

Meinertzhagen died in 1895, having never gotten over the triple bereavement he suffered upon returning to England and the information upon his life and collection activities is scant after the death of his friend Campbell whose diaries Meinertzhagen featured extensively in. The collection of over 500 objects was donated to the museum by Meinertzhagen's son and Charles Hercules Read made sure the each item was individually labelled with his name to ensure that he would be remembered in the collection and nearly all of these labels still survive today (Starzecka et al, 2011, 20). Franks paid for the collection himself in order to give the money to Meinertzhagen's widow quickly, and later was reimbursed from the Christy fund. Some of the collection were considered duplicates to be swapped, but still remain in the collections, accessioned in the 1980s. Meinertzhagen represents the largest single Maori collection in the British Museum to date (Starzecka et al, 2011, 20). Meinertzhagen donated 104 polished axes in total, with only 6 unpolished. Analysis of the condition of the artefacts shows that Meinertzhagen had a preference for selecting material that was in a good or very good condition, with 64% of the axes donated being in that condition. This may be due to the fact that he was recorded to have very good relationships, with the Maori community and offered help with access to

health care, and was allowed to adopt a Maori child. He may have been given or offered axes that were in very good condition as consequence of these relationships (Starzecka et al, 2011, 20). This collection bridges the period at the end of Franks' Keepership and the beginning of the rise of expeditionary material entering the British Museum.

4.4: In Summary

- The temporal and geographic zones that polished axes inhabited during this period continued to be considered remote, exotic and distant. Despite increased international travel, ethnographic polished axes were still considered analogous to prehistoric artefacts. The resolution of the Neolithic increased due to increased excavation and adoption of scientific dating methods from geology and the Darwinist agenda eventually became a dominant and popular ideology adopted by many in the archaeological community.
- A.W. Franks was both the linchpin and the driving force behind the accumulation of ethnographic and prehistoric artefacts in the British Museum during the mid to late 19th Century.
- Through studying the acquisitions Franks made on behalf of the British Museum it is possible to see connections to wider spheres of archaeological knowledge making and how curators at the British Museum can access other groups of individuals contributing to knowledge creation in both archaeology and anthropology, this will be continued in the next chapter.

Chapter 5: A collection of collections

"*A museum is far from static. It is comprised of a complicated mass of social relationships formed between curators, administrators, collectors, visitors, communities living in different parts of the world, collections, individual objects, exhibition cases, labels, accession books, guidebooks, buildings, communication systems and so on. The list is endless. The harder one looks, the more connections one seems to find. All of these social agents variously interlink. Stability – materialises in the form of an institution such as a museum – emerges as a specific result of interactions, but it is always provisional and always under review*" (Larson et al, 2007, 218).

This Chapter further showcases the "Russian doll" nature of the British Museum collections. Where groups of artefacts, when further studied, can show the connections and collectors behind the acquisition of collection. However, it also seeks to showcase the changing nature of approaches towards both ethnographic collecting and ethnographic research. MacDonald (2006) has argued that as well as their role of public educators, Museums were also the catalyst for many to begin their own private collections, particularly in the mid-19th Century. Increased trade and colonialism during this period meant the variety of objects available for people to collect, especially exotic items, had exponentially increased. The museum as an entity became part of the cultural consciousness of the middle classes, and the popularity of the acquisition of new collections also went hand in hand with the development of department stores, who often borrowed stylistic organisation from museums (MacDonald, 2006, 86).

It is largely these private collectors who form the majority of collectors considered in this thesis, although institutions are also considered. These case studies were picked through a process of elimination as outlined in Chapter 2. All collectors that had polished axes in their collection were considered from the departments of Africa, Oceania and the Americas and Britain, Prehistory and Europe. Collectors of polished axes also exist in the British Museum from the departments of Asia and Ancient Near and Middle East, but in-depth consideration of these collections was not possible in the scope of this thesis.

Very often the collectors of polished axes were not dedicated archaeologists for their primary career. The demography of the collectors of polished axes in the British Museum is overwhelmingly white, male and upper and middle class, those who had the disposable income to be able to compile a collection. There is only one woman collector considered in this thesis, this is Maria Wronska Friend, who collected from Papua New Guinea in the course of her anthropological fieldwork in the 1970s. Where other women are connected to the collection of polished axes on the British Museum database, they are responsible for the donation of material to the British Museum after the death of their spouse or parent.

There are tables in the Appendix which shows the differing occupations and collectors considered in the case studies throughout the thesis. Occupations include - archaeologist, anthropologist, banker, MP, industrialists, colonial officers and the military – but what connects all the individuals is that their profession generates the disposable income needed to be able to buy collections of artefacts. Their collections formed a scientific database whose availability was crucial to the London community of scientists and collectors in the decades of the mid -19th Century when the concept of prehistory was formalised.

Firstly, I will be using the Christy Collection as a case study and launching point for the wider collections of polished axes held in the British Museum. Henry Christy was both a key benefactor to the British Museum, but his life and friendships formed the foundation of the administration of the Christy collection, and also the fuelled the archaeological collecting and interests of many of those who were fortunate enough to know him. In the second part of this Chapter I will be discussing the impact of expeditionary anthropology on the ethnographic collections of the British Museum.

5.1: Christy Fund's purchases of European archaeology and ethnographic artefacts

Arguably, the most important acquisition of A.W. Franks' early career within the department was that of the Christy Collection. The details of how Franks' initial

connection to Christy was made is still unclear. Henry Christy was a textile merchant, banker and ardent collector who lived between 1810 and 1865 (King, 1997, 137). His connection to ethnographic artefacts came through an extensive period of travel in the 1850s, whereas his archaeological interest was manifested through both his fieldwork and the arrangement of his personal collections. The arrangement and classification of Christy's personal collection is known through a catalogue produced in conjunction with Steinhart in 1862.

Henry Christy laid the foundations of modern Palaeolithic archaeological fieldwork in the 1850s. He collaborated with Edward Lartet in excavating in Upper Palaeolithic cave sites in the Dordogne. Lubbock acknowledges the expertise and knowledge that Christy held in his 1865 publication Prehistoric Times (Petit and White, 2013, 40). Christy was known to have provided guided tours of his site and had intellectual discussions on the nature of prehistoric artefacts with many members of the Lubbock-Evans network (Petit and White, 2013, 43). After the untimely death of Christy in 1865, Franks was appointed to be one of four trustees to Christy's Bequest to the Museum, along with Sir John Lubbock. Franks compiled a catalogue of the Christy Collection, which for reasons of space management was kept in Victoria Street Westminster, in a temporary exhibition (Cook, 1997, 122). Although the Christy Collection is often discussed in terms of the wide variety of ethnographic objects, there was also a European and prehistoric component to the collection compiled by Christy. The bequest left by Christy to the British Museum also allowed Franks to purchase a great deal of European archaeological material. The first European polished axes bought with the Christy Fund were sold to the museum by Frederick Brome in 1866. Frederick Brome was a Naval Captain, who also excavated in Gibraltar, which is where these axes were from (Merlin, Stribblehill, 2013).

The personal collections of Henry Christy should be studied separately to those purchased with the Christy fund. 8423 artefacts are attributed to Henry Christy in the British Museum. This collection reveals both the travels, personal interests and friendships that Christy carefully cultivated throughout his life. Through studying the purchases of the Christy Fund, you can witness a crucial period of the British Museum's history, an era when A.W.Franks carried extraordinary control and purchasing power over the collections. Through singling out polished axes, it is possible to show the connections between the British Museum and the

individuals curating polished axes, and using them to formulate chronologies of prehistory using the literature they were creating. 79 axes of stone, bronze and iron were originally donated by Christy to the British Museum.

The original collection bequeathed to the museum was comparatively hard for scholars to access when compared against other collections held at the main site, due to the lack of space, which was lamented at the time (Edwards, 1870, 656). The research begun by Christy was carried on by others and used in the refinement of prehistoric timelines.

5.2: The composition and connections of the Christy Fund

The Christy Collection was catalogued in 1861, by C.L Steinhauer, of the Ethnographic Museum in Copenhagen, who produced the *Catalogue of a Collection of Ancient and Modern Stone Implements and other Weapons, Tools and Aborigines of Various Countries, in the possession of Henry Christy* (Starzecka et al, 2011, 13). 8,887 objects in total in the British Museum were donated by or purchased through the Christy Fund – objects continued to be purchased long after Franks died, and new trustees were appointed. The majority of the Christy Fund was used to purchase European Prehistoric artefacts. These numbers do not include exchanges and duplicate items transferred between museums that were largely undocumented (Jill Cook, 2013, pers comm). In total, 909 polished axes were purchased through the Christy Fund for the department of Prehistory and Europe. This represents 10% of the total number of the artefacts purchased and represents the largest grouping of artefacts studied in this thesis. This number does not represent a single donation, rather a concerted pattern of spending by Augustus Wollaston Franks to acquire these collections.

For many of the axes there is limited acquisition data in terms of find spot and date that the axe was added, however for the majority of axes, the vendor is listed, in both the catalogue created by Franks or has been subsequently discovered and placed on the British Museum database. There was surprisingly little purchased from the main actors behind the beginnings of prehistory in

mid-19th Century, this was not due to their lack of support for the British Museum, but because their collections were intended for elsewhere:

- 2 axes were purchased from Sir Augustus Lane Fox (Pitt Rivers)
- 30 of Sir John Evans' axes were purchased by the Christy Collection

The biggest vendor to the Christy collection in terms of polished axes, was unsurprisingly, A.W. Franks with 359 axes, representing over a third of the polished axes present in the Christy Collection today. Under the umbrella of the purchases made by Franks, there are two major collections of polished axes made – those of William Greenwell and Jens Worsaae (67 axes). The table below shows the distribution of the Christy Collection throughout the British Museum's collections. The skewing of the acquisitions towards the departments of Prehistory and Europe and Africa, Oceania and the Americas is because of the purchasing power that Franks was able to wield during the mid-to late 19th Century.

Department of British Museum	No of Objects Purchased with Christy Fund	Percentage of the Christy Fund
Prehistory and Europe	6156	69%
Africa, Oceania and the Americas	2077	23%
Asia	628	7%
Greek and Roman	0	N/A
Coins and Medals	0	N/A
Ancient Egypt and Sudan	0	N/A
Prints and Drawings	0	N/A

Table 5: Christy Fund Accessions by Department

A guide to the Christy Collection was published by the trustees of the museum in 1868, and was written by A.W. Franks. The Guide is a useful insight into the composition and display of the collection and the role of the polished axes in the

exhibit. Tickets to visit the collection were issued in the main hall of the British Museum and the collection was open to the public, although being offsite meant that it was not the most widely visited area of the museum, though there were signs in the main galleries of the British Museum advertising it (Franks, 1868, 1). The Guide informs us that during 1866 to 1868, there were 65 donors or vendors to the Christy Collection (Franks, 1868, 23). The display of the Christy Collection away from the main exhibition halls of the British Museum was only ever meant to be a temporary solution, and Franks expresses his wish for more of the collection to be displayed publicly in the guide (Franks, 1868, 4). Although archaeology and collecting was a leisure activity for Christy, he took undertook excavations and sought to collect whenever he travelled and Franks records Christy's primary interest as being stone tools and implements and their relationships to the "*Prehistoric races of Europe*" (Franks, 1862, 2). The first room was dedicated to stone tools from Europe, Asia and Africa. Polished axes from France and Denmark were displayed as being representative of the "*surface period*" (Franks, 1862, 7). Further polished axes from Britain and Ireland were displayed over the fire place in the same room, again being representative of the "surface period", which later became known as the Neolithic, after the publication of *Prehistoric Times* by Sir John Lubbock in 1865 (Franks, 1862, 8).

There is also evidence of how ethnographic examples of stone axes were treated in the British Museum in this guide. The ethnographic collections of stone from the Americas were placed next to the Palaeolithic specimens from France, because the trustees thought they formed the "*closest analogies*" (Franks, 1868, 10). Christy's collection included polished axes from New Guinea and other Pacific Islands that are recorded as having still been in use when they were collected (Franks, 1868, 15). Axes are also recorded from Polynesia and New Zealand (Franks, 1868, 16). Hafted Stone axes were collected from Australia that are recorded as having being strengthened with lumps of gum, to make them fit better into their hafts (Franks, 1868, 17). Christy collected axes from North, South and Central America that are recorded as being "*similar to the Old World*" (Franks, 1868, 18). West Indian polished axes are also recorded as being similar to their European counterparts (Franks, 1868, 20). Interestingly, the polished axes are not separated out or given special treatment; they are listed as

being stored in cases with a myriad of other artefacts, with no organisational structure other than geography and apart from when they have been used as analogies to explain European prehistory (Franks, 1868, 10).

The Guide also records Christy's connections to the early pioneers of both archaeology and anthropology. Cases 21 – 24 in Victoria Street held modern artefacts from Mexico, where Henry Christy and E.B. Tylor travelled together. This journey was significant in the anthropological career of Tylor. And the pair spent four months together during the trip in the 1850s, after which Christy collected significant portions of his North American and Canadian collections. It is not known who influenced whom but Christy collected significant amounts of artefacts after their time spent together (Caygill and Cherry, 1997 and Franks, 1868, 20).

The Christy Collection was brought back onto the main British Museum site after the departure of the natural history collections to South Kensington in 1880s, which created space for them. However, in-depth study and cataloguing of the ethnographic portion of the Christy collection did not begin until the 1890s with the recruitment of two volunteers, James Edge Partington (who is discussed in Chapter 6) and O.M. Dalton. Between them, they made significant contributions to the understanding of the Oceanic collections the Christy Fund brought into the Museum (British Museum, 2015 (web). Although one polished axe from New Zealand remains in the bequest from Henry Christy, the influence of Henry Christy extended far beyond his death in 1865. The Guide to the Christy Collection compiled by Franks in 1868 shows that Henry Christy had a great interest in Oceanic, Polynesian and Melanesian artefacts, with a room dedicated to the artefacts arranged in the suite in Westminster, after his death. These included stone adzes from Melanesia that were "*still in use*" at the time they were collected (Franks, 1868, 15). A group of Polynesian axes with elaborately carved hafts were also displayed, as well as carved Maori adze handles. A great many of the objects displayed in this room from New Zealand appear to have been wooden carvings, there is not the same technological focus upon the ethnographic artefacts, compared to the artefacts from the European sequences (Franks, 1868, 16). For instance, the Neolithic, (referred to as the "*surface period*") stone axes from England and Ireland are displayed in "*a series"* (Franks, 1868, 9). The collections in the suite at Westminster were not arranged by

Christy himself, but by the Trustees of Christy's Bequest and Mr Steinhauer and by 1868 the collection had been significantly augmented through donations, some items exchanged and others purchased and so the composition of the collection had been altered considerably (Franks, 1868, 4). It is difficult to know what importance Christy would have placed upon Maori polished axes, but it is clear that Franks saw Christy's primary research interests being in the discovery of the Palaeolithic of the South of France, when he passed away, as he was arranging further fieldwork there when he died (Franks, 1868, 2).

5.3: Consolidation of the collections and the Museum of Mankind

"*Ethnographical collections are necessary for the effective study of human development; it is no less important to make them as representative as possible before the opportunity is passed*" (Read, 1910, 43).

The legacy of the Christy Fund and the Christy collection can be seen in the anthropological specimens of polished axes that dominate the collections acquired by British Museum from the Pacific Islands from the early 20th Century onwards, which mirrors the development of ethnographic work in the region. The development of anthropology and its links to prehistory, are strongly linked to the institutionalisation of its artefacts in museums and the connections these artefacts provided to fieldwork nurtured the discipline in Germany, Britain and Denmark. The institutionalisation of ethnographic artefacts added to a complex process of entanglement and detachment from the artefacts original meaning and use (Shelton, 2006, 65). Collecting cannot be separated from colonialism, even within Europe. The appropriation of ancient remains from Ancient Greece, Egypt and the Near East and ethnographic artefacts from Oceania and the Pacific was an industry of wholesale shipment. The export of classical and ethnographic objects overrode claims to cultural heritage in the 18th and 19th Century. The past was seen as something to be collected, especially in new colonial territories which whose archaeological and ethnographic records were used to create a chronological framework which bolstered the claim for Western intellectual superiority in the 19th Century (Scarre, 1990, 13). The gradual decline of European colonialism and the invention and greater affordability of commercial

air travel have meant that attitudes, both public and academic have changed towards other cultures. However, the British Museums collections should be approached with the knowledge of the colonial background of the theoretical development of both prehistory and anthropology, as well as how the British Museums galleries were assembled as a whole (Scarre, 1990, 17).

Historically, there have been variable attempts to classify, document and arrange ethnographic artefacts in the British Museum's collections, meaning that many artefacts (most notably those from Cook's Expeditions) have been lost or misplaced. The curatorship of Franks combined with the bequest of Christy did bring a greater sense of order to the ethnographic collections. When on display, ethnographic collections were arranged geographically or used as a comparative object in the British Museum's prehistoric collections. It is not known whether or not Franks was inspired by the classification systems developed by Jomard or Von Siebald during the 1830s and 1840s. Jomard had a comparative approach to displaying objects by their function, similar to the approach used with polished axes in the British Museum during the mid-19th Century, whereas Von Siebald believed the geographic origins was the most important features and that aesthetics should be disregarded (Shelton, 2006, 66). The way the British Museum displayed its ethnographic collections during the mid -19th century was very different to that espoused by the contemporaneous collection arranged by Pitt Rivers in Oxford, where objects were displayed according to their "connections of form" (Shelton, 2006, 69).

The British Museum's collection of Melanesian objects, which totals over 20,000 artefacts, represents hundreds of different language and many cultural traditions. Many of the artefacts are the earliest known examples, and many objects are no longer manufactured by their communities (Thomas, 2013, 8). Melanesian collections have remained under examined in comparison to their New Zealand and Australian counterparts in the department of Africa, Oceania and the Americas (AOA) (Thomas, 2013, 9). Throughout the early twentieth century, and the beginnings of expeditionary anthropology, objects collected from New Guinea were viewed as highly exotic commodities that originated from another time and place, with many viewing the Melanesian societies they encountered as "Stone Age" (e.g. Blackwood 1950) (Gosden and Knowles, 2001,8). Motivations behind the collection of Melanesian material culture were

diverse, and artefacts were collected by different people from a variety of professions including anthropologists, colonial administrators and missionaries and this is reflected in the collections of Melanesian artefacts held by the British Museum (Gosden and Knowles, 2001, 8).

This period was dominated by grand expeditions, most notably from A.C Haddon who led an expedition by the Torres Strait and the Cooke –Daniels Expedition led by C.G. Seligman in 1910. A C Haddon has two polished axes in the British Museum collection – both hafted and donated in 1889, but collected the year before. There are 35 artefacts in the museum collections in total from his expeditions. Many thousands of objects were removed from New Guinea between the 1880s and World War Two. The impact that this would have had upon the local economies should not be underestimated and would have an effect on the volume of objects manufactured, depending on their popularity with Westerners, objects may have seemed to have greater prominence than they actually had in Melanesian society (Gosden and Knowles, 2001, 9). From the late 19th/ early 20th century up until the Second World War, the collection of Melanesian artefacts by non-indigenous people was driven by concern that Melanesian local knowledge was disappearing through outside contact and cultural change on the islands. However, the material culture collected did not stay in Melanesia and filled European and Australian Museum collections. Regional Museums have only appeared in Melanesia through the nation and colony formation on the islands. Museums were founded in Papua New Guinea on 1954, Vanuatu in 1956 and the Solomon Islands in 1863 (Bolton, 2003, 48).

Haddon's Torres Strait 1898 expedition has been described as the "stuff of anthropological legend" that had been inspired by his previous trip to the Torres Strait in 1888, which had originally been intended to be a voyage with the recording of natural history is its primary mission (Kuklick, 1996, 611). The 1898 expedition to the Torres Strait led by A.C. Haddon came at an important point in the history of anthropological research and endeavour. British anthropology was still a fledging discipline, drawing upon the expertise of both the natural sciences and art-based disciplines (Herle and Rouse, 1998, 1). The team was comprised of eminent scientists. The team included W.H. Rivers, (doctor and experimental psychologist), William MacDougall and Charles Myers were physicians and had taught Haddon at Cambridge, Charles Seligman, physician (later anthropologist,

but at the time specialised in tropical diseases), Sidney Ray – a linguist and the photographer Anthony Wilkin, who had previously worked upon archaeological excavations in Egypt (Herle and Rouse, 1998, 1). The expedition was designed by Haddon, who envisaged a multidisciplinary project. Haddon was especially keen upon conducting psychological research, but also planned to incorporate ethnology, sociology, linguistics and ethnomusicology. Haddon's interest in the region had been stoked by a previous research trip to the Torres Strait to study marine biology. The 1898 expedition lasted seven months from April to October. Haddon shifted from zoology to anthropology as he was anxious to record cultures before they disappeared as consequence of industrialisation (Herle and Rouse, 1998, 3).Haddon divided recording duties according to the interests of his team. Haddon was responsible for recording decorative art, local customs and physical measurements of the local inhabitants. Seligman, although tasked with researching native medicines, became interested in comparative ethnography of the peoples of Cape York and Southern Papua. Vast quantities of data was generated by the expedition and the results were compiled in six volumes of The *Reports of the Cambridge Expedition to the Torres Straits (1901)* but results were also widely disseminated in journals and newspapers (Herle and Rouse, 1998, 3).

Haddon contributed significantly to the development of anthropology as a discipline with the establishment of the chair of the lectureship of ethnology at Cambridge University, in 1900. That position was created for him and signified the transformation of his scientific persona from that of zoologist to anthropologist. This transformation could only be achieved with the legitimisation provided with conduction of fieldwork, but also the careful cultivation of relationships within learned societies and universities (Kuklick, 1996, 611). Haddon's expedition is credited with formalising the case for observation in the creation of anthropological and ethnological theories, giving the discipline its scientific basis, what has come to be known as "*the Cambridge School*" (Kuklick, 1996, 613). Haddon's theories and background were firmly set in the Darwinian school. He translated biological concepts into anthropological theory (Kuklick, 1996, 613). Haddon was "*an apostle of a Darwinian creed*" (Kuklick, 1996, 614). Inspired by the accounts of Darwin and Wallace, an island would have seemed liked the ideal place to conduct scientific research. Islands by geographic nature are obviously isolated, housing comparatively fewer

species and could be seen as being unsullied by invading species. Islands have often been the location where remnants of extinct species have been found and are certainly areas, along with other isolated areas including caves and the Artic where "peculiar or endemic forms" have been found. With this naturalist background, the stage seems set for the investigation of the communities of islands such as the Torres Strait, as remnants of a lost past, existing outside of the time frame used by the Western world (Kulick, 1996, 615). The flora and fauna of Island species were under threat from Western colonialism and missionary work and the "salvage" aspect of scientific research was present in both anthropological and naturalist fieldwork of this era. The "salvage science" had first been practised in the Oceanic area, including Australia in the first half in the 19th Century, when the continent of Australia was described as a "*zoological garden of living fossils*" (Kuklick, 1996, 616). Those creating the first anthropological and archaeological narratives of these areas would have been pre-disposed to seeing this geographic region as prehistoric. It was also presumed that islands would have had less European contact affecting the distinctive cultures formed in island societies (Kuklick, 1996, 616).

The nature of collecting in New Zealand, despite being part of the same Oceanic region, collecting retained much more of a 19th Century English pattern, with middle class professionals dominating the collectors, whom often held other careers to finance their collecting, but who later became experts in their fields in their own right. Two of the most notable collectors of Maori artefacts in the early 20th Century connected with the British Museum are James Edge Partington and Harry Beasley (who also collected artefacts from other Oceanic and Polynesian countries). James Edge Partington collaborated with Charles Heape of Manchester, published artefact studies together (Edge-Partington and Heape, 1969) (Starzecka et al, 2011, 1). James Edge Partington was a wealthy, private collector of Oceanic material who extensively travelled in the Pacific from 1879 onwards. He catalogued the collection of Oceanic artefacts from the voyages of Captain Cook in the British Museum. (Starzecka et al, 2011, 10). James Edge Partington's collection will be covered fully in the case studies for Papua New Guinea, where the majority of his adzes were acquired from.

The Beasley collection, which entered the British Museum, in 1944, represents possibly the most significant privately curated ethnographic collection in the UK.

Along with the artefacts, comprehensive catalogues were presented in 1975 by his daughters, with comprehensive notes, labels and letters. Information in the British Museum's register comes from Beasley's own notes and labels. Harry Beasley was a prolific collector, but did not collect from the field. Instead, he travelled widely in Europe and had extensive contacts with museums and dealers to acquire his collection (Starzecka et al, 2011, 12). He was a prolific collector of fish hooks, which he published his own monograph about (Braunholtz and Digby, 1950, 103). His collection was so great that he was able to create his own museum, the Cranmore Ethnographical Musuem, which also had its own journal *Ethnologia Cranmorensis.* The Museum was bombed during the Second World War, after the death of Harry Beasley in 1939. His widow donated most of his collection to the British Museum for safekeeping, but other objects were sent to regional museums (Starzecka et al, 2011, 12). Beasley's collection was deemed by Keeper H. Braunholtz to be "*outstanding*" and possibly "*the most important ever received by the Franks*" (Braunholtz and Digby, 1952, 103). The British Museum received artefacts from Oceania, North West America, Eskimo tribes and West Africa from Beasley's Collection. Many of the artefacts received in the donation from Mrs Beasley, were of very high value, like a ceremonial wooden table brought from the Pelau Islands and inlaid with shell, thought to be used to hold offerings to the gods (Braunholtz and Digby, 1952, 104).

Polished axes represented a very small part of Beasley's collection. Only eight polished axes in Beasley's collection come from New Zealand, but all are in good condition, and one is unfinished. This seems to reflect Beasley's concern with acquiring high quality pieces. Beasley's widow also donated part of his collection to the Pitt Rivers Museum. A more substantial collection of polished axes was donated by Professor Archibald Liversidge posthumously in 1928. Liversidge was a Professor of Mineralogy and Chemistry at the University of Sydney. Liversidge's original collection was split between a collection of mineral samples (which were sent to the Natural History Museum) and a collection of ethnographic tools, which were sent to Braunholtz at the British Museum (Starzecka et al, 2011, 16). As you can see from the graph below, the collection that was donated was a very utilitarian, technologically focused set of artefacts, of which polished axes and adzes made up the majority of artefacts present.

Some of the implements in the British Museum's collection are featured in a publication written by Professor Liversidge himself, "Notes on some Australasian and other stone implements" in the Journal of the Royal Society of New South Wales. It is a useful insight into how adzes were viewed during this period (Starzecka et al, 2011, 16). Liversidge used the New Zealand implements as a comparative collection to contrast against implements from New Guinea and Australia, one from Java and one from Niagara Falls, in the USA. Liversidge says he collected almost all his artefacts from indigenous peoples themselves, or found them on land that used to belong to them (Liversidge, 1894, 232). The petrology of all the specimens he collected was studied through the removal of samples from the tools, which is hardly surprising given his mineralogical background, and interestingly does not illustrate the tools, instead using measurements to describe them (Liversidge, 1894, 233). Liversidge is primarily interested in morphological and mineralogical comparisons between the groups of artefacts, or attention is paid to function or social context behind the artefacts (Liversidge, 1894, 242). Morphological characteristics were used to suggest similarities between polished adzes manufactured by different cultures. For instance, the Javanese axe described was thought to be similar to the Maori adzes collected as the sides of the polished axe had been finished to a right angle (Liversidge, 1894, 244). From his writings, it can be seen that Liversidge viewed polished axes and adzes of multiple cultures as scientific specimens rather than cultural products – his priorities in recording these axes and adzes are very different to those of his predecessors, such as George Grey, who was interested in recording the individual cultural biographies of each artefact (Hawkins, 1856, 267).

William Oldman, a dealer from London, contributed a great deal to the study through the creation of a comprehensive catalogue, first published by the Polynesian Society in 1935 (Starzecka et al, 2011, 1). The Oldman collection was collected and curated in Britain, and he never travelled to the Pacific, an aspect which connected many collectors of Pacific material. James Edge Partington was unusual in the fact that he made repeated visits to the Pacific, whereas collectors such as Beasley and Christy did not. Oldman is unlike any of the collectors previously considered in this thesis, because he was also a professional dealer in artefacts, as well as a private collector (Neich and Davison,

2004, 7). Commercial trading in archaeological and ethnographic artefacts was largely a consequence of the demand for private collecting in Britain. There were separate theatres of dealing and private collecting in France, Germany, Italy and Switzerland. It was uncommon for the theatres of collecting and dealing of ethnographic artefacts to overlap, but Oldman did source a few items from continental dealers (Neich and Davison, 2004, 7). Oldman was born in 1879, and his first recorded artefact ledger begins in 1894. Oldman produced 130 artefact catalogues in total. He began amassing a private collection of Polynesian material from 1896 onwards, using the best pieces as a form of life insurance. His expertise in the field was well respected though, as he was elected a Fellow of the Royal Anthropological Institute in 1905, aged only 25. Although Oldman was not directly involved in writing ethnographies, his artefacts and presence at these meetings would have meant that his collecting activities did have an impact on how artefacts were viewed and written about (Neich and Davison, 2004, 8).

Oldman began to gather Polynesian material from alternative sources after the First World War, especially from regional museums that began to concentrate on local British material instead of the exotic items that had been donated or bequeathed and at auction in London. He stopped dealing in 1927, but continued to collect privately. Like Beasley's collection, Oldman's collection survived several direct hits from bombing raids in World War Two. The survival of the collection was due to the fact Oldman had a substantial basement in his property (Neich and Davison, 2004, 9). Most of Oldman's collection was sold to the New Zealand government in 1948, but his wife sold his collection at auction at Sotheby's and to the British Museum after his death, retaining only a few items for the family. The majority of Oldman's collection in the British Museum are Native American, Eskimo, Australian Aborigine but a small amount of Polynesian material was donated as well (Neich and Davison, 2004, 11). Oldman carefully retained the history of each artefact he collected if it was possible, noting provenance details and retaining labels associated with artefacts and this information was recorded in his private collection catalogues and sales catalogues. Visitors were able to come and view Oldman's collections, both to purchase and to study them (Neich and Davison, 2004, 13).

Only two polished nephrite Maori adzes are in the British Museum from Oldman's collection, however further stone implements were donated from the North American Collections, more polished adzes were bought by the New Zealand Government in 1948. Unfortunately due to problems of storage in New Zealand Museums in the 1950, especially at the Dominion Museum, who kept no master list of their portion of the Oldman collection, some of Oldman's collection is now unaccounted for. So it is impossible to say for certain where the polished adzes recorded in the catalogue retained at Te Papa ended up (Neich and Davison, 2004, 14). Eleven other polished axes are recorded in the catalogue; all are very high quality artefacts, with four in their original hafts (Oldman, 2004, 5). There have been problems with the display and exhibition of the Oldman collection recently, as having a "collector based" exhibition about Oldman himself was deemed inappropriate, though individual artefacts were displayed in other exhibitions, including the famous Taonga Maori, organised by the National Museum (Neich and Davison, 2004, 16). The repatriation of these artefacts was a powerful act in the reclamation of Maori heritage from colonial power, but there is much more work to be done on the impact of the collection upon the writing of the history of the Maori people (Neich and Davison, 2004, 19).

After the 1930s, there was a break away from the use and accumulation of mass ethnographic collections in museums due to the institutionalisation of anthropology as a university subject in Britain and the redirection of the focus of anthropology towards social structure and firmly away from the universality of man. There was a similar decline in the field collecting of artefacts. Both museum ethnography and field collection of artefacts did not enjoy a resurgence in academic popularity until the 1980s in the United Kingdom (Shelton, 2006, 71).

One of the biggest changes for the ethnographic collections during this period was the foundation of the Museum of Mankind and the removal of the ethnographic collections from the main Museum site. David Wilson has described the annexation of the ethnographic collections at the British Museum as "*a misplaced adventure*" (Wilson, 2002, 194). The Ethnographic collections were moved offsite to the Museum of Mankind in 1970, which was situated in Burlington Gardens, with the reserve collections of the department being

transferred to the building on Orsman Road, which also houses the Prehistoric collections (Palaeolithic) of the Department of Prehistory and Europe (Pope-Hennessy, 1976, 8). The aim of the move was to provide better use of the collections and provide changing exhibitions which illustrated the great variety present in the anthropological collections of the British Museum. The Museum of Mankind was organised geographically and included items from Africa, Oceania and the Americas, Asia and Europe (Pope-Hennessy, 1976, 249).

The foundation of the Museum of Mankind from the British Museum's ethnographic collections is accredited with stoking a resurgence in ethnography further (Shelton, 2006, 72). The exhibitions at the Museum of Mankind were arranged in several different styles. During its early period during 1963 – 1971, there were recreated scenes to show how the artefacts would have been used. Later, the museum moved to mixed genre exhibits, including *Paradise: The Waghi People of the New Guinean Highlands* (1992), which combined recreations with traditional exhibits and new technology. Craftsmen were also asked to showcase their skills at the museum in live demonstrations (Shelton, 2006, 74). It was a popular tourist site attracting around 400,000 visitors a year and held roughly six exhibitions a year (Mack, 2003, 14).The style of exhibition differed significantly from that of the British Museum, being centred around fieldwork and cultures as opposed to the display of progressive historical ages (Mack, 2003, 14).

Polished axes from the Papua Massim are recorded as being displayed in the Museum of Mankind, where it is recorded in the guidebook as being a piece of "art," because of its carved haft and large greenstone blade and is recorded as having been part of ceremonial exchanges (Pope-Hennessy, 1976, 253). The focus on art in the Museum is further seen in the Maori section of the guidebook where their culture is described as being "*characterised by a sophisticated art style very different from that other central Polynesian Islands*" (Pope-Hennessy, 1976, 258). Aside from the physical space from the museum there, the move also separated the department from its previous intellectual base as there had been considerable overlap between the ethnographic department and other departments including Europe and Asia (Wilson, 2002, 283).

My time period considered for items in the Museum's collections extends to the present day, however there are few donations of ethnographic polished axes after the Second World War. From the mid-19th Century onwards my investigations of polished axes at the British Museum is dominated by axes and adzes from archaeological investigations. Aside from archaeological excavations the main source of polished axes in in this period came from the Welcome Collection in 1964. The rise of accessioned artefacts from archaeological excavations in the Museum was due to the fact from 1970s onwards it was decided that purchase grant could be used to support ethnographic field work and archaeological excavations and the Department of Prehistoric and Romano-British Antiquities was one of the departments given permission to carry out their own excavations (Wilson, 2002, 319). By funding their own excavations, the Museum hoped to expand their collections to include more modern sites and by using these modern sites could use modern scientific techniques to have up to date interpretation in the museum galleries. Arguably the most important excavation in relation to the study of polished axes is the Neolithic quarry site of Grimes Graves in Norfolk led by Ian Longworth (Wilson, 2002, 319).

With the reaccessions of the ethnographic artefacts from the Museum of Mankind, the British Museum began to form the modern Museum present today. All museums have certain kinds of objects that become popular and easy to place in exhibition spaces and those that are harder to position in galleries. In the modern British Museum, there is not as much space for the stone tool collections as there once was, and they are certainly no longer displayed alongside ethnographic artefacts. The archives of the British Museum were developed with scholarship in mind, but the element of exhibitionism dictated what was kept, what was swapped and what was acquired. Certain artefacts have always popular in the Museum's collections, such as the Egyptian mummies, who have always drawn crowds and mentioned in the literature surrounding the Museum. It is testament to their popularity amongst collectors, curators and prehistorians that polished axes remain on display in the British Museum's galleries today (Spalding, 2002, 47).

5.4: A late 20th Century of polished axes: Paul Sillitoe

"*It is a small wonder that shut up in museums with only objects to study that they have failed to break moulds and significantly advance the study of artefacts, to produce well integrated and theoretically currently relevant accounts of others material assemblages (Gathercole, 1982). The obvious seems to have been overlooked….that a people's material culture is looked at as? an impartible aspect of their life, on material, adaptive, symbolic and other grounds and that the growth of material culture studies will depend on the consideration of objects as integral parts of their existences, not descriptive in isolation as something apart, a necessary chore*" (Sillitoe, 1988, 6).

The anthropologists of the late nineteenth century, like Haddon and Balfour would have recognised three separate spheres of data which built anthropological research: material culture, social organisation and physical anthropology. However, with the second and third generations of dedicated scholars the role of material culture had been firmly jettisoned from its position of popularity in anthropological studies and replaced with studies of art, language and ceremonial rites and events (Pfaffenberger, 1992, 491). The twentieth century marked a departure in the way material culture was approached by anthropologists. Social anthropology came to dominate the approaches towards material culture overall in the twentieth century. Social anthropology predominantly viewed material culture as a means of viewing symbolic social practice; however, material culture was always used tangentially, almost never the main focus of anthropological study. The purview of social anthropology remained society, kinship and belief systems (Sillitoe, 1996, 10).

Anthropologists distanced themselves from the study of material culture as it was associated with diffusionist and evolutionist theories taken to the extreme and a concentration on the minutiae of the construction of technology rather than the social context of the artefact (Pfaffenberger, 1992, 491). Getting rid of the study of material culture, it has been argued, allowed the intellectual and scientific basis of anthropology to develop, making anthropology a discrete intellectual entity. Where the study of anthropological study of material culture

continued was in museums. It is only in the last two decades that museum ethnography has had the resources to advance significantly, however, and the divorcement of the artefacts from their original communities and lack of resources for museums to conduct fieldwork remains problematic for the discipline (Pfaffenberger, 1992, 492). Malinowski described the role of technology in anthropology as "an indispensable means of approach to economic and sociological activities and to what might be called native science" (Malinowski, 1969, 460 in Pfaffenberger, 1992, 493). Despite nearly a century of material culture being relegated to the second rung of anthropology as a discipline, material culture studies and technological studies are beginning to return to social anthropology, being applied to symbolic and ritual anthropology, cultural ecology and the studies hold many similarities with ethno archaeological approaches (Pffafenberger, 1992, 493).

Paul Sillitoe is one of the last donators of ethnographic polished axes to the British Museum collections. He donated 198 objects in collection all donated in 1979, the majority of which are polished axes. He is examined here separately because of his approaches to material culture, which is radically different to the majority of anthropologists. I was fortunate to interview Professor. Sillitoe, and this interview influenced my view of his collections in the British Museum. The diagram below summarises the topics covered during my interview with Professor Sillitoe;

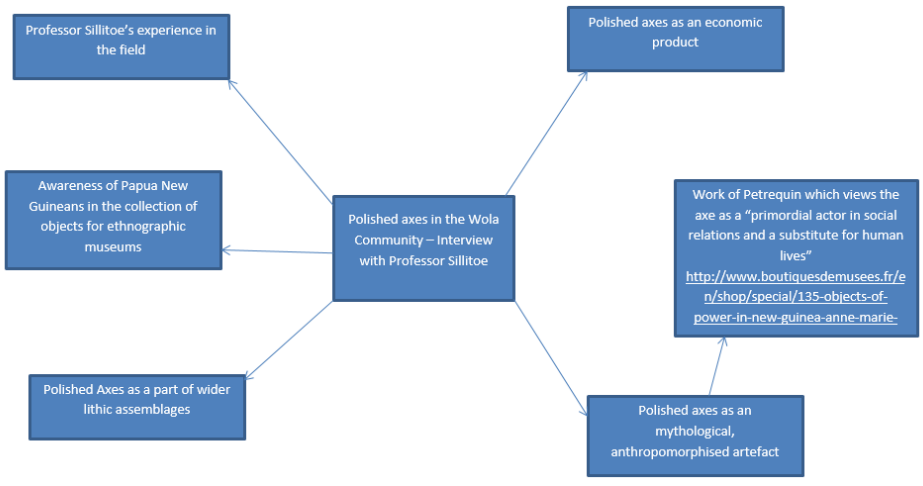


Figure 1: Topics Covered in Paul Sillitoe Interview

Sillitoe's methods have set him apart from other anthropologists in so much that he has approached material culture in a very archaeological manner and although his career has had many facets including projects on indigenous knowledge development as well as more traditional anthropological kinship and labour division studies, he has retained the use of lithic analysis as a means of creating knowledge from the ethnographic data collected in the field. Sillitoe's 1979 collection of lithic artefacts donated to the Museum was specifically requested to be collected by the British Museum. This collection included 198 objects, including many polished axes. Sillitoe (1996) has examined the scope of material culture studies in anthropology. He is critical of the studies of ethnographic artefacts in museums, likening their treatment to those of natural history collections. He criticises the way in which (due to time and monetary factors) these studies are often limited to classifying and updating descriptions of artefacts (Sillitoe, 1996, 2). Sillitoe (1988) has been a vocal advocate for the increased inclusion of material culture and artefact studies in anthropological research and discourse. One of his main arguments behind his stance is the disappearance of indigenous communities' pre-industrial lifestyles. The evidence of their previous ways of life is increasingly confined to museums. He argues that anthropology will increasingly be concentrated upon "social and cultural invisibles" and that better recording and documentation of museum artefacts from previous ethnographic expeditions is needed to build a platform for future work to be planned from (Sillitoe, 1988, 5). Speaking on the divide between archaeology and anthropology with regards to the study of material culture, Sillitoe (1996) believes that "*we should not allow the indistinct and artificial intellectual boundaries to prevent us from including them in our review, perhaps contributing to their further development*" (Sillitoe, 1996, 2).

Sillitoe (1996) advocates the use of "ethnotechnology" as a sub discipline. Ethnotechnology is defined as "*the comprehensive study of material culture in both the field, with living populations making and using things, and in the museum, with artefacts and employing controlled comparison and analogy, posing prepositions we can test in the field*" (Sillitoe, 1996, 14). Ethnotechnological studies share many similarities with the aims of ethnoarchaeological approaches, and both derive from a need to make

archaeological and anthropology more holistic in approach, yet more amenable to "*rigorous and scientific documentation*" (Sillitoe, 1996, 20).

Sillitoe (1988) finds it surprising that artefact studies have not gained more momentum in anthropology due to the rise of Marxism and cultural ecology from the 1970s onwards with an emphasis on production and human environmental adaptation. Sillitoe (1988) took an innovate approach to field work with the Wola communities, linking studies of production and adaptation of material culture to the economy and social order, with a particular focus on production and ceremonial exchange which is a central institution in Wola life (Sillitoe, 1988, 6). Sillitoe (1982) conducted ethnographic fieldwork with the Wola people. The Wola live in five valleys in the Southern Highlands of Papua New Guinea. The Wola farm using shifting cultivation, with the main component of their diet being sweet potato, but also herd pigs as well. These pigs, along with other valuables including shells, form the basis of a ceremonial exchange cycle ordered around social events (Sillitoe, 1982, 19). The axes manufactured by the Wola are called *Kwiy shomael* and the blades are always polished. They are mounted in split socketed hafts and lashed with rattan to secure the blade to the haft. There is gendered use of the axes and the axes are only used by men and the Wola believe that women, if they were to handle the axe, would dull the cutting blade and men avoid using axes after the have had intercourse (Sillitoe, 1982, 19). The polished axes were used for three different tasks, gardening, processing firewood and manufacturing wooden implements.

Silllitoe (1982) notes that the axes were used in a different manner to steel axes, as the stone axe require a shorter more "pecking" style to avoid damaging the blade (Sillitoe, 1982, 19). The blade of the polished axes used by the Wola could last the lifetime of the owner, and actually required less upkeep than the steel replacements. Hafts generally lasted four or five years, the socket where the axe was bound had to be replaced yearly as that was where the greatest stress was placed upon the artefact. Hafting was not important in terms of the value of axe; the value of the axe was measured by the size of the blade. A large axe could be exchanged for other high value objects in Wola society, including pearl shells and pigs. This is whilst they were in common after gradual replacements by steel axes from the 1930s, stone axe blades for common use have no value in Wola

society, whilst ceremonial axes used in dances do retain some value (Sillitoe, 1982, 21).

The Wola do not collect raw material for the manufacture of polished axes directly, the material for the manufacture of axes comes from the Western Highland Provinces and polished axes were imported ready-made. The quality of the stone determines the value of the axe, not any social beliefs. Quality is assessed through watching water condense on the stone to assess hardness (Sillitoe, 1982, 21). Material for the hafting of polished axes was readily available locally and did not need to imported or bartered for (Sillitoe, 1982, 22). Sillitoe (1982) directly observed the hafting of polished axes, and observed that although help from relatives could be obtained, generally each man was responsible for maintaining his own axe, but learnt the skills of hafting, binding and maintaining the blade from other male relatives (Sillitoe, 1982, 31). There is a comparative scarcity of polished axes amongst the Wola and axes are often curated and kept between generations. Sillitoe (1978) recorded 53 cases of men gaining possession of axes and in 44 of these cases (83%) the man in question inherited the axe from their farmer (Sillitoe, 1978, 266).

Ceremonial exchange is undoubtedly a significant factor in the movement of goods and artefacts across the New Guinean highlands and often drive beyond purely economic (Sillitoe, 1978, 268). Examination of these "*spheres of exchange*" has often formed the basis of many seminal studies in anthropology which is often presented as "*descriptive ethnography*" (Sillitoe, 2006, 1). A common question which is posed in both archaeology and ethnography is where is the distinction drawn between ceremonial trade and exchange? And is it possible to view this distinction in the archaeological record? In terms of Melanesian society in the recent past, the Wola community do make distinction between different types of goods and artefacts and how they are exchanged (Sillitoe, 1982, 271). In the trade and exchange of goods in Papua New Guinea, two assumptions are often made. Firstly, is that the natural occurrence of resources determines the patterns of trade. Secondly, that there is a demand amongst people for resources which do not naturally occur in their locality and this is what drives the demand for trade. These assumptions also rest on the premise that people keep some of the artefacts/goods which are traded through their locality. Distance is also a major factor affecting trade (Sillitoe, 1978, 265).

The language of the Wola gives us an indication of how they differentiate transactions. To hire an item is *ma way,* to trade (or swap) is *kwal bay, dob bay* is a term referring to the person arranging the transaction and *sok may* refers to the party receiving the goods. These terms apply to non-living things, for animals the term for trade is *haezay* (Sillitoe, 1978, 271). There is not the same economic scale of value as found in Western capitalist systems, swaps are based on personal need to consume, profit is not a factor, but the need to exchange an object for ceremonial reasons is often a driving factor (Sillitoe, 1978, 271).

Melanesian ethnography by one of the collectors of polished axes at the British Museum has been used to attempt to reconstruct how the archaeological record was formed, specifically the formation of lithic assemblages. Paul Sillitoe and Michael Shott (2004) used data from Sillitoe's ethnographic work with the Wola people of New Guinea. They compared lithic assemblages to show how use life affects the size of the lithic assemblage at discard. This study assumes that no matter the culture of time period, that use life affects the composition and size of the found discarded or archaeological assemblage (Sillitoe and Shott, 2004, 339). Sillitoe and Shott (2004) propose that through studying the use life and assemblage composition in ethnographic settings, it may be possible to model assemblages archaeologically when combined with experimental data. The authors lament that the modelling of archaeological assemblages seems to have fallen out of theoretical fashion, despite the crucial role should studies play in the recreation of past (Sillitoe and Shott, 2004, 353). The combination of experimental, archaeological and ethnographic data in studies such as this one may be a good balance to deal with the problems thrown up with the use of ethnographic analogy in the study of European prehistory. These problems are discussed in Chapter 7.

5.5: In Summary

The British Museum has not had a unified ethnographic department since the Museum of Mankind closed in 1994, and the ethnographic collections are now confined to a very different method of display to those that had been enjoyed at the Museum of Mankind. There was less space due to the reintegration with the main British Museum and what artefacts could have display space reassessed

(Shelton, 2006, 75). Despite the fact there is no longer a dedicated ethnography department in the British Museum, the legacy of ethnographic expeditions are still strong within the British Museums collections. The main takeaway points from this chapter are:

- The Christy Fund its management has had a considerable impact on the ethnographic collections of the British Museum because of the purchasing power it gave A.W.Franks during the mid-19th Century, when arguably, the majority of ethnographic artefacts were freely available for purchase spurred on by the colonial and missionary activities of the British Empire.
- New Zealand was a crucial source of ethnographic polished axes during the mid-late 19th Century, with the Melanesian collections gaining prominence with the rise of expeditionary anthropology.
- The collections of polished axes from ethnographic sources entering the British Museum diminish considerably after the 1970's with Paul Sillitoe collection in 1979, representing the largest single donation of polished axes during the late 20th Century.
- Paul Sillitoe's approaches to material culture, archaeology and ethnography could be used as a cross disciplinary basis for challenging the problems caused by the use of ethnographic analogy in the European Neolithic.

Chapter 6: Turning axes into history

" Collections are sets of objects and like all other sets of objects, they are an act of the imagination, part corporate and part individual, a metaphor intended to create meanings, which help make individual identity and each individuals view of the world" (Pearce, 1995, 27).

Whereas the previous Chapters have concentrated on the enlightenment and the mid-19th Century, this Chapter examines the archaeological ideas formed during the early 20th century and beyond. The first half of this chapter runs through how archaeologists have approached Neolithic polished axes in Europe and the Near East, beginning with the work of Vere Gordon Childe. The second half of the Chapter is devoted to the use of analogy in archaeology in the interpretation of the European Neolithic, including polished axes. This chapter is heavily biased towards the European Neolithic (particularly British and Western European) due to the amount of implement petrology carried out and tested on European polished axes during the 20th century which also influenced the creation of groups and societies dedicated to the study of polished axes, including the Implement Petrology Group which still meets yearly in York and has done for over seventy years.

What this Chapter aims to show:

How initially in the mid-19th and 20th Century polished axes continued to be drawn into archaeological narratives of the European Neolithic through:

- The mythic and historic origins of the use of polished axes in European prehistory.
- The use of polished axes as a diagnostic type fossil
- The connections to trade which were made through implement petrology
- The social role of polished axes in the Neolithic

6.1: The mythic and historic origins of the use of polished axes in European prehistory

"There are three kinds of Cerauniae, differentiated by shape and colour. Socatus, our most ancient authority, has recorded two of these, the black and red. A third kind has been added which is quite rare and sought by all the Parthian magi, green in colour…It is thought that all kinds are hurled down from the sky by lightning bolts and that third kind is only found in a spot that has been struck by lightning" (Mercatus, 16th Century, 1875 translation, Heizer, 1980, 73).

Greek and Roman sources had been aware of the use and manufacture of stone tools, but this information had become obscured after the fall of the Roman Empire and the origins of both polished and flaked stone tools had become uncertain. Explanations of polished stone tools fell into two categories; they were either of celestial or folkloric origin. The celestial origin of thunderstones had similar folkloric tales across mainland Europe, America, Asia and Oceania (Johanson, 2009, 129). Ceraunia means thunderstone, a common belief was that polished axes were the result of celestial phenomena – either lightning strikes or meteorites, which had become fossilised upon earth (Cook, 2003, 182).

Sometimes ceraunia were believed to appear with every lightning strike. When collected and kept on a person, they were thought to have magic properties and protect the wearer from lightning strikes and ward off ill health. When kept in the home, ceraunia were believed to counteract evil spirits that spoiled food (Johanson, 2009, 130). The exact effect of each thunderstone would vary between countries and depend on the colour or other physical properties of the stone (e.g. whether or not they were perforated and could be worn by collector). The "bolt" or weapon – like form of axes and adzes was also thought to correlate to universal thunder gods (e.g. like Zeus or Thor), making them remnants of the gods thrown down from heaven or left upon earth. The believed medicinal and magical properties of polished axes has led to extended curation of polished axes through generations, well after their original manufacture from the Bronze Age well into the Middle ages and beyond (Johanson, 2009, 132). This extended curation and use life of polished axes

meant that they could be easily discovered in the landscape without excavation which led to them being a popular artefact in the collections of antiquaries.

The earliest known reference to polished axes in the literary record after the fall of the Roman Empire was made by the physician to Pope Clement VIII, Michel Mercatus in the mid sixteenth century (Heizer, 1980, 70). Mercatus describes two types of ceraunia; ceraunia cuneata – polished axes, and ceraunia vulgaris – flint arrow heads and spear points (Heizer, 1980, 70). Mercatus believed that they had been used as weapons and that in the sixteenth century in Italy they had been utilised by goldsmiths and were carried by some as protection from lightning (Heizer, 1980, 74). From the mid- seventeenth century onwards there was a steady stream of recognition of the polished axe, as both a pre-Roman artefact and an object utilised by man but not necessarily manufactured by them. The English antiquarian William Dugdale also recognised polished axes as being used by "*native Britains*" who had not yet learned to use iron (Dugdale, 1656 in Heizer, 1980, 69). The acceptance of the pre-Roman age of stone tools brought a new set of questions and comparisons with ethnographic materials. European antiquarians began to look for answers in the similarities they found in the form and design of axes of the peoples of the Pacific and the Americas, with the earliest comparisons were drawn with Native American tool use (Goodrum, 2011, 52). Robert Plot wrote in 1686 that he believed that polished axes display in the Ashmolean Museum were comparable to those used by Native Americans and that Native American examples could be used to show how Pre-Roman axes could have been hafted (Heizer, 1980, 70). Even with ethnographic comparison, the supernatural beginnings of polished axes was still being described. In 1699, Edward Lhwyd (Keeper of the Ashmolean) wrote that such tools were manufactured by "*elfs or fairies*" and were then found, used and hafted by pre-Roman Britons and that their use was continued by Native Americans (Hezier, 1980, 72).

The belief in the celestial origins of ceraunia were also described by the French apothecary Antoine de Jussieu, in 1723. However, by the time of his writing he was convinced of their manufacture by man because of ethnographic comparison with those manufactured in the Caribbean. Jussieu also records the exchange of polished axes as commodities ethnographically. Jussieu believes that the introduction of iron was the reason for the disuse of stone tools in

Europe. He states: "*The people of France, Germany and other Northern countries, who but for the discovery of Iron, would have much resemblance to the savages of today, had no less need than they – before using iron – to cut wood, to remove bark, to split branches, to hunt for their food and to defend themselves against their enemies. This they could not have possibly done without these tools, which not being subject to rust, are found today in the ground intact and nearly with the original polish*" (Jussieu, 1723 in Hexier, 1980, 80). In all of these early sources there is no temporal distinction in the use of polished and flaked stone tools and they are believed to have been used concurrently.

The reconstruction of the pre-Roman past by the antiquarians of the seventeenth and eighteenth centuries relied heavily on borrowing from the theoretical development of the geological sciences who with the use of fossils were restructuring the known timeline of the development of the earth (Goodrum, 2011, 55). The objects behind the investigation of the pre-Roman past in the early eighteenth century were not the product of systematic excavation. Most were found due to accidental discovery, largely by farmers or labourers, who then gave or sold them into private collections and museums. This was not an era of the wide public display of polished axes, but they were described and discussed in print and in the new forums of scientific societies (Goodrum, 2011, 57). In a letter addressed to the Society of Antiquaries in 1766, Charles Lyttelton presented an argument that polished axes were a weapon of war, used before the use of metal used by Ancient Britons (Goodrum, 2011, 58). Lyttelton positively states: "*There is not the least doubt left of these stone instruments having been fabricated in the earliest of times and by barbarous peoples, before the use of Iron and Metals was known*" (Lyttelton, 1776, 118). His evidence for the use of the polished axe as a weapon of war, comes from a French account of a prehistoric or "Gaulish" burials discovered in 1685, where the burnt skeletons of "*soldiers*" were buried with axes underneath the skulls, including a polished nephrite example (Lyttelton, 1776, 120). Even at this early stage polished axes are recognised as a common artefact across Europe, but also to be found in Mexico and the East Indies. In these early letters we can see the beginnings of the use of the polished axe as a comparative artefacts, across continents and time periods (Lyttelton, 1776, 119). Lyttelton supposed that the polished axe belonged to the very first inhabitants of the British Isles, even

before the "Ancient Britons" that had been proposed by other authors. In his closing argument he says: "*How low an idea so ever some people may entertain of the Ancient Britons, they can hardly be thought of as barbarous and ignorant to have made their battle axes and spear heads of stone and this with great labour and execution, when at the same time, they were mechanic sufficient to make iron scythes and had such plenty of iron as to arm their chariots of war with such a destructive weapon. On the whole, I am of the opinion that these stone axes are the most ancient remains existing at this day in the British Isles of our British ancestors and probably coeval with the first inhabitants of this island*" (Lyttelton, 1776, 123).

Formal collection and public display of stone artefacts in museums for use of antiquarians began earliest in Scandinavia, there had been a very early display of stone axes in the collection of Ole Worm, who founded a museum in Copenhagen, and many stone axes are described in his catalogue of 1655 (Cook, 2003, 181). Worm described them as *ceraunia*, believing them to be a consequence of natural phenomena (Cook, 2003, 182). Possibly the first known description of a Neolithic polished stone axe in studied from a Museum collection in Britain was published by Sir William Dugdale in his book The Antiquities of Warwickshire published in 1656. He believed it was made by "*Native Britons*" before the Romans. He studied this axe in the Ashmolean Museum, although it is believed to have been lost in the fire of 1679 that destroyed Ashmole's apartment in London (Cook, 2003, 182). The founder of the British Museum, also believed in the medicinal properties of stone, in particular jade. Sir Hans Sloane endeavoured to improve medicinal practice through the study of his collection. This was also a way of improving his own social standing though innovation of medical practice. Unfortunately, it is not possible to say whether or not he was interested in the medicinal properties of polished axes. There is only one hafted polished axe remaining in the collection of Sir Hans Sloane in the British Museum from Belize (Huxley, 2003a, 88).

The continued recording of the folkloric origins of polished axes lent itself to the further comparisons of ethnographic analogy and that beliefs in the magical properties of the polished axe have not disappeared. This can be seen in the work of Sir John Evans in the late 19th Century. Evans devotes a chapter to the mythology and history of the uses of the polished axe in his work *Ancient Stone*

Implements, Weapons and Ornaments of Great Britain published in 1872 (Evans, 1872, 55). Evans reports that the myth of the axe being a "thunder-bolt" that fell from the sky still exists in the West of England (Evans, 1872, 56). Evans believes the connection between lightning and thunder and stone axes is pervasive wherever polished axes are found. Evans lists examples from Japan, Burma and from across Europe (Evans, 1872, 59). He reports that even in the 19th Century that axes are believed to have medicinal properties if they are boiled in water. Evans is interested in the juxtaposition in the way people view axes even within the same century, to many modern people, the axe still holds power and mystic properties, which antiquarians and scholars would not ascribe to the polished axe (Evans, 1872, 57). The myth surrounding axes as thunderbolts also extended to the Gold Coast, Australia. The explorer William Winwood Reade reported that the local communities' associated prehistoric axes with thunder due to the fact heavy rainstorms with thunder and lightning often exposed prehistoric deposits containing axes. The local communities ground the axes to release therapeutic properties they believed the axes contained for the treatment of rheumatism. Reade collected some of the axes described by the locals as "*god stones*" and gave them to a trader Andrew Swanzy, who donated them to John Lubbock's collection (Owen, 2013, 82).

This quote from Evans illustrates his reasoning for why polished axes were believed to those mystic properties: "*There are two deductions which may readily be drawn from the facts just stated; first, that in nearly, if not, indeed, all parts of the globe which are now civilized, there was a period when the use of stone implements prevailed ; and, secondly, that this period is so remote, that what were then the common implements of every-day life have now for centuries been regarded with superstitious reverence, or as being in some sense of celestial origin, and not the work of man's hands*" (Evans, 1872, 62).

The folklore surrounding the polished axe continues well into the 20th Century during the Second World War and is recorded by anthropologists, who have taken on the mantle of recording these beliefs as archaeology, had by this point developed radically different priorities. Hildburgh (1941) wrote an article for the journal Man describing the Spanish beliefs of the protective and medicinal properties of prehistoric stone tools in Spain in the present day (Hildburgh, 1941, 15). Arrowheads and other thinner stone tools were worn as protective

amulets to be kept close to the chest or body for maximum effect, these tools were thought to be more potent medicinally in Spain as they were rarer than the polished axes. The polished axes however, still had a protective role in the shielding of the holder of the axe from lightning. Hildburgh records that: "*In the mountains of Toledo there is a 'fervent cult' of Neolithic axes as extremely efficient protections against the deadly actions of lightning; the peasants preserve with loving care in their houses which they find in their fields, in the firm belief that lightning will not injure those houses, nor the persons living in them, nor their beasts. In the district of San Pablo de los Montes, people carry stone axes in their pockets, so that ' nothing should happen to them should there be cloud*" (Hildburgh, 1941, 15). There are similar reports from Catalonia and the Basque region of polished axes being placed in houses as a protective measure from lightning, but also of polished axes being left in various positions in the landscape (usually planted upwards in the ground, and engraved) as a votive or protective offering (Hildburgh, 1941, 16).

Interestingly, the early modern folklore surrounding the history of the polished axe has become a matter for the historians of science and archaeology to discuss (e.g. Stiles 1977, Goodrum 2002, 2004, 2011), the medicinal properties of polished axes have been dismissed or at least not included by those who investigate the sociality of the polished axe in the 21st Century. Nevertheless, the folkloric background made the polished axe a popular antiquarian collector's piece and a regular item in the cabinet of curiosity.

6.2: The polished axe as a diagnostic type fossil and the collections of Evans and Lubbock

The precursory period to the use of polished axes as a diagnostic type fossil was one of knowledge creation and the formation of institutional legacies which can still be seen in the national museums across Europe and Northern America. By the 1840s although the length of geological time had lengthened the time line of humanity had not. Three main approaches dominated scientific discourse about the human past in the 1840s. The Three Age System, Ethnology and what Rowley-Conwy (2007) terms "ancient history" (Rowley-Conwy, 2007, 5). Ancient History was based upon two main forms of scholarship; the study of chronologies constructed from documents (the foremost document being the

bible) and philology (Rowley-Conwy, 2007, 8). Traditionally, it has been claimed that there had been a decline in antiquarian endeavour in the mid to late 18th Century (e.g. Sweet) but there was a significant number of individuals who continued to study monuments and artefacts, including Richard Gough and Charles Lyttelton. There are no collections of prehistoric artefacts currently in the British Museum collections from either of these early antiquarians but there are collections of prints donated by both. (Cook, 2003, 188). The British Museum's library collections had a much more prominent public role in the Museum than they do today; they were available to study daily, although Sloane's original collection of printed books (between 40,000 – 50,000 volumes), were not recognised as being donated by Sloane until 1941, when an American scholar discovered how Sloane processed his acquisitions. It is difficult to assess the impact of the Sloane Collection on the formation of prehistory, only to say that when combined with the Royal Collections (known as the "Old Library" in the Museum) it made a formidable intellectual resource which would have not been paralleled in terms of accessibility to scholars and variety in London during the 18th and early 19th Century (Francis, 1953, 4).

The "*Northern Antiquaries*" were a group of scholars who sought to categorise and define both the artefacts of prehistory and the time period in which they belonged and their work was a revolutionary. The work of these archaeological pioneers would radically change how the pre-Roman past was viewed through the development of the Three Age System, but the dissemination and adoption of their ideas was not straightforward. This period of revolution was prompted by the appointment of Christian Jorgensen Thomsen as the first curator of the Danish National Museum of Antiquities in 1816 (Renfrew, 2007, 7).

Although, the Three Age System had been used to order Scandinavian museums for forty years previously the acceptance of the system was not immediate. The works of Thomsen and Worsaee were published in the Britain in 1848 (A Guide to Northern Antiquities) and 1849 (The Primeval Antiquities of Denmark) (Pearce, 1996, 26). The adoption of the concept of the Three Age System in Britain was also hampered by practical barriers. There was little published concerning the Three Age System in English. There was a large quantity of the findings of Scandinavian archaeology published in English by the Royal Society of Northern Antiquaries. The Royal Society of Northern Antiquaries used their

journal, *Antiquarisk Tiddskrift,* to spread the story of Viking conquest and exploration. This membership list of the society showed that the journal was disseminated to heads of state across the world including the King of Prussia and Presidents of Ecuador and Chile (Rowley-Conwy, 2007, 84). The Royal Society of Northern Antiquaries international journal, *Memoires de la Societie Royales des Antiquiares du Nord* (which published French, English and German translations of Danish articles) published the first mentions of the Three Age System outside of Thomsen's publications in 1840. It is known that the British Museum staff had read the German translation of Worasee's 1843 book in 1844, even though the English version did not appear till 1849 (Rowley-Conwy, 2007, 1).

Vaux, who wrote Handbook to the Guide of the Antiquities in the British Museum in 1851 and worked as an assistant in the Department of Antiquities, remarks that at that point "British or Anglo-Roman antiquities" arrangement was so unorganised that their composition was not thought worthy of description (Pearce, 1996, 26). It is also known that Thomsen visited the British Museum in 1843. It is reported that Thomsen reported that the Museum's collections were jumbled and the staff "unknowledgeable" (Jensen, 1992 in Rowley-Conwy, 2007, 87). The Three Age system would have appeared like a minor subsection of Danish archaeology to outside observers in the early 19th Century (Rowley-Conwy, 2007, 88).

Although Thomsen and Worsaae did not donate any artefacts personally to the British Museums collections, the British Museum holds a considerable collection of artefacts bought at auction belonging to the personal collection of Worsaae given to the British Museum through Franks by means of the Christy collection. Worsaae's collection at the British Museum is comprised of 486 artefacts, all European, with the overwhelming majority being Danish in origin. The artefacts range from Mesolithic to Medieval in date. 243 artefacts (50%) are from the Neolithic. There are 117 polished axes in this collection and all are from Denmark. The majority of the polished axes were retrieved from excavations in Denmark in the first half of the nineteenth century (Thrane and Collett, 2011).In and of itself, this collection of polished axes although substantial, is not extraordinary or remarkable in terms of objects or quality. What it does represent, however, is the importance Franks placed upon the position of the

Northern Antiquaries in the collection and dissemination of archaeological knowledge, by the time the collection was purchased in 1869.

The mid-19th Century was the period in which the polished axe began to be viewed as something more than a antiquarian curiosity but as a quantifiable unit of scientific measurement, a period which was transformative for archaeology and the evolutionary sciences and saw the establishment of prehistoric archaeology as a scientific discipline. Interest in the prehistory of Britain prior to the mid-19th Century had been dominated by attention on the ancient Celtic past which had been dominated by Scottish, Welsh and Irish scholars, fuelled by a "Celtic Revival" in the mid -18th Century (Rowley-Conwy, 2007, 83). There was not a nationalist agenda in London to investigate the earliest archaeology in London. The pre-Roman past was seen as inferior to the relatively recent arrival of the English who were known to be post- Roman migrants to British shores. The pre-Roman past was seen as "inferior" and scientific discussion of this past was seen as giving unnecessary credence regional nationalistic narratives. The time depth of the accepted archaeological chronology of pre-Roman times was very shallow and populated using information from Ethnology. Emphasis was placed upon the population of Britain by waves of migration moving from East to West across Europe (Rowley-Conwy, 2007, 83).

After the watershed moment of the Great Exhibition of 1851, science in the mid -19th Century evolved gradually into a truly interdisciplinary effort drawing upon geology, zoology, botany, mathematics and astronomy. Those involved in conducting scientific experiments and drawing up theories were rarely limited to one discipline (Owen, 2008, 212). It was against this multidisciplinary background that the polished axe was placed in the chronology that we use as archaeologists today. Growing interest in archaeology can be measured in the growing membership of the Society of Antiquaries (formed in 1710) and their publication *Archaeologia*, which began in 1770 (Cook, 2003, 188).

Polished axes may have not been the artefact that pushed back the known antiquity of man in 1859, but the collection of polished axes along with other stone tools formed a database that allowed the construction of typologies and the arrangement of a coherent chronology of the prehistoric era. This database, when combined with stratigraphic information and faunal remains became a

powerful scientific base for observing the unwritten past. With the performance of Evans and Prestwich at the Society of Antiquaries in 1859, the axes and pieces of stone they showcased gained a value both monetary and scientific, which was important in an age of industry and international trade (Gamble and Kruszyinski, 2009, 463). The speeches made by the Society of Antiquaries by Evans and Prestwich in 1859 were much more than a standard descriptive report, one of countless ones made to the Society. This report set the benchmark for establishing "*the procedure to authenticate archaeological observations made in the field that involved neither upstanding monuments nor excavation of buried remains*" (Gamble and Kruszyinski, 2009, 463). Their speeches highlighted the performative power of objects as scientific evidence. Evans and Prestwich combined the display of objects with eyewitness testimony from the workmen of the site of Abbeville and stratigraphic evidence to form a highly persuasive argument. Their discovery was so radical that they needed to ensure that their evidence met the highest scientific standards of the day (Gamble and Kruszyinski, 2009, 463). Those who followed in the footsteps of Darwin and his ideology believed first and foremost that archaeology should be both "scientific and empiricist" (Owen, 2008, 213). Previous antiquarian study had seen objects mainly for their aesthetic value or for their value connected to their ability to connect to documentary sources. Whereas under this new scientific agenda, objects became quantifiable units of scientific evidence without attachment to documentary evidence. Because of this change in intellectual stance, objects could become "type fossils" and become sorted and classified to fill the new timeline put forward by Evans and Prestwich (Owen, 2008, 213).

6.2.1 Sir John Lubbock

Aside from the publication of Darwin's *Origin of the Species* in 1859, arguably the most influential book in the formation of the concept of the idea of the polished axe as diagnostic tool for the recognition of the Neolithic in the archaeological record, especially in terms of impact on the general public, was the wildly popular *Prehistoric Times* (1865), written by John Lubbock. The book sold 20,000 copies and ran for seven editions in the English language and was translated into others. The book was essentially a synthesis of the current state of prehistoric archaeology as Lubbock saw it, written for an audience who were new to the subject. The book was written in response to problems that the

archaeological community had had with Lyell's *The Geological Evidences for the Antiquity of Man, with remarks on Theories of the Origin of the Species by Variation* in 1863 (Owen, 2008, 215). In the creation of this book, Lubbock took a tour of the major Museums of Europe holding prehistoric collections and sought out the collections held by private individuals, including Boucher des Perthes and John Evans. Lubbock had also been on numerous visits to the gravel pits of the Somme, sometimes with Prestwich and Evans to view the stratigraphy and artefacts (Lubbock, 1865, vii).

Lubbock saw the prehistoric past as being as being as rich as the historical one. His work was directly in contradiction to classical scholars who believed that the prehistoric past, was lost and of little value in telling the story of man. Lubbock states: "*Thus, the memorials of antiquity have been valued as monuments of ancient skill and perseverance, but it has not been supposed that they could be regarded as pages of ancient history; they have been recognized as interesting vignettes, not as historical pictures" (Lubbock, 1865, 1).* Importantly, Lubbock saw archaeology as a science that would form a bridge between history and geology (Lubbock, 1865, 2). Archaeology's duty, as defined by Lubbock, was to study the artificial structures and objects created by man in the past "*houses for the living, tombs for the dead, fortifications for defence, temples for worship, implements for use, ornaments for decoration*" (Lubbock, 1865, 2).

Lubbock defined the Neolithic by the manufacture and use of polished stone: *"The later or polished Stone age*; *a period characterized by beautiful weapons and instruments made of flint and other kinds of stone, in which, however, we find no trace of the knowledge of any metal, excepting gold, which seems to have been sometimes used for ornaments. This we may call the "Neolithic " period*" (Lubbock, 1865, 3). He does acknowledge however, that his presented division of prehistory of the prehistoric period into the Palaeolithic, Neolithic, Bronze Age and Iron Age was not universally accepted and that some archaeologists believed that stone and metals were contemporaneous before the time of the Romans (Lubbock, 1865, 4).

A partial donation of objects from Lubbock's collection was made by John Lubbock's son, John Birkbeck Lubbock, in 1916 (his father died in 1913). Charles Hercules Read oversaw the accession of John Lubbock's collection into the

British Museum. John's network of acquaintances and collectors was continued after his death. Read took over the position of the Keeper of the Department of British and Medieval Antiquities and Ethnography after the retirement of Franks and Reade also succeeded Lubbock as the President of the Society of Antiquaries in London in 1908. It is very likely that Lubbock and Read knew each other well and Read certainly saw the value of retaining the small portion of Lubbock's collection that was offered to the museum by Lubbock's son in 1916 (Owen, 2013, 356). The British Museum has 356 artefacts donated by Lubbock's son in 1916. Polished axes make a very small proportion (6%) of his collection at the British Museum – the highest proportion of artefacts are those made of Copper and Bronze, and in particular Bracelets. The majority of this collection comes from the Hallstatt excavations commissioned by John Evans and John Lubbock in the 1860s. However, the original donation was slightly larger as Read let other regional museums to choose artefacts from it for their collections (Owen, 2013, 134).

Lubbock describes the Neolithic axes in his collection as being the tools of the "*most importance"* (Lubbock, 1865, 88). In Prehistoric Times, polished axes are viewed as the implements at the top of the apex of stone tool technology. Lubbock was keenly interested in the innovations of the archaeological record and comparing these adaptations to the ethnographic record (McNabb, 2012, 118). Lubbock viewed them as the most important tool in the Neolithic period next to the utilitarian flake. He notes the proliferation of polished axes across Europe during the Neolithic period and refers to polished axes he held in his own collection – especially a large white flint specimen from Denmark (Lubbock, 1865, 69).

The rest of John Lubbock's collection currently resides in Bromley Museum. Lubbock recorded all of the majority of his collections in two notebooks (now known as the Avebury Catalogues) which now reside in the Bromley Museum and contain the details of 1243 items he acquired between 1863 and his death in 1913 (Owen, 1999, 284). Archaeological artefacts represented 58% of Lubbock's collection, with paintings, natural history specimens and ethnographic artefacts (32%) making up the remainder. The collection is global with artefacts from North and South America, Asia, Northern Africa and New Zealand, and Polynesian Islands. Over his lifetime, John Lubbock collected over 1,300 artefacts

which had reached them through 400 “transactions” (Owen, 2013, 50). There were several different ways that artefacts could reach Lubbock’s collection: many people donated artefacts as gifts, he collected them personally from archaeological sites and he bought them from traders and merchants. Owen (2013) has determined that Lubbock’s immediate circle of friends accounted for a “major” source of his collection with 65 known transactions (Owen, 2013, 50). For instance, Sir John Evans is recorded as giving Lubbock large amounts of prehistoric material eleven times between 1863-1881. He also gave Lubbock a collection of fragmentary polished Celts from Ireland in 1865 (Owen, 2013, 51). These figures do not include a separate collection – which I first discovered during data collection in New Zealand collections – A.W.Franks was collecting a separate collection of ethnographic polished stone tools for John Lubbock. Five axes remain in the collection and were acquired through negotiation with the Government of Victoria in 1891. Artefacts from this collection were collected from New Zealand, Australia and New Guinea.

There was a “watershed” in approaches to prehistoric material in the 1870s, which moved the focus away from providing evidence for the antiquity of man and proving the Darwinist agenda, and instead focusing upon providing evidence for the refinement of timelines and filling the gaps in typological classification sequences (Owen, 2008, 217). This was the period in which ethnographic evidence started to hold greater importance. Evans and Lubbock held the view that ethnographic specimens could be studied to provide parallels for prehistoric Europe, because they felt that these societies were just at a different stage in their development to Western Europe and North America. They believed in a single human species and that cultural diversity present was not due to genetic differences. The work of Tylor, Lyell and Darwin also used this approach (Owen, 2008, 216). During the same period, there were opposing views from the Anthropological Society and James Hunt, who believed in polygenesis, the theory that saw non – Western societies as being biologically inferior, a different species, who would not be able to develop. Although those who followed the Darwinist Agenda also used racist terms such as “savages” they did believe indigenous societies to be equal human beings (Owen, 2008, 217).

Museums operate what has been called a “selective tradition” which has been used as a conceptual way of designing the past and shaping the cultural present. The last

twenty years haves seen an increasing focus on how identities are formed within the museum environment. The formation of identities is especially pertinent to the aims of this thesis, as the identities of collectors are closely allied with the make-up of the collections (Trefanenko, 2006, 50). It was often an explicit aim of collectors to shape the morals and characters of the people they wished to educate with their collections, firstly with their own "private" selection of the public, those who they invited into their home and then secondly, with the donation of their collections to public bodies such as the British Museum, they made choices for future generations on what was both deemed valuable and what constituted acceptable evidence for the reconstruction of the past. John Lubbock was without question, one such moral educator, concerned with a legacy of education.

John Lubbock was a member of the highly secretive "X Club" which sought to create a new power base in London's scientific society based on the spreading of the Darwinist principles within British society as a whole. The X Club had been created by Thomas Huxley to strengthen relationships between the disciples of Darwinist theory (Owen, 2013, 43). Membership was strictly by invitation only and devised to make sure that the "Club" had access to all the major scientific, social and political establishments, including the Church of England, Parliament and the University of England (Owen, 2013, 44). The X Club were more than friends and acquaintances, they shared beliefs and values. They were all men, most shared Anglican beliefs but all rejected orthodox Christian and conservative beliefs instead opting for a liberal science based understanding of the world and wider universe (Barton, 1998, 416). The X Club sought out Lubbock for their membership because they believed he represented more than a collector of archaeological and ethnographic material as he had a more philosophical approach to his work than other contemporaries. His political connections became a crucial part of the group's ability to influence (Barton, 1998, 422).

The X Club held monthly meetings from June to October. This allowed regular communication between the members, who used these social opportunities to decide how best to approach their opposition to conservative and obstructionist views in intellectual society (Jensen, 1970, 63). The founding members of this club were George Busk (1807-1887) a naval surgeon and amateur scientist, Joseph Hooker (1817-1911) Assistant Director of the Royal Botanic Gardens at Kew, John Tyndall

(1820-1893) Professor of Natural Philosophy and Thomas Huxley (1825- 1895) Professor of Natural History. John Lubbock (1834-1916) was the youngest member of the society, and although he was well known for his archaeological work, his admission to this club was a consequence of his friendship with Charles Darwin. The Group met every year until 1892, when illness and retirement slowed the frequency of the meetings (Jensen, 1970, 65). The X Club was heavily involved in the matters of the Royal Society, including matters of governance and funding experiments and other societies and whether or not the Royal Society should be involved with colonial societies (Jensen, 1970, 66). The X Club members were all prolific publishers which helped disseminate their liberal agendas. George Busk alone published over 70 scientific articles. They were also behind the formation of the Journal *Nature*, which evolved from a previous failed venture by X Club members named *The Reader* (Jensen, 1970, 68). The passion behind the X Club's beliefs often brought them into conflict with politicians and theologians. They opposed Gladstone's government on several occasions, particularly on his Irish Home Rule policy and the treatment of Kew Gardens as a Royal Park and not a site of scientific interest, which led to a passionate defence by Lubbock in the Houses of Parliament (Jensen, 1970, 70). The X Club also meddled in the affairs of the British Museum, with Huxley strongly opposing Richard Owen's reorganisation of the natural history collection to a site in South Kensington as part of a new science museum (this later became the Natural History Museum). In perspective, South Kensington at the time was inaccessible by public transport and the site proposed was used for teacher training rather than science. The X Club saw it as civil service building, not as a site for scientific experiments (Barton, 1999, 431).

Despite his extensive network for sourcing donations and purchases and sharing research Evans was not a member of the exclusive "X Club" (Owen, 2013, 44). Between them, John Lubbock and John Evans managed to maintain and use what has been described as the "Lubbock-Evans Network" (Bowden, 1991, p41, Chapman 1989, MacGregor, 2008). This network included the founders of modern day archaeology, Augustus Lane Fox (Pitt Rivers) and William Boyd Dawkins and Augustus Wollaston Franks of the British Museum. This network did share aims with the "X Club" which were the professionalization of science and the study of prehistory and antiquities, combined with the transformation of London society to be compatible with a more liberal, Darwinist scientific agenda (Owen, 2013, 45). Other members of Lubbock's network of contacts can be seen from the preface of his work Prehistoric

Times – he is eager to provide legitimation of his work through association – with Prestwich (Geologist), fellow archaeologist John Evans, fellow Banker and collector Henry Christy, Keeper of British and Medieval Antiquities and Ethnography – Augustus Wollaston Franks and Professor Tyndall (Lubbock, 1865, X).

The formation of Lubbock's scientific and antiquarian network of friends and acquaintances was formed in the early 1860s. His collection was central to the creation and maintenance of these friendships. Lubbock's collection and interest in prehistory was not his primary profession and all his research and collecting activities, like his friend John Evans, had to be balanced with managing the family business (Owen, 2013, 31). His network of friends, orientated through his friendship with Darwin and the spreading of his ideas was almost fully formed by 1864 and his network now included such famous figures as Henry Christy and arctic explorer, Dr John Rae, who provided him with some of his first ethnographic specimens from Northern Canada. He also shared the same dealer of ethnographic artefacts in London as Evans and Franks, William Wareham, through whom, Lubbock acquired artefacts allegedly collected by Captain Cook (Owen, 2013, 40). Lubbock purchased archaeological and ethnographic material from William Wareham 29 times between 1865-1869, which was a period crucial to the revision of his work Prehistoric Times.

6.2.2: Sir John Evans

Sir John Evans, in combination with Joseph Prestwich, championed the establishment of the extended antiquity of mankind (Roberts and Barton, 2008, 95). One of Sir John Evans' greatest gifts to the development of the study of prehistoric archaeology in Britain was the publication of his work *Ancient Stone Implements, Weapons and Ornaments of Great Britain* in 1872. The book was a comprehensive review of all the contemporaneous knowledge of the Palaeolithic period in Britain and also recorded every known Palaeolithic artefact with a recorded find spot (Roberts and Barton, 2008, 95). However, although this work is primarily famous for its contribution to Palaeolithic studies the majority of the book is dedicated to stone artefacts from the Neolithic, (the Stone Age had been divided by John Lubbock in 1865). The book goes beyond the formation of a typology, Evans also considers the manufacturing process, drawing upon his own efforts at reconstructing flint implements and Evans also tries to discern the

meaning these artefacts may have had to their owners (Roberts and Barton, 2008, 96). Evans organised his collections in a very different manner to many of his contemporaries by adopting a typographic system with find spot numbers and this can be seen in the records detailing the Neolithic collections at the Ashmolean (Roberts and Barton, 2008, 108). Interestingly, despite his close friendship with A.W. Franks, Evans chose not to donate his collections to the British Museum after his death even though he approved of the public acquisition of prehistoric material (Roberts and Barton, 2008, 108).

Although Evans' own collected material is largely British, he also took inspiration in his classification from his Scandinavian counterparts (Worsaee, Montelius and Muller) and sought to have a global perspective on the use of stone tools and drew on ethnographic comparisons, referencing Lubbock's work throughout his own (Evans, 1872, 1). Evans considered the Neolithic the time when the landscape had reached "*its present configuration*", a time that antiquarians and scholars could relate to, as opposed to the unknown of the Palaeolithic (Evans, 1872, 12). Only five European polished axes remain at the British Museum, due to the fact that the vast majority of his collections resides in the Ashmolean Museum, Oxford. Evans was a systematic collector, before his interest in prehistoric materials began in the 1860s. He began by collecting geological specimens in 1850s, and also had a great deal of interest in ancient silver and gold British coins (an interest he shared with A.W.Franks) (Owen, 2008, 222).

There was a bit of "friendly competition" in collecting between Lubbock and Evans, but in the end, Lubbock could not compete with the vast amounts of material, both prehistoric and ethnographic and historic that Evans hoarded. Collectors during this period, were not only interested in gathering aesthetically pleasing specimens, or those with the greatest value, instead both Lubbock, Evans and Franks were concerned with the amount of data that could be gained from gathering together sets of artefacts, from which they could be used as part of the Darwinist cause, but also as part of a larger resource and data set. Lubbock, Franks and Evans had a very "open-access" approach to their collections, freely sharing data and artefacts, through letters and visits and lectures. Franks' management of the Christy Collection and the private collection of Pitt Rivers meant that the South of England possessed a huge

amount of data for the study of human antiquity and ethnography (Owen, 2008, 223).

Sir John Evans devoted a large portion of a chapter of *Ancient Stone Implements* to the discussion of the manufacture and use of grinding tools. Evans gathers evidence from many different sources for the reconstruction of the use and manufacture of the polished axe, including archaeological examples, ethnographic examples and experimental efforts of fellow antiquarians. Evans defines the characteristic tool of the Neolithic period as being the hatchet (both ground and polished) (Evans, 1872, 49).

"*With regard to the process of grinding or polishing flint and other stone implements not much need be said. I may, however, refer the reader to Wilde's Catalogue* of the Museum of the Royal Irish Academy for an account of the different processes. In all cases the grindstone on which they were polished was fixed and not rotatory, and in nearly all cases the striae running along the stone hatchets are longitudinal, thus proving that they were rubbed lengthways and not crossways on the grinding-bed*" (Evans, 1872, 39).

Evans gives a detailed description of the manufacturing process of polished axes and celts and includes the results of attempts by European archaeologists to recreate the manufacturing process, with water and sand to facilitate the grinding and processing of the stone (Evans, 1872, 40). He uses comparative ethnographic examples of jade artefacts from the New Zealand collections in the British Museum to argue for the use of sawing in the manufacture of polished axes (Evans, 1872, 41). Evans does not give any reasoning behind the variety of forms of polished axes found, and instead focuses on the origin myths of the polished axe as discussed above (Evans, 1872, 51).

Although, Evans classes polished axes as a Neolithic tool, he does not solely rely upon their inclusion for the dating of excavation data, but also looks for other indicators of age, including fauna. However, Evans records that Pitt Rivers was happy to use polished axes as the dividing line between the two chronological periods. He states "*General Pitt Rivers suggests a question, whether the implements found at Cissbury belong to the Neolithic or Palaeolithic age, and seems almost to regard the distinction between the implements of those two*

ages as founded merely on the minor point of whether they are chipped simply, or also polished" (Evans, 1872, 80).The Cissbury collection of artefacts was presented to the British Museum. Evans appears to have had access to the British Museum's collection as well as the Christy Collection in the preparation of his manuscript (Evans, 1872, 81). Evans' approach to polished axes is mainly typological, concentrating upon form and function, drawing upon a wide range of polished axes held in both public and private collections (Evans, 1872, 109). Evans also discusses the retrieval of polished axes from Bronze Age and Roman sites. He credits this to the permanency of the material from which they are made, but also the mystic qualities he believed had been ascribed to them (Evans, 1872, 145). Evans directly links the spread of polished axes to spread of civilisation to Britain: *"it seems probable that some of these implements may claim an almost fabulous antiquity, while in certain remote districts of Britain into which civilization made but a tardy approach, it is possible that their use may have lingered on to a time when in other parts of the country, owing to the superiority and abundance of metallic tools, these stone hatchets had long fallen into disuse."* (Evans, 1872, 150). Both the works of Evans and Lubbock show how polished axes were used as a reference point in a wider repertoire of artefacts to fix the position of the Neolithic in both time and space and link it to the newly "discovered" colonial lands of Oceania in an attempt to both subjugate and categorise the indigenous peoples who had been recently colonised by Britain, reinforcing Western supremacy.

6.3: Beyond the 19th Century:

Polished axes continued to form part of the British Museums collections past the prolific collectors of the mid 19th Century. Franks was succeeded as Keeper by his close friend and protégé Charles Hercules Read. Read had come to work for Franks at the age of seventeen. Franks had entrusted the ethnographic portion of the Christy Collection to Read to catalogue. He became an Assistant in the Department of British and Medieval Antiquities in 1880. Under the guidance of Franks, Read became a keen ethnographer and antiquarian scholar and became assistant keeper to Franks in 1895, just a few years before the death of Franks. Read published comprehensive catalogues and guides to the Museum's collections (Wilson, 1974, 316), although Read is best remembered for his

ethnographic work (as discussed in Chapter 5). From the 1860s onwards, studies of antiquities of ethnographic material d became more and more popular and in 1888 an extension was added to the Assyrian Basement to add a lecture room for the benefit of the public (Wilson, 1974, 303).

In 1964 the Wellcome Institute of Medicine donated 222 polished axes to the British Museum. In total the Wellcome Institute have donated 254 polished axes to the British Museum in all. Despite being donated in the late twentieth century the collection was a product of both the mid-19th and early 20th Century. Henry Wellcome (1853 – 1936) made his fortune in the pharmaceutical industries and with this fortune amassed one of the largest private collections in the world. Throughout his life, Wellcome worked closely with objects. During his work life he developed "compressed medicines" noted for their useful miniature nature but his private collections were so gigantic they were left unfinished during his lifetime (Larson, 2010, 83). Wellcome's collections are known internationally for the sheer variety of objects within them, from prehistoric artefacts like polished axes to microscopes and surgical instruments (Larson, 2010, 84). During the 1920s his rate of collection was so voracious that his expenditure on his collection outstripped that of the British Museum (Larson, 2010, 94). The Wellcome Medical Museum opened in 1913, although only a small proportion of his collection was ever displayed there. After Wellcome's death in 1936, this initial showcase museum had already closed and preparations for a second museum had already begun. His death, however, sparked a major dispersal of hundreds of thousands of artefacts to public museums and private collections. This sorting of the collection continued for 50 years, with the Science Museum in Kensington receiving 130,000 objects relating to the history of medicine in the 1970s (Larson, 2010, 94). In terms of patterns of collecting Wellcome was influenced considerably by the anthropologists of the 19th Century, who collected in the same comparative, comprehensive nature as natural history collections and was interested in tracing the "evolution" of cultural traditions, which is evidenced in his collections (Larson, 2010, 95). Duplicates of artefacts were common, in order to encompass light variances in pattern or form, which may have been important in a wider evolutionary scheme (Larson, 2010, 96). Despite the vast expanse of Wellcome's ethnographic collections, there are limited examples of them in the British

Museum collections, with the majority of polished axes donated to the British Museum from Wellcome being retrieved from archaeological contexts from Europe. By all accounts, Wellcome did not seek help or influence from the British Museum in the compilation of his collections, but they were in fact tightly controlled and overseen by himself, even if the physical purchases by artefacts were undertaken by staff members (Larson, 2010, 101). Wellcome was undoubtedly part of the wider collecting network and by no means did he collect in isolation, but the size of the collection limited initial attempts to share knowledge from it. Wellcome did employ a team of academics to catalogue the collection but criticisms of secrecy remains from the wider community (Larson, 2010, 99). Wellcome was part of the founding team of Burroughs, Wellcome and Company in 1880 (Larson, 2010, 84). The company made a variety of medicinal products, including the miniaturised "compressed medicines", as well as creams, soaps and vaccines and anti-toxins (Larson, 2010, 86). Wellcome's firm was at the forefront of technological innovation in this area and he was personally involved in the design and oversights of the company (Larson, 2010, 89). Larson (2011) links the miniaturisation process used by Wellcome in his industry (linked with feelings of control and the limits of human perception) to his habits in collection artefacts. Collection of objects can be viewed at attempts at creating a microcosm or miniaturisation of the wider world. In containing the world, it can be more easily studied and understood (Larson, 2010, 93). His fortune allowed him to buy objects that may have proved to be valuable to scientific study later, even if they were unimportant or mere curiosity at the time (Larson, 2010, 95).

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6.4: Vere Gordon Childe and the 20th Century

> *On the corner stone laid by Thomsen, archaeologists have been engaged in building up a series of ages, defined like geological eras, by assemblages of fossils. But their fossils are tools, those extra-corporeal organs by the improvement of which human societies have progressively enlarged their capacities for survival" (Childe, 1944, 4).*

Following in the footsteps of 19th century archaeologists, arguably one of the most influential archaeologists of the early 20th century, Vere Gordon Childe also used the polished axe as a diagnostic type fossil for the recognition of the Neolithic in archaeological record. Much like his forebears, Childe was engaged

in the identification and definition of archaeological eras through the study of material cultures and technology. Arguably his aim was the further resolution of archaeological time. He argued in his address at the Huxley Memorial Lecture in 1944, "*Nevertheless, historical time as opposed to mere succession does not enter into the archaeologist's conception*" (Childe, 1944, 4). Childe criticised in this address the unquestioning acceptance of the evolutionary nature of technology and the blanket use of type fossil artefacts across geographic regions, including polished axes. He states:

"*Suppose a tool or group of tools, traditionally assigned to one stage turn up at a point in historical (cosmic) time earlier than the first appearance of the type possible anywhere . Then the tool will automatically transferred to the previous stage, however long it may persist in succeeding stages. Thus the polished stone celt, appearing in Boreal Europe before the hint of plant cultivation or stock-breeding is perceptible in the archaeological record from that or any other region, must ipso facto surrender its privileged place in the Neolithic Stage if that be defined by "Food Production*" (Childe, 1944, 4).

Childe described polished axes as a "characteristic" of the Neolithic (Childe, 1948, 42). Although Childe obviously saw the polished axe as an artefact belonging to the Neolithic, he did not view it as the sole indicator of the presence of Neolithic economy. Pottery and megalithic architecture were the primary indicators of the Neolithic lifestyle that Childe applied to the archaeological record. The form of polished axes were used by Childe to further refine the age of the site in question and to further demarcate time within the Neolithic era (Childe, 1949, 132). Polished axes were seen as an accumulation of the knowledge of previous stone tool technologies as opposed to a social construct, Childe concentrated on the effect the addition of the polished axe to the technological repertoire of man would have had and what that meant for progression of farming economies. He wrote that with improved axes and woodworking tools, along with the introduction of the sawing and drilling of stone; "*Neolithic carpenters could make even rough mortise and tendon joint and construct quite complicated looms for weaving. There was no technical reason they could not put together a wooden plough or set up a mast in a sailing boat, but there is no positive evidence they ever did*" (Childe, 1948, 8). Childe saw the Neolithic axe as a technological response to the need to work timber, an

unavoidable consequence of living in the forested environments of Northern Europe in addition to being a marker of a hunter gatherer society progressing into a more sedentary lifestyle (Childe, 1957, 8). Based upon evidence from finds of axes in South Russia, and particularly evidence of axes from the settlement Star Carr, in Yorkshire found next to the wooden platforms, Childe believed that wood working for construction began in the Mesolithic (Childe, 1957, 9). Although the axes used in the Mesolithic at the sites listed by Childe were predominantly flaked, Childe thought that the Mesolithic invention of ground stone was highly probable and should not be discounted, along with the Mesolithic use of ceramic technology (Childe, 1957, 12). Childe took a diffusionist approach to the Neolithic – envisioning its spread across Europe from its first practitioners in the Near East. Edmonds (1995) has questioned whether or not the appearance of polished axes can be seen as a purely technical response to greater needs for timber. Whilst most are recovered from sites where they have been appear to have been formally deposited in contexts such as funerary areas, enclosures and rivers (Edmonds, 1995, 72).

Prehistory, according to Childe, was a progressive concept with increasing technological complexity being a necessity as time passed although this progress was shaped by individual cultures. Complexity was viewed and measured through material culture, whose meanings were fluid in time and space, but whose meanings could be retained through generations. Technological progress viewed in the archaeological record could be seen through the contributions of many different communities, some of whom contributed to the surviving record and progression more than others. The creation of new technologies is determined socially in response to both internal and external factors (Sherratt, 1990, 9). Childe was right to stress that this progress is not always smooth and warfare and conflict often played a part in cultural and technological development. Religion is conspicuously absent in the work of Childe, which is viewed as a marker of his own personal feelings on the subject (Sherratt, 1990, 10).

Childe wrote prehistory on a scale that has not been attempted by a single individual before or since. His vision of later prehistory was written very much as a history, with political actors and motivators between late Neolithic and Bronze Age society (Sherratt, 1990, 12). His narrative of prehistory was not set in stone,

however, and was open to constant revision throughout the course of his life. For example, his book "The Dawn of European Civilisation" went through six editions (Sherratt, 1990, 13). His literary output was enormous, with 20 books and around 240 articles. He wrote for both academic and popular audiences. His view of polished axes as one of a range of typological and economic markers of the Neolithic package is still one that is prevalent in the archaeological scholars of today as will be shown in the next section (Sherratt, 1989, 152).

6.5: Polished axe as a commodity

"*Trade is therefore understood in its widest sense: the reciprocal traffic, exchange, or movement of materials or goods through peaceful human agency*" (Renfrew, 1969, 152).

Relationships based upon exchanges and trade have been a consistently important part of the history of the study of polished axes from the early twentieth century onwards (e.g. Clarke, 1965, Darvill, 1989, Bradley, 2005, Brumm 2011) and has also been a focus of the ethnographic studies into the production of polished axes. Petrological identification of stone axes in Britain and Ireland has been used as the primary evidence for Neolithic exchange networks and polished axes form an important source of data. Petrological identification of exchange networks of polished axes have been carried out across Europe, especially in the French and Italian Alps (Clare, 2009, 1). Clare (2009) has suggested that exchange networks for polished axes in the Lake District may have evolved from earlier Mesolithic networks and that perishable goods may have been exchanged for more exotic polished axes. Perishable goods of course make the networks more difficult to trace. Nonetheless, these transactions may have laid the foundations of Neolithic trade within the sites and sources for procurement of materials and exchange also have been determined in the Mesolithic (Clare, 2009, 7).

The economic character of the Neolithic has always been an area of keen debate in archaeology. One of the main ways in which the Neolithic is made distinct from the Mesolithic is through the intensification in selection and use of resources (Edmonds, 1995, 69). There has been a switch from viewing the Neolithic as an economic package to a cultural system to be exported or

transferred across modern European boundaries (Thomas, 1988). The Neolithic has been viewed as a "lifestyle" which took the form of the "transformation of social relations of production" (Edmonds, 1995, 70).

The value of the polished axe is considered in two different ways in archaeology. These are: the polished axe as a social commodity and the value of the polished axe as an economic commodity. These two systems of value often become intermeshed and intertwined with reasoning drawn from ethnographic comparison. The biography of the polished axes held in the British Museum's collection, regardless of their original time or geographic location of origin cannot be extracted from the Western capitalist system in which they are now enmeshed with regards to the ways they are now studied. Their inclusion in the displays of public museums has cemented the monetary value of polished axes that was previously driven by private display and collection. The polished axe has been commoditised in differing ways by different groups, including collectors, their original owners, museum professionals and scholars and finally the public who see them on display, during their life histories. The western archaeological preoccupation with the reduction of the artefact to a comparable unit of wealth which may be "objectively" studied has often disconnected the polished axe from their original context and meaning (Shanks and Tilley, 1992, 48).

Even when considered by the newest and most progressive forms of social archaeology, polished axes are primarily viewed as a form of commodity, albeit one with the draping's of socially dictated meaning. It is these cloaks of social meaning imposed upon the past which have become problematic. "Value" in archaeology often primarily refers to the relationship the object has with another connected party. This connection can be physical or perceived. If we were to consider these artefacts using a rational method, values and facts should be kept separated - yet in many cases in the biographies of the polished axes in the British Museum's collection, values and facts have become intertwined in determining the worth of the artefacts to both the public and curators (Shanks and Tilley, 1992, 47). Much of the archaeological consideration of polished axes during the 20th Century was through the lens of economic archaeology. Economic archaeology was defined by Shanks and Tilley (1991) as "*the historical primacy of technologically rational behaviour*" (Shanks and Tilley,

1992, 50). This can be clearly demonstrated through the application of game and decision theories in attempting to bridge the divide between the capitalist present and the prehistoric economic past. Modern ethnography and in particular hunter-gatherer economies are often used as inspiration and comparison in these studies (Shanks and Tilley, 1992, 50).

The focus upon economic systems in prehistoric archaeology began in earnest in the 1930s. It was believed that cultural contact and trade could be viewed in the archaeological record by documenting similarities in form between regions and "*direct evidence from recognisably traded materials*." Right from the outset, polished axes were to have been included in this category due to their recognisable petrographic qualities (Renfrew, 1993, 6). Polished axes have been used by archaeologists in varying models of prehistoric economies. One commonality, however, is that ethnographic analogy is often used as the basis for modelling the trade of axes. The difficulties and problems in applying ethnographic models to prehistory (both economic and social) are discussed fully in Chapter 7. This section is heavily biased towards the European trade in polished axes due to the fact this is the area in which the greatest amount of petrographic work has historically been carried out.

Polished axes, particularly jade or jadeite axes, alongside obsidian flaked tools have been the most investigated to try and demonstrate the scale and workings of the trading networks in the Neolithic (see Campbell Smith, 1965) (Renfrew, 1969, 154). This section is heavily biased towards the European trade in polished axes due to the fact that this is where the highest concentration on petrographic research has been carried out. There has been a switch from viewing the Neolithic as an economic package to a cultural system to be exported or transferred (Thomas, 1988). The Neolithic has been viewed as a "lifestyle" which took the form of the "*transformation of social relations of production*". The language of economical sciences are often applied to prehistoric archaeology in Europe a way not applied to later periods, due to the lack of writing and the void of social comprehension, compared to other civilisations (Edmonds, 1993, 70).

With regards to the study of the potential prehistoric trade in polished axes the most important step forward was the beginning of the Implement Petrology Committee, which will be henceforth known as the IPG (originally a committee

of the South Western Group of Museums and Art Galleries) (Keiler et al 1941, Stone and Wallis 1947).The first forty years of the 20th century of Neolithic stone axe studies in Britain were dedicated to the detailed mapping of geographic positioning and morphological description of axes and the IPG led the way. This was part of a descriptive approach to objects that had become deeply embedded in European studies (Bradley and Edmonds, 1993, 4). Petrological analysis of polished axes began in South West England with the work of H.H Thomas in 1929 (Darvill, 1989, 27). His work was followed by the work of Keiller, Piggot and Wallis (1941), who were charged by the South Western Group of Museums with the petrological identification of polished axes. Due to the highly collectable nature of polished axes, this project was only possible with the help and consent of private collectors. Pigott, Keiller and Wallis (1950) note that this research was timely because it was only then that the majority of private collectors were willing to share their collections for invasive research, which involved cutting away sections of the artefacts for analysis (Keiller et al, 1941, 50). Their initial analyses were primarily concerned with charting trade routes in the Neolithic and Bronze Age (Cummings, 1974, 201). Two hundred implements were considered in this study and nine different source groups were identified (Keiller et al, 1941, 64). This early study set the tone for future studies, concentrating on finding clusters or epicentres of geological significance, or factories of axes which could then be used to piece together the rest of the trade "route".

Grahame Clark (1965) provides a theoretical overview of the approaches in Western Archaeology towards the study of polished stone axes in the middle of the twentieth century. Clark considered polished axes in a global context, using archaeological material from north Western Europe and ethnographic evidence from Australia, New Zealand, Melanesia and New Zealand (Clark, 1965, 1). In taking a global overview of the study of polished axes Clark seeks to understand the factors that underlay the distribution stone axes, seeking clues for the pattern of distribution in the archaeological record through the use of ethnographic studies to provide clues towards economic systems of the past. However, he is mindful not to use them as sources of direct comparison, which would be inappropriate (Clark, 1965, 28). This article is commonly cited by those studying the history of the polished axe as it shows the progression and

sometimes stasis in the interpretation of polished axes and the wider Neolithic in the mid twentieth century and in the present day.

Local and regional approaches to polished axes were much more common during the mid-20th century as opposed to Clark's global approach outlined above. These regional approaches are particularly evident in Britain. Cummings (1974) criticised the initial attempts at petrology of stone axes for simply charting the distribution of the axes in relation to their factories and not explaining enough about the nature of trade in the Neolithic (Cummings, 1974, 201). Cummings (1974) created his own distribution maps using the national grid as a frame of reference. Flint and chert axes were completely excluded from this report, as not enough thin sectioning had been carried out. The proportion and significance of flint and chert polished axes was not assessed by Cummings, meaning that this distribution map is not indicative of the full scale of the axe trade (Cummings, 1974, 201). He concluded that successful trading of polished axes, especially those classified in Group 1 (Cornwall) relied on the maintenance of markets in distant parts of the British Isles. The exceptions to this rule were groups XVI, XVIII and XX whose distribution was only localised (Cummings, 1974, 204). His findings were meant to be a basis for further research and Cummings continued to be a major researcher in the field of implement petrology, through his work in the Implement Petrology Group, which was founded by the Council for British Archaeology in 1952 (Darvill, 1989, 27).

There have been problems identified about the reliance upon conventional distribution maps and the sources as identified by the Implement Petrology Committee. The patterns which are evident in distribution maps may not actually make sense as we assume they do as archaeologists do not understand the pressures behind their formation. These distribution maps also assume the number of identified sources to be correct, and sources often go unquestioned which also leads to the assumption of organised labour and factories to produce the axes (Edmonds, 1992, 71). The distribution of axes currently seen in the British record may have occurred over many, many generations (Edmonds, 1992, 71).

Darvill (1989) whilst acknowledging the immense contribution of the IPG, sought to fill the gap left by the IPG, through their exclusion of flint in distributional

studies. This bias towards non flint axes in the data had been caused by the difficulties in the petrographic and geochemical analysis of flint, which made flint artefacts difficult to trace back to individual sources (Darvill, 1989, 28). In some areas of Britain the number of flint axe heads recovered outweighs stone axe heads significantly for instance in Gloucestershire, flint axe heads make up 75% of the axe heads recovered (Darvill, 1989, 28). By including flint axe heads in the distribution patterns in England, Darvill identified three types of distribution in relation to source material: regional, local and waterborne distributions (Darvill, 1989, 32). Small and medium size axes appear to have been transported the farthest, though practical considerations of their weight must be taken into account when exploring the reasoning behind this. He concluded that more than one mechanism underlay the trade in axe heads during the Neolithic, with gift exchange and personal visits being a likely catalyst for the movement of axe heads, although seasonal migrations were also possible (Darvill, 1989, 41). Darvill (1989) acknowledges one of the main difficulties in the field of implement petrology and stone axe studies, especially the production of distribution maps and potential trade routes, is the fact that stone axes (especially polished artefacts) are still viewed as highly collectable artefacts and gaining access to private collections can be difficult and time consuming. This means that distribution studies are often limited to museum collections, who are themselves limited by the legacies and choices of collectors from the mid-19th Century (Darvill, 1989, 30).

The work of the Implement Petrology Group carried on throughout the 1980s, culminating in the second monograph of Stone Axe Studies. Clough and Cummins (1998) carried out a review of 7,600 stone axes which had been thin sectioned. These artefacts range from the Mesolithic to the Early Bronze Age. There is a definite bias in the data collected against flint artefacts, though this is acknowledged by the authors and explained due to problems with the petrological identification of flint (Clough, 1988, 1). 26 Petrological Sources with identified additional sub groupings taking the total to 34) and it was concluded that these groups represented deliberately and consistently exploited rock sources, with a large amount of the axes recovered being made from glacial erratics and a small number from pebbles. There is still a heavy reliance on the production of distribution maps, and with the inclusion of artefacts without

provenance and flint artefacts, the accuracy of the data is questionable (Clough, 1988, 6).

It should be noted that there is a great deal of differentiation in the morphology of stone axes found within the British Isles, which cannot be seen through the use of distribution maps alone. The relationship between morphology, distribution and trade has been explored by Chappell (1987) and Hodder and Lane (1982). Together they put forward four different models of stone axe exchange based upon the morphological variation present in the axes themselves. The first model assumed that larger axes had a greater non-utilitarian value than shorter axes and that larger axes travelled greater distances. The second model was the opposite. The third assumed that there would be no change in the size of axes no matter how far away from the original source they were found (Hodder and Lane, 1982, 217). The fourth model assumes that axes decrease in size away from the source of raw material due to a scarceness of the raw material and had to be re-used more frequently (Hodder and Lane, 1982, 218). The sample of axes measured and considered was restricted to five petrological groups due to the limited time available for the study (Hodder and Lane, 219). They concluded that the second and fourth hypothesis best matched the pattern of the data. They found that larger axes are less commonly used near to sources and the greater distance from the raw material source, the smaller the axes became due to reuse. The sizes of axes found in burial or other "ritual" depositional contexts would be dictated by distance and reuse. There is a strong focus in this work of being able to find evidence of ritualistic use of axes, a trend which has dominated stone axe research from the 1990's onwards (Hodder and Lane, 1982, 232).

The grouping of axes and identification of factories created by the Implement Petrology Group provided an opportunity for museum curators to interpret the story of stone axes in an accessible way. However, an over-concentration in petrological analysis in the study of stone axes led other aspects of the biographies of stone axes to be left behind. From the final decade of the 20th Century onwards there was a greater consideration of the biographies of individual artefacts, searching for context and technology of manufacture, consideration of function and style and the possible differing value of stone axes to Neolithic communities (Pitts, 1996, 311). Arguably one of the most

comprehensive reviews of the framework for the study of implement petrology and Neolithic stone axes in Britain was carried out by Mike Pitts (1996). Pitts was concerned that through the over-concentration on the petrological source groups that some of the original context and information surrounding individual artefacts had been lost and that style, manufacturing techniques and function need a greater consideration when discussing localised sources of raw material (Pitts, 1996, 311). Instead of conventional petrological groups, Pitts divided the 2,000 artefacts in his study into six different classes of rock, including flint, which has not been a focus of petrological analysis and consequently flint axes were left out of the picture. Pitts concentrates on how properties of the stone affect manufacture as well as charting variation in morphological features in axes across Britain (Pitts, 1996, 312). Pitts found that a great deal of morphological variation in stone axes can be accounted for in the properties of raw material (Pitts, 1996, 338). Pitts also concluded that the context of axes is often overlooked and that fragmentary axes can hold a great deal more information that they are usually credited with. Pitts' studies also reveal that the caching of axes was much more common than previous literature had suggested in Britain (Pitts, 1996, 339). The large sample of axes used, as well as the consideration of partial or fragmentary axes, as well as the comprehensive literature review makes this study an important milestone in the study of polished axes.

The polished axe trade in the Neolithic (especially the Middle Neolithic) took place in a period of social intensification and monumental building. The polished axe trade in mainland Europe is closely associated with the building of enclosures (Petrequin et al, 1992, 45). As well as ritual uses, the manufacture of polished axes and the associated trade may have been governed by political and social controls which derived from the pressures of the kind of settlement that the manufacturers lived in (Petrequin et al, 1992, 45). The part played by the polished axe in network building is not limited to the European Neolithic. Watkins (2008) and (2010) has argued that polished axes were part of symbolic network building in the transition to agriculture and that these networks were fundamental in the maintenance of sedentary societies in the early Neolithic in South West Asia. In order to maintain a complex society, artefacts needed to become symbols and shared amongst networks at a community, regional and

supra-regional level (Watkins, 2010, 631). These artefacts became symbolic of abstract concepts of relationships and social memory (Watkins, 2010, 631).

The status of polished axes as a hallmark of the Neolithic can be seen through study of their use and interpretation in writing the archaeology of the Levant and South West Asia. In the Levant, flint adzes were utilised by people for 6,000 years. Ran Barkai (2011) who has studied woodworking tools in the Levant intensively (2448 bifacial tools from 24 sites, in one study alone) describes them as providing "*clear evidence of a way of life, based on intensive exploitation of the environment"* (Barkai, 2011, 39). The polished axe and adze was part of a broader lithic repertoire in the Levant including the use of stone chisels during the Neolithic and Chalcolithic (circa 9,000 – 3,500 cal BC). The reappearance of knapped bifaces and polished axes with the appearance of the Natufian lithic toolkit was extremely significant as it represented a marked departure from preferred Levallois manufacturing methods in the Upper and Epi-Palaeolithic toolkits. The polished axes are seen as markers of social change in the transition from mobile hunter gathering to a more sedentary lifestyle in the PPNA, in which the first "villages" have been found (Barkai, 2011, 40). Bifacial tools were used in the PPNA in the Levant to manipulate the local environment and to make effective use of raw materials (Yerkes et al, 2003, 1064). It should be noted that polished axes may have held a different function to other bifacial tools in the PPNA. Through microwear analysis of PPNA bifacial tools it has been determined that flaked, flint tranchet axes were used to work wood, bone, hide, meat and plant material, whereas ground stone polished basalt axes that were studied through the same method showed no evidence of use (Yerkes et al, 2003, 1063).

During the PPNA, no flint axes were polished and they have been non-flint or basalt polished axes are typically recovered unbroken, whereas most flaked flint tools are found broken. There were also no stone tools made using a transverse flaking technique. The polished stone axes in the PPNA are thought to have played a symbolic role that went beyond their functional uses and have been found in ritual contexts, for instance at Glial and Hatula, basalt axes were discovered cached with a human figurine and in Syria at the site of Jerf El Ahmar, a basalt polished axe was found in a burnt house in combination with three auroch skulls (Barkai, 2011, 46). The polished axe became an even more

significant artefact in the PPNB. In a significant shift from the PPNA, the dominant bifacial tool in this period became the polished flint axe. Although, the polished axe replaces the flint tranchet axe in the PPNB, wood working continues consistently throughout the Neolithic (Yerkes et al, 2003, 1064). The PPNB was a period of social change with an increasing dependence upon domesticated plants and animals with increased modification of the landscape which required a stronger, more durable axe. Polishing made flint stronger than tranchet axes (Barkai, 2011, 50). Their large size and transformed appearance through polishing has led Barkai (2011) to believe that polished axes had a ritualistic value (Barkai, 2011, 51).

6.6: Neolithic society and the polished axe

This section is split into three reflecting the divisions of how polished axes have been used to reconstruct Neolithic society.

6.6.1: Polished axes as a prestige commodity

Polished axes have been connected with almost all areas of prehistoric life in the Neolithic – travel, trade, rites of passage, monumentality, personhood and symbolic communication. There is even evidence for the deposition of polished axes in funerary contexts, including at Hambledon Hill where they have been associated with corpse processing and defleshing, though it must be stressed that this is a rare example (Edmonds, 1993, 80). In the last twenty years the focus has shifted in archaeology from investigating the pure mechanics of prehistoric activity and has instead been drawn to the social and symbolic reasoning behind trade and exchange (Renfrew, 1993, 5).Focus upon perceived social value of objects and the complexities of gift giving with reference to modern ethnographic research have only comparatively recently gained archaeological attention (Renfrew, 1993, 5).

In certain archaeological circles, the polished axe has become transformed into a prestige commodity of the European Neolithic. This is due to a translation of the ethnographic record of the "*big man*" phenomenon as witnessed in Papua New Guinea. The social and political implications of prestige objects can be wide ranging and highly dependent on the structure of society. Prestige objects are not just an indicator of status, but can be a marker of taste, a level of violence, a

time period, or ancestral lineage or as a souvenir of a time, place and event (Thomas, 1991, 29). There is often an overlap in the way in which polished axes are studied as an economic commodity and the ways in which they are seen as a social construct or means of communication. This is mainly due to the application of ethnographic research, particularly those conducted in the regions of Polynesia and Melanesia. The bridge between the two disciplines of social and economic archaeology is often the perceived or socially mediated value of the artefacts in question. Polished axes have been investigated with regards to their value as a prestige artefact. Ascertaining the potential value of polished axes in each social context is extremely difficult and should be approached with caution. For starters, the definition of an *exchange value* (as defined by Marx and Ricardo) can only be applied in a market economy where all products are considered saleable commodities (Risch, 2011, 101). Social value of a commodity is decided by the meaning of an product, according to Marx (1867, 49) and is obviously is determined by different variables than the exchange value of the product in question, including personal desires which may override economic constraints which usually apply to the market in question (Risch, 2011, 101).

Risch (2011) states an important point to remember: "*Concepts such as prestige, status and agency or the ephemeral moments of exchange are much better suited for an in material view of individual relations and thus a projection of our own values on the past. Exchange and consumption are often treated as social entities in their own right, independent of the physical conditions – matter and energy – which make them possible and the social needs they serve*" (Risch, 2011, 101).

Risch (2011) studied the production and exchange of Western Mediterranean polished axes. His research has found that aside from the Alpine jadeite axes in the 5th millennium, there was no significant attempt to use polished axe production as a form of social control in the Western Mediterranean, nor was there a high level of specialisation in production (Risch, 2011, 112). He also has come to the conclusion that if there was long distance circulation of these objects (greater than 200km) then it was more likely to be due to scarcity of raw material or utility value of the object in question, than perceived monetary or social value (Risch, 2011, 113). The circulation of "high value" polished axes, as a form of social and political control in his opinion would have meant the shared

cultural beliefs over large distances. The sharing of these beliefs whatever they may have been would have been crucial in the creation of wealth through the exchange of prestige objects. However, the level of networking needed to maintain this communication system would have had to have been significant (Risch, 2011, 114). Risch does believe that polished axes were part of the maintenance of exchange systems as a source of political differentiation, rather than as a form of social control or religious item. This model has only so far been applied to the Mediterranean, however, and would be difficult to apply on a larger area due to the variety of beliefs or political systems that may have been present (Risch, 2011, 114).

Petrequin, Jeudy and Jeunesse (1993) believe that the polished axe "forms the basis of Neolithic social reproduction" and the intensification of trade of polished axes during Middle Neolithic was closely allied with the concentration of population and increased use of enclosures and greater projects of collective labour during that period (Petrequin et al, 1993, 45). Petrequin et al (1993) state confidently that polished axes were "widely valued prestige goods" that had established networks for the transferral of artefacts between groups. Not only representing prestige, the authors go further in determining that polished axes were used in the social and political organisation of the Neolithic (Petrequin et al, 1993, 59). The polished axe trade in the Neolithic (especially the Middle Neolithic) takes place in a period of social intensification and monumental building (Petrequin et al, 1992, 45). As well as ritual uses and consumption, the manufacture of polished axes and the associated trade may have been governed by political and social controls which derived from the pressures of the kind of settlement that the manufacturers lived in. Petrequin et al (1992) carried out a localised reconstruction of polished axe manufacture, trade and consumption in the Southern Vosages, France (Petrequin et al, 1992, 45).

Through reconstructing the production systems of the polished black stone axes two different phases of production were determined, which showed that cultural choices determined a significant part of the manufacturing process. The first phase of production was dominated by manufacturing techniques that only required a generalist level of ability such as pecking the rock with a hammer stone. The second phase employed much more specialised techniques such as

sawing of the rock to produce long axes for long distance exchange, sometimes up to 80km away from outcrops of raw material (Petrequin et al, 1992, 49).

It has been stated that "*the exchange of jadeite axes is one of the best known instances of long distance circulation of artefacts in the Neolithic period*" (Bouard, 1993, 61). Piggot and Powell (1951) recognised the importance of the presence of jadeite axes in British Neolithic sites as evidence of the long distance travel of objects (Bouard, 1993, 62).The wide distribution of jadeite axes across Europe has been used to insinuate a "complex system" of trade and exchange during the Neolithic. Investigation of the trade in polished axes across Britain and Europe has more often than not been used in combination with petrographic analysis. In the last ten years, significant progress has been made in addressing the gaps in the exchange structure of polished axes identified by Bouard (1993). Projet Jade (Petrequin et al, 2013) has led the way in this respect. The project bridged the divide between archaeologically viewing the polished axe as an economic commodity and viewing it as a social construct of power and control.

6.6.2: Polished axe as a symbol of the Neolithic psyche

In the last two decades there has increasingly been links made between the study of the Neolithic body and person, and the relationship between bodies and the tools they used. Polished axes, as one of the most durable Neolithic tools to remain, have taken a leading role in the exploration of this theme. It is not disputed that as an artefact, polished axes would have played a recurring role in the lives of Neolithic people, simply because of their functional role. Like a toothbrush is to us now, the polished axes would have been an everyday sight for a Neolithic person in Europe. This commonality of view has led archaeologists such as Julian Thomas (1996) to stress the view that the stone axe should be interpreted as a symbol of Neolithic unity, created in a range of similar material forms and circulated across communities.

Thomas (1996) also stresses the fact that although axes may have become a sort of "common currency" amongst disparate communities, in many cases they do not appear to have possessed an unequivocal meaning. For instance, within the LBK culture they are found within male and female burials. At Sonderhausen,

Germany, they are only found in male graves, but in Nitra, Slovakia, polished axes are only found buried with female individuals. This could imply that the way that the axe may have been used to represent the social identity or representation of the dead individual could have been varied (Thomas, 1996, 112). Despite their varied funerary contexts polished axes remain largely seen by archaeologists today as masculine artefacts.

Archaeologists have sought to ascribe and recreate the meaning of the choice of raw material, colour and texture of polished axes, often drawing upon parallels in use of monumental architecture to support theories of intentionality in use of certain colours and materials (Darvill, 2011, 140). The significance of the aesthetic and sensory qualities of flint should not be ignored when considering the importance of polished axes in Neolithic societies. Flint is a raw material which would have been experienced through sight, sound and touch particularly during the manufacturing process of polished axes (Van Gijn, 2008, 194). The colour and translucency of the flint should also be considered (Cooney, 2002 and MacGregor 2002 – examples of the importance of colour in flint), as should the texture because whether the flint has been knapped, ground or polished is very distinctive. These aesthetic qualities of flint can signal the origin of the material and can reference places far removed. Flint makes distinctive sounds when knapped and a kind of "ringing" sound is often described. Flint is also inextricably linked to man's capacity to create fire, a necessity of domestic and social life. Flint's most striking quality is the permanency of the material, which may have helped to create links with the past (Van Gijn, 2008, 195).

The aesthetic importance of raw material choice for the manufacture of polished axes can also be viewed in the archaeological record. It is believed that the popularity of use of pale grey/green axes in the Langdale axes may have been echoing the use of alpine jadeite axes (Cooney and Mandal, 1998 in Darvill, 2011, 141). South West Wales was an area of intense stone exploitation during the Neolithic. Bluestone was exploited for both the production of tools and the construction of monuments. Obviously, the most famous use of this stone was for the building of Stonehenge. The association with Stonehenge has led to the investigation of how stone was viewed by Neolithic persons (Darvill, 2011, 141). Parker Pearson and Ramilisonina (1998) have asserted that the stones at Stonehenge represent ancestors, using ethnographic parallels from Madagascar.

Ethnographic parallels were used by Parker Pearson and Ramilisonina (1998) as an attempt to diverge from romantic notions of the uses of the monuments on Salisbury plain which are deeply rooted in British society (Parker Pearson and Ramilisonina, 1998, 308). Formal analogies have been drawn between Stonehenge and Madagascan society because of the presence of standing stones formally erected called “vatolahy” (which translates as ‘man stones’). These stones are recognised as representing ancestors in the local community (Parker Pearson and Ramilisonina, 1998, 309).Although Parker Pearson and Ramilisonina (1998) do acknowledge the difficulties of using analogies and the fact that the two societies cannot be compared due to the huge disparity in both age and location. Despite this admission, analogy is still seen as a legitimate source of information to inform the Neolithic of Britain (Parker Pearson and Ramilisonina, 1998, 309).

The study of jade polished axes in particular have led to the view of polished axes as being sacred objects with individual histories and being connected to myths and legends. It has been suggested that Alpine polished axeheads had a meaning far beyond their uses as cutting and wood clearing tools that was socially constructed (Petriquin et al, 2008, 261). Unlike other types of polished axeheads, alpine axeheads have not been discovered in settlement contexts and funerary contexts, apart from a few examples in Italy, Southern France and Catalunya, near to where they are produced. Alpine axeheads have been found across continental Europe, Britain and the Isle of Man (Petriquin et al, 2008, 262). The majority of Alpine axe heads have been discovered in small numbers or singly. Many polished axeheads have been deliberately deposited or “planted” in the ground in conspicuous positions, like at the mouth of a cave, or in marshy areas and this deliberate deposition and caching is not restricted to jadeite axeheads (Petriquin et al, 2008, 261). Ethnographic research has considerably influenced the view of Neolithic jadeite stone axes in Europe. New Guinean communities have provided an extraordinary amount of information about the manufacture of stone axes, but these are not isolated communities and has had contact with the rest of the world for many years (Petrequin and Petrequin, 2011, 336). Ethnographic research has shown us how the axe can exist simultaneously in two different worlds, that it is almost a living entity with its own history (Petrequin and Petrequin, 2011, 339).

6.6.3: Depositional processes and the symbolic use of polished axes in the Neolithic.

How polished axes have been deposited or disposed of is often used as a major indicator of their role and place within Neolithic society as a symbolic commodity. There has been a focus upon the depositional contexts of polished axes in the European Neolithic, especially Scandinavian axes and those found in the Netherlands. Polished axes are frequently discovered in hoarded caches. In Denmark, there are 171 hoards of polished axes that have been recorded containing over 500 axes and in Scania, the southernmost province of Sweden, a further 122 hoards containing 316 axes are known to exist (Larsson, 2011, 208).

Lars Larsson (2011) has led the investigation of the treatment of polished axes with fire and the potential transformative statement that this may make. Axes destroyed by fire have been found at the entrances to megalithic tombs in the Funnel Beaker culture. At the site of Kverrestad, Scania large pits (the longest being 4m in length) were found containing the burnt fragments of over a hundred axes alongside burnt human remains. The exact reasoning behind the burning of axes remains unclear (Larsson, 2011, 210).

Larsson (2011) applies "*It is reasonable to assume that Neolithic societies gave at least some of elements of their material culture characteristics similar or corresponding to people. Axes were integrated in everyday life, involved in various tasks and with particular people; they also featured in important ceremonial cycles. These practical, categoric and biographical associations could be implicated in the treatment accorded to blades at all stages in their life cycles*" (Larsson, 2011, 212).

In Scandinavia there are significant differences in the way that polished and non – polished axes are deposited. Unpolished and polished axes are frequently found together in the same hoard, but unpolished axes are not generally found in funerary contexts. Only one unpolished axe has been recovered out of 161 graves known from the Middle Neolithic of Northern Jutland. The reasoning behind the separation of artefact types is unclear. Larsson feels that there may have been differences in the biographical histories and use of unpolished blades (Larsson, 2011, 208).

The polished axe has been used to explore the relationship between the body, the axe, the landscape, cosmology and death in the Neolithic. Polished axes and debitage from polished axe manufacture has been recovered from a palisade site in Jaravallen, Scania. Larsson (2011) believes that there is a connection between the manufacture of axes, the construction of ritual structures and communal events. The construction of timber monuments may also have been synonymous with the "birth" of axes" (Larsson, 2011, 209). Larsson (2011) states:

"*This might give a special perspective on the biography of axes. The relationship between the softer wood and the harder stone has been presumed to encapsulate an important dualism between birth and death when the human body grows harder with time and is transformed into stone after death*" (Parker Pearson and Ramilisonia, 1998 in Larsson, 2011, 209).

Polished flint axes represented one of the most commonly recovered types of artefact from the Neolithic found in Scandinavia. Often retrieved from wetland contexts, they are also strongly associated with enclosures and outside passages in megalithic tombs (Larsson, 2011, 204). Some polished axes were deliberately broken upon deposition. Wetland deposition of both fragmentary and whole polished axes in the Scandinavian and Dutch Neolithic was often accompanied by the deposition of human remains (Larsson, 2011, 209). Larsson (2011) connects the use of polished axes in the Neolithic to theories of social practice and agency of material culture. He expresses the use of polished axes may be a form of Neolithic ideology and expression (Larrson, 2011, 204).

Further evidence for the ritual use and deposition of polished axes has been recorded in the Netherlands. These ritual depositions specifically date to the Middle Neolithic and are associated with the Funnelbeaker Culture (TRB) (Wentink, 2008, 151).Wentink (2008) believes that these deposited axes played a central position in the cosmologies of Neolithic communities, and that these axes deposited in wetlands had a fundamentally different biography to those deposited in funerary settings (Wentink, 2008, 152). Intentional deposition began in the late Mesolithic in the Netherlands with collections of pottery buried with bone and antler and Neolithic depositions of axes have been excavated since the 19th Century, and were originally proposed to be cached trade goods, but these explanations were dismissed (Wentink and Van Gijn,

2008, 29). TRB axes have a very distinctive cross section which is rectangular and there are 20 known hoards containing multiple axes which have been retrieved from waterlogged places (Wentink and Van Gijn, 2008, 30). Over half of depositions are situated near a grave site, a trend which is mirrored in Denmark, where TRB axes are manufactured. Use wear analysis also revealed red ochre along the cutting edge of one of the axes which further strengthens the case for ritual use and also revealed that they had been packed in a soft material for transport (Wentink and Van Gijn, 2008, 40). Depositions occur over the entire Drenthe Plateau, but it is not known what part they played in ritual or cosmologies, though it is suggested that their deposition in water logged stream valleys may have helped connect communities (Wentink and Van Gijn, 2008, 41).

The uses polished axes as symbols in the Neolithic are often discussed as absolutes, a definite truth –for instance: "*Whatever the cultural setting, the period or place, axes have often frequently occupied a prominent place in the collective imagination… Axes were undoubtedly vital tools, but also potent symbols*" (Davis and Edmonds, 2011, 3). In my opinion it can often be counterproductive to try and replicate symbolic meaning from the past, especially when drawn from the holistic experience of the present, especially of those drawn from experimental or ethnographic archaeology. At the very least extreme caution should be applied and linguistic absolutes avoided. The entanglement of objects has become a major theme in the study of material culture; polished axes have been studied in this manner. The entanglement and agency of polished axes and the application of social anthropological theory are discussed in Chapter 8.

Bruck (1999) has argued that the concept of "ritual" use of artefacts should not be used uncritically because the notion of ritual behaviour varies widely between societies. There is a current trend in the study of ritual practices in archaeology accompanied by a similar trend of scepticism about archaeologists' ability to identify ritual practices (Bruck, 1999, 314). There has been a struggle in both archaeology and anthropology to define what constitutes ritual practices. Renfrew (1985) and Richards and Thomas (1984) have led the way in searching for a definition that archaeologists can use. Bruck (1999) argues that when contemporary functionalist explanations cannot explain artefacts in the archaeological record then "ritual" is used as a catch-all term (Bruck, 1999,

317).This separation of the secular/scientific and the seemingly non-function or symbolic in European archaeology is a divide which has its roots in the development of the split between the church and state in a post Enlightenment society (Bruck, 1999, 317).

Cassen et al (2011) sought to investigate the relationship between monumental architecture, art, symbolism and identities and political ideologies in the Neolithic. Polished axes and in particular, jadeite axes were a crucial part of the data set for their investigations. Cassen et al, (2011) whilst acknowledging the difficulties of the recreation of prehistoric identities from material remains, concentrate on the monuments of the Carnac Region of France. Cassen et al (2011) uses the work of Pual Riceour (2000) as the basis for the definition of identity, why it is hard to define, and why it is impossible to fossilise in the archaeological record in its entirety. Riceour (2000) gives three possible theories for the impermanent nature of identity – its fluctuating relationship with the passage of time, its collective formation in times of interpersonal violence, and the fact that collective identities are formed through relationships to other communities, which are important in the definition of both “ourselves” and “the other” (Cassen et al, 2000, 227). Cassen et al (2000) postulate that polished axes formed part of a network of “object signs” and where these object signs were displayed, images of power, identity and belonging were transmitted (Cassen et al, 2000, 228). Interestingly, they choose to categorise the axe as a weapon, rather than as a woodworking tool. In my opinion, the polished axe does not need to be categorised as a weapon as there is limited evidence to suggest its routine use as a weapon of war. Indeed the authors concede that the axeheads are only symbolically representative of weaponry used primarily for adornment (Cassen et al, 2000, 230).

The polished axe head is also a common component of megalithic art in Brittany, both in the walls of passage graves and engraved upon standing stones in the region. There also appears to be a link between engravings and the presence of “high status” grave goods in the form of jadeite axe heads (Cassen et al, 2000, 241). The authors disagree with the common interpretation of art containing axes as a representation of agriculture and the clearance of the forests for the construction of monuments which has been prevalent since the 19th Century

(Cassen et al, 2000, 241). They sought to move beyond an economic model for the use of the polished axe in the Neolithic and propose that it could have been an object sign bridging the divide between the hunter gatherer nomadic lifestyles of the Mesolithic and the settlement of the Neolithic – the authors state; "This could unite, in a single object, the ancient stunning weapon (i. e. the throwing stick or 'crosse') used by the hunter-gatherers and the new cutting weapon (i. e. the axe) which accompanied the new socio-economic model that was farming" (Cassen et al, 2000, 241).

Cassen (2005) continued his investigation of the potential symbolic influences of the polished axe upon Neolithic society. The language he uses to describe the polished axe is evocative and conjures the notion of the activity and connection to the self that the polished axe may have possessed. He states; "*It is not only a simple tool for cutting down virgin forests, but most of all a defence and attack weapon that acts as a percussion lance, the expression of self by means of force, creating the shock of one body confronted by another. It will split better if the impact is violent. Slivers make a vivid noise, the folgurance of knocks warms up the blade. The impetus and sharp axe is expressive and non-restrictive. Here is the intense power of action and the expression of a weapon/tool, brutal and resonant, thundering and tumultuous"* (Cassen, 2005, 202). Although beautifully and convincingly written, the symbolic portrayals of the meanings of the polished axe, which have been developed by European scholars in the last fifteen years, demotes the practical nature of the tool in the seeking of a transcendent quality which cannot be substantiated with any degree of certainty or transposed directly on the past without a great degree of caution.

6.7: In Summary

- The polished axe has been consistently used as an archaeological marker for the Neolithic over the last three hundred years, but has been used in different ways for different evidential needs.
- The Three Age system was not immediately adopted in the British Museum, with Franks preferring geographically based displays this helped retain the ethnographic and archaeological connections in the British Museum displays between polished axes.

- Sir John Lubbock and Sir John Evans provide some of the most compelling literary evidence for the archaeological views and uses of the polished axe in the mid-19th Century. Their publications inspired the generation of archaeologists of the early 20th Century, including Vere Gordon Childe. Although their inclusions in the British Museum collections are limited, their networking and literary references in their publications regarding British Museum collections have had a far longer lasting impact.
- The connections between ethnographic and archaeological polished axes have remained strong in the imaginations of Western archaeological academia, who have frequently sought analogical comparisons, especially with Melanesian societies.
- The next Chapter concentrates on the problematic nature of these analogies and the rise in popularity in the use of ethnoarchaeology in the study of the polished axe.

Chapter 7: Interplay of archaeology and ethnography: the "Pacification" of the European Neolithic and the problems with the use of analogy

"*Prehistorians, by the very nature of their task, must inevitably talk in metaphors. With no names or personal motivations around which to construct an account of past events, narrative accounts of prehistory can only describe the past by analogy. Equally inevitably, therefore, the metaphors of one generation seem appropriate to the next one: prehistory is notable for the way in which it is constantly rewritten in the light of current experience*" (Sherratt, 1990, 3).

This chapter is focused towards the comparative use of Melanesian ethnographic artefacts both inside and outside the British Museum. Melanesian artefacts and society has commonly been drawn upon by archaeologists for comparison with prehistoric Europe, arguably more than any other geographic area outside of Africa. Ethnography has been described as being a "*traditional source*" of extra information for European archaeologists, filling in gaps of societal reconstruction not allowed by current archaeological methods limited by processes of decay and artefact recovery (Hollowell and Nicholas, 2008, 63). Previous intertwining of archaeological and ethnographic approaches from the mid-19th century has left a legacy of scientific colonialism. Scientific colonialism has left barriers of power, privilege, and gender inequality and influences how Western scholars engage with cultures in a post-colonial society (Hollowell and Nicholas, 2008, 64). The whole ethnographic process has been mined for information by archaeologists. The repertoire of the ethnographic process is not only fieldwork but is also the form of writing which is used to record indigenous cultures (Hollowell and Nicholas, 2008, 65).

Perhaps the most important role in the interplay between archaeology and ethnography is the diversity in explanations and approaches. Ethnography can expose archaeologists, to the huge range and variability in human behaviour away from mainstream western culture. Exposure to radically different belief systems and approaches to material culture can have a positive impact upon how archaeologists view the past (Hollowell and Nicholas, 2008, 69). When writing and studying histories of archaeology, it is necessary to accept that they have mainly been written from positions of privilege and dominated with

European voices and stories. This position has often been used to obscure the role of cultural and economic relationships with indigenous people that were part of negotiating the process of forced colonisation (Torrence and Clarke, 2000, 7).

This chapter aims to show:

- The "Pacification" of the European Neolithic and the polished axe
- The historical context for the use of ethnography in the interpretation of the prehistoric archaeological record
- Ethno-archaeology and the problematic use of analogy in the archaeological record

7.1: The "Pacification" of the European Neolithic and the polished axe

"*If we want to compare pre-colonial forms of life, we have to engage with the pre-colonial situation. There are no ethnographic parallels, however seemingly distant from modern Sweden or Britain, that will ever allow us to do it without the addition of an archaeology that comments on the time and situational specificity of the ethnographic examples*" (Spriggs, 2008, 548).

Paul Roscoe (2009) has coined the term "Pacification" for the "*deployment of ethnographic models from the Pacific to illuminate the archaeological landscape of Europe and the Middle East*" (Roscoe, 2009, 578). Roscoe (2009) wrote this article as a response to the claims of Spriggs (2008) on the use of ethnographic analogy, and whilst agreeing with Spriggs (2008) on the usage and methods in which analogy with Pacific is increasingly being applied in European archaeology, and the need for greater integration of archaeological and ethnographic data sets he does disagree on the level to which societies in the Pacific were culturally changed by colonial influences (Roscoe, 2009, 579). Roscoe (2009) does agree, however, that modern anthropologists are sometimes guilty of writing of Melanesian society as if it were "out of time" and isolated from modern events, and that this tendency may be why archaeologists have approached Melanesia seeking the difference and isolation that is described in the ethnographic literature (Roscoe, 2009, 585).

Melanesia is one of the most intensely studied areas in the world in terms of both ethnographic fieldwork and comparative ethnographic archaeology. Because much of archaeology is preoccupied with the study of pre-industrialised nations and communities, archaeologists have found one of the richest and diverse areas of study in Melanesia. There are over 1,000 distinctive language groupings and an extreme variance in subsistence patterns dependent of course on the community and environment in question. Despite the extreme variety of lifestyles and social organisation present in Melanesia and they are interlinked with incredibly complex systems of material exchange (Roscoe, 2000, 79). In particular it has drawn the attention of archaeologists who have sought information on the beginning of political complexity. This is due to the popularity of the "Big Man" role in New Guinean society, which takes the spot between tribe and chiefdom societies and which has provided an archetypal role for prehistorians across the world (for European examples of this see Shennan et al, 1992).

Many thousands of objects were removed from New Guinea between the 1880s and World War Two. The impact that this would have had upon the local economies should not be underestimated and would have an effect on the volume of objects manufactured, depending on their popularity with Westerners, objects may have seemed to have greater prominence than they actually had in Melanesian society (Gosden and Knowles, 2001, 9). From the late 19th/ early 20th century up until the Second World War, the collection of Melanesian artefacts by non-indigenous people was driven by concern that Melanesian local knowledge was disappearing through outside contact and cultural change on the islands. However, the material culture collected did not stay in Melanesia and filled European and Australian Museum collections. Regional Museums have only appeared in Melanesia through the nation and colony formation on the islands. Museums were founded in Papua New Guinea on 1954, Vanuatu in 1956 and the Solomon Islands in 1863 (Bolton, 2003, 48).

Since the late 18th Century, when explorers began to collect artefacts from Melanesia, these artefacts have lived what Nicholas Thomas has termed "double lives" (Thomas, 2013, 6). They remain significant objects in Melanesian societies despite the disruption wrought by colonisation, disease and missionary intervention and the suppression and abandonment of certain artefacts and

production techniques. In Europe, however, these artefacts have entered a new phase of their existence. They have often been fetishized, classified into categories that remove them far from their original associations and finally displayed or stored in Museums. The collection and treatment of these artefacts, both in museums and in the academic press has created a gulf between the artefacts and their original contexts and meanings (Thomas, 2013, 6).

Spriggs (2008) has argued that European archaeologists have drawn too much from recent ethnographies of the Pacific, whilst ignoring what the archaeologies of the Pacific region (more specifically Melanesia) have to tell us about the development of the communities that have been the subject of modern ethnographies (Spriggs, 2008, 538). Parallels involving the transferral of "*Big Man*" and "*dividual*" societies have been popular in the European Neolithic. The short term ethnographies used as the basis for these parallels cannot give the depth of vision provided by incorporating the known archaeological sequence of the area as well. Tilley's *An Ethnography of the Neolithic (1996)* is an example of the transferral of ethnographic narrative approaches to the European Neolithic (Spriggs, 2008, 539). The impact of colonial contact and consequent social change is likely to have been far greater than has been written from a European anthropological perspective. By the time it was safe for Europeans to conduct long term anthropological studies the Pacific communities concerned had already been transformed by high death rates from introduced diseases made even worse by low birth rates, as well as the interference from missionaries and colonial officers on their existing land management and political systems. The creative and resilient way in which Melanesians survived and adapted to the pressures of colonial rule and oppression should not be denied (Spriggs, 2008, 539).

It could be argued that there is a new form of post-modern use of ethnographic analogy by archaeologists such as Thomas (2004), where knowledge of ethnography is seen as essential in order to allow archaeologists to "de-Westernise" their methods of thinking and being in order to approach European archaeological data in new ways. If this was truly how ethnography was used by modern archaeologists, it would not be as problematic as it currently is. Do we really need ethnography to show how potentially different the past could have

been? It is the “measure of presumed similarity” between the past and present societies that is often not as critically assessed as it should be. Part of the problem is where the present society is deemed to sit on the evolutionary scale provided by Western archaeologists, e.g. band or tribe (Spriggs, 2008, 542). Despite awareness of the problems and protestations in literature against the dangerous use of analogy, ethnography continues to be used to directly inform and pad out the investigation and interpretation of the Neolithic in Europe (Spriggs, 2008, 543). A lot of attention academically over the last three decades has been on how best to apply ethnographic analogues to the archaeological record and deconstructing their historic use (e.g. Gould and Watson, 1982, Orme, 1974) but it is only in the last decade that the modern use of analogy and how it is applied has been significantly challenged (Stahl, 1993, 235).

The development of anthropology and its links to prehistory are strongly linked to the institutionalisation of ethnographic artefacts in museums and the connections these artefacts provided to fieldwork nurtured the discipline in Germany, Britain and Denmark. There were two main waves of ethnographic museum building in the UK and the British Museum collections spans them both. The first was between 1849 and 1884 and the second wave took place between 1890 – 1931 (Shelton, 2006, 65). The British Museum, of course, was not a dedicated ethnographic museum in the same vein of institutions like the Royal Ethnographic Museum in Copenhagen (opened 1849) or the Museum of Archaeology and Anthropology at Harvard (opened 1866). The British Museum’s ethnographic collections were built through its encyclopaedic approach to knowledge. The institutionalisation of ethnographic artefacts added to a complex process of entanglement and detachment from the artefacts original meaning and use (Shelton, 2006, 65). Historically, there have been variable attempts to classify, document and arrange ethnographic artefacts in the British Museum’s collections, meaning that many artefacts (most notably those from Cook’s Expeditions) have been lost or misplaced. The curatorship of Franks combined with the bequest of Christy did bring a greater sense of order to the ethnographic collections. When on display, ethnographic collections were arranged geographically or used as a comparative object in the British Museums prehistoric collections in the British Museum. It is not known whether or not Franks was inspired by the classification systems developed by Jomard or Von

Siebald during the 1830s and 1840s. Jomard had a comparative approach to displaying objects by their function, similar to the approach used with polished axes in the British Museum during the mid-19th Century, whereas Von Siebald believed the geographic origins was the most important features and that aesthetics should be disregarded (Shelton, 2006, 66). The way the British Museum displayed its ethnographic collections during the mid -19th century was very different to that espoused by the contemporaneous collection arranged by Pitt Rivers in Oxford, where objects were displayed according to their "connections of form" (Shelton, 2006, 69).

Lemmonier (2004) has written about how the search for the authentication of the archaeological record has led to the use of ethnographic parallels and specifically then temporal annexation of Papua New Guinea of western academics who have viewed the country as an isolated anomaly (Lemonnier, 2004, 79). Papua New Guinea has occupied a peculiar and unique place in the imagination of western scholars. Western explorers have used the isle to seek fame and infamy in the recognition of "lost" tribes (a practice which still undertaken my modern explorers today) and historically anthropologists and archaeologists have sought to view a different time and place in Papua New Guinea (Lemonnier, 2004, 79). During the 1990s, five tribes including the Liawep and Wolani, were said to have been "discovered" by the outside world. The way these contact situations have been portrayed in the media reinforces stereotypical imagery of "stone age" people speaking unknown languages. People in these communities are usually photographed partially clothed and often portrayed as menacing, and "entranced" by modern objects (Lemmonier, 2004, 80). Modern media is searching for a world removed from industrialisation that was the object of anthropological fieldwork over a century before. There is often a sense of permanence and Papua New Guinea being described as a place out of time, which is ultimately disingenuous but ameliorates the replication of the prehistoric past (Lemmonnier, 2004, 81).

The success of historical ethnography in anthropological discourse has meant that other researchers have looked to Papua New Guinea seeking to observe a pre-colonial world (Lemmonier, 2004, 83). No societies in Oceania are truly "pristine" or untouched by colonial contact. All have been affected to some degree by colonial and post-colonial contact. Pre-colonial situations are deemed

to be observable in situations where behaviour appears to have not been outwardly modified by Western influences, but this represents a disregarding of the history, anthropology and archaeology of the societies involved in the search for a version of the past which does not exist. Colonial collections in museum environments can help counter the representations of societies as "pristine" and show the interactions and agency of the indigenous communities involved (Lemmonier, 2004, 85). Lemmonier (2004) describes the case of the Toulambi community in Papua New Guinea, who have been the subject of both anthropological and archaeological study and "discovery" through journalistic endeavour. Despite their "discovery" in the late 20th Century, colonial archives show that the Toulambi have been in contact with at least six Australian government patrols from 1929 onwards (Lemmonier, 2004, 87).

After the consideration of how the ethnographic collections of polished axes at the British Museum were built in the previous chapter, it is necessary to explore how these artefacts have been used together with archaeological artefacts in a broader context to show the impact the display of these artefacts had on how prehistory was written. This broader context includes the use of ethno-archaeology and ethnographic data to inform the archaeological record and the continued debate over the use of analogical reasoning in the archaeological knowledge creation.

7.2: The historical context for the use of ethnography in the interpretation of the archaeological record

"*Ethnography is that branch of the general science of man (anthropology) descriptive of the manners and customs of particular peoples, and of their development from savagery towards civilisation. Although the word in its strict sense embraces the manners, customs, beliefs of all peoples, including those of Europe, it is more especially concerned with those races who have no written records and are unknown to history. The classification of mankind is a subject best with many difficulties, and has at all times given rise to disagreement*" (Read, 1910, 10).

Charles Hercules Read (Keeper of the Department of Ethnography at the British Museum) associates the division and classification of mankind into different

tribes and races, and ultimately into a developmental sequence, as a consequence of the popularity of evolutionary theory and the championing of Darwin's ideals. As European industrialisation was seen as the highest rung of the ladder of civilisation, ethnography was seen as a way of informing European history and archaeology and the documentation of the present was seen as a way of documenting a lost European past (Read, 1910, 2).

Ethnographic evidence has been considered useful by antiquarians since the Enlightenment. There have been implicit value judgements in the language used to describe ethnographic communities and their artefacts, the most starkly contrasting being the juxtaposition between civilisation and savagery and barbarism. Savagery, comes from the Latin term "*sylva*", meaning those who lived outside in the woods, therefore outside the Roman city and the term barbarian, is originally derived from Greek and used to commonly describe those tribes whose languages the Greeks did not understand, most notably the Scythians (Stocking, 1987, 10). During the enlightenment, there was a great deal of philosophising predominantly by French and Scottish authors, on the nature of civilisation and the modification of man's social nature through time, which became the background for how the West viewed indigenous communities during the great period of colonial competition which followed. The philosophies were based on the abiding principle that man's social condition was both hierarchical and progressive. The Bible was the conditioning influence on the writings of man's social development. The short chronology offered by biblical reasoning made charting relationships between tribes and linguistic groups difficult. One of the first attempts at an ethnographic history was the *Customs of American Savages* by Jospeh Lafitau, which sought to create a historical narrative for the Native Americans since the Great Flood, through comparison with Old Testament Tribes and Grecian gods (Stocking, 1987, 12). Throughout the enlightenment, in the absence of other historical data it was believed that the earlier developmental stages of mankind could be reconstructed by the observation of communities still living in states of what was perceived to be "savagery" (Stocking, 1987, 15).

Both ethnography and archaeology were connected together under the umbrella of a fledging "science of man" the goal of which was defined by William Robertson (1777) as "*to complete the history of the human mind, and*

attain to a perfect knowledge of its nature and operations, we must contemplate man in all those various situations wherein he has been placed (and) follow him in his progress through different stages of society" (Robertson, 1777, in Stocking, 1987, 17). This exploration of fundamental human nature was combined with a "*heightened sense of consciousness and European identity and cultural superiority*" (Stocking, 1987, 18). There was a commonality in European feeling linked through political and religious beliefs, which Enlightenment Europeans felt separated them from the rest of the world, both old and new (Stocking, 1987, 18). There were stereotypic behaviours associated with each stage of development and geographic region that were pervasive in the Enlightenment consciousness. People who lived in a state of "savagery" were seen as having fetishist tendencies; oriental people were seen as a despotic race, whereas Europeans were seen as a "vigorous" race (Stocking, 1987, 19). The science of man was approached with different methods in different countries; Germany developed a tradition of comparative philology, France established a tradition of comparative anatomy and England was known for approaches dominated by political economy, viewing people in terms of their place in the economy and their capacity to provide labour (Stocking, 1987, 30). These ideas were constructed in a time of intense political upheaval, rapid technological change and a time when the "fate and character of European civilisation hung in the balance" (Stocking, 1987, 30). The attempts of good reason and classification of the human world was a direct response to the disturbances happening in the European political order. Economics, class, morality (religion) and politics played an important part in the discussion of other races and explanation of human progress (Stocking, 1987, 36).

The highlighting of the "savage" nature of indigenous communities and therefore the reinforcement of the supremacy of Europeans could also be viewed in the British Museum in the way ethnographic artefacts were displayed in the mid-19th Century. In the 1871 Guide Book, Franks explains to the reader that the collections are arranged by chronological order "*from the earliest monuments of the Egyptian Pharaohs down to the last memorials of Roman dominion in this country*" (Franks, 1871, 63). Interestingly, the prehistoric and ethnographic rooms (still only two in 1871) are set apart at the end of this chronology, together. However, there is in this guidebook a description of the

contents of both the “British” and Ethnographic collection. The British Collection is arranged by material, stone, bronze or iron. Franks states; “*The remains of the inhabitants of the British islands previous to the Roman invasion embrace the Stone, Bronze and a portion of the Iron period of the Northern Antiquaries. They have for convenience been classed according to their materials and the order corresponding to the supposed introduction of such materials into this country*” (Franks, 1871, 124).

Polished axes (referred to as “stone celts”) were displayed in the first four cases alongside both Palaeolithic flints, which were noted to have been found alongside mammoth and ethnographic examples of polished axes. Franks describes their display thus: “*They appear alongside analogous examples, still in use amongst nations in a savage state, to have been mounted in wooden handles and bound round with leather thongs so as to form axes and adzes*” (Franks, 1871, 124). The unhafted prehistoric axes are from Wales, England and Ireland but Franks does not say what the provenance of the ethnographic specimens is. There is also one hafted prehistoric axe alongside stone implements from Italy, Portugal, Africa and America (Franks, 1871, 124).

Twelve out of one hundred and thirty nine cases are dedicated solely to stone tools in the British and Medieval Room in 1871. The Ethnographic collection was in a separate room and Franks was obviously frustrated by the lack of space given to the collection. He states; “*any scientific arrangement has been rendered difficult by want of space; but the objects have been as far as practicable, arranged in geographic order*” (Franks, 1871, 129). Jade polished axes from New Zealand donated by Sir George Grey are displayed alongside his collection of fish hooks, nose flutes and ornaments. Polynesian stone axes are recorded as being displayed in the case alongside. Papua New Guinean axes collected from the voyages of the HMS Rattlesnake were also on display. The stone implements are not separated out in this room and are instead displayed alongside a myriad of material culture. Finally in the Guide Franks advertises the Christy Collection, which was only open on Fridays during this period inviting the reader to see a large amount of the prehistoric and ethnographic collections there (Franks, 1871, 131).

In the 19th Century the use of ethnographic analogy was prompted because the lack of prehistoric data. Ethnographic data became an observable, testable link between the objects in the collections the distant and shrouded past (Reybrouck, 2013, 5). The Great Exhibition of 1851 was something of a watershed in the presentation of the past and the ethnographic present. Even after the close of the exhibition in 1852, the collections of "savage people" were sold and reassembled Sydenham. At Sydenham, people were displayed grouped with natural history specimens, people from the Artic were displayed alongside the polar bear, Native American alongside birds' native to North America (Stocking, 1987, 47). This visual separation of the indigenous communities from the "communal" achievements and products of Western man was powerful and long lasting, as it firmly set ethnographic artefacts and communities as "the other", a set of data to be studied much like the taxidermied animals they were displayed alongside. Fairs and exhibitions were often the first way in which the public interacted with both archaeological and ethnographic objects. Over six million people had visited the exhibition by the time it was closed. Many of the most notable figures in the history of the British Museum visited the exhibition and later wrote of the influence it had upon them, their outlook and their careers: these included Franks, Henry Christy and Augustus Henry Lane Fox (Mack, 1997, 36). Franks himself prepared a selection of prehistoric material for display at the 1867 Exposition Universelle in Paris on behalf of the British Museum. Gabrielle de Mortillet commented on how well displayed they were, complete with provenance of each artefact, which was not a common practice at the time (Cook, 1997, 121).

There was also a significant amount of migration of material from these fairs and exhibitions into public collections (MacGregor, 1997, 17). The British Museum bought Worsaae's personal collection at the 1867 Exposition in Paris. Many national museums at the time officially sanctioned the selling of duplicate artefacts. There was free movement of artefacts not only between museum professionals, but interested amateur scholars as well. John Evans acquired stone implements through international fairs and exhibitions, building on his reputation built through travel and publication (Bangert, 2008, 250).

Polished axes were added to the British Museum collection through colonial fairs, most notably through the Colonial and Indian Exhibition in London in 1886.

These axes were donated by H.H. Romilly. The main colonial powers behind these exhibitions were Britain and France, however even countries that were political dependencies in the early 20th Century such as New Zealand, Canada and Australia also held fairs exhibiting colonised people and artefacts (Benedict, 1991, 5). From 1878 beginning at the Paris World Fair, as well as artefacts, saw the first displays of citizens of colonial nations for the education of the paying public, part of the narrative which sought to show the West's ascent to "*civilisation*" (Corbey, 1993, 341). The movement and lives of these people were closely controlled and their freedoms almost completely restricted, with enforced barriers between them and the visitors and they stayed within the display space which represented their colonial nation. People did become acculturated to Western lifestyles but this was hidden from public view. The exhibitors were keen to stress the divisions between nature and wildness which these people were meant to represent and "*civility*" of industrialised Western life. The sense of "*otherness*" and the "*exotic*" in ethnographic studies was heightened through the use of such displays (Corbey, 1993, 344).

These exhibitions went in tandem with a growing trend for using human specimens in museum exhibits for comparison and study in terms of physical anthropology and natural history. The exhibiting of humans was not a new phenomenon, but previous exhibiting of people in lunatic asylums died out at the end of the 19th Century due to the increasing medicalization of the care of the mentally ill (Corbey, 1993, 354). A common theme in these exhibitions were the linkages to prehistoric study and people were classified and slotted into typologies in much the same way as artefacts and treated as "*missing links*" in human prehistory (Corbey, 1993, 355). The popularity of the ethnological exhibition did not decline until the 1930s, when criticisms of their racist and imperialistic nature reached intolerable levels (Corbey, 1993, 358). These fairs are important to consider in the history of museums and the display of ethnographic material because of the recurrent nature of the fairs, the same sorts of artefacts and exhibits appeared at each exhibition and helped to create images of the colonies, some elements of which have still been retained internally within the former colonies and externally in the public memory (Benedict, 1991, 5).

The final decades of the 19th Century, along with the first few decades of the 20th saw a marked increase in both anthropological fieldwork and interest in ethnographic artefacts in museums. During this period, museums were one of the main areas for both knowledge generation and dissemination in anthropology (Larson, 2007, 90). Scholars during this period, much like archaeologists, saw themselves as scientists and the objects they collected and curated as objects of scientific evidence, quantifiable units of scientific measurements that could be plotted on maps of a global scale. Ethnographic artefacts were also viewed as conceptual markers that could be slotted into evolutionary schemes. Henry Balfour, who was the first curator of the Pitt Rivers Museum, created maps based on the spatial and temporal distribution of artefacts at the museum (Larson, 2007, 91). Changes to the methodology of socio-cultural anthropologists made at the turn of the 20th Century by British practitioners affected anthropologists worldwide (Kuklick, 2011, 2). There was a shift in the nature of collection of ethnographic artefacts at this time and the professional collector was replaced by the scientific fieldworker. The rise of the scientific fieldworker meant that "armchair" anthropologists no longer had the upper hand in mainstream anthropological theoretical discourse. This is not to say that professional collectors did not contribute anything to scientific research in anthropology, but their contribution is often obscured through their commercial interests. Professional collectors often gathered collections of artefacts and natural history specimens as a commission. As fieldwork was seen as an arduous and labouring task in the 19th Century, collectors often distanced themselves publicly from the field working portions of their work (Kuklick, 2011, 3).

7.3: Ethnoarchaeology and the problematic use of analogy in the archaeological record

"*With the acceptance of judicious use of ethnographic analogy in archaeological interpretation people quickly realised that most ethnographic accounts were inadequate for use in archaeology. Ethnographers are not usually concerned with the same problems as archaeologists, so most things in a society of relevance to archaeologists are not recorded. The palliative to this deficiency was*

to begin studies of non – industrial peoples from an archaeological perspective" (Stiles, 1977, 87). (emphasis mine)

The majority of stone tools, at least in archaeological contexts are studied in a void of linguistic contextual information. Language, both spoken and written becomes the gateway for understanding the context of material culture (Tilley, 1991, in Pearce, 1994, 68). Archaeologists have created their own language in order to codify, govern and translate the use of stone tools in the modern world. In the absence of language – the rules of the system of language are used to understand the phenomena presented in the archaeological record. Tilley (1991) states: "*language becomes the paradigm for understanding all aspects of social life… if language is an exchange of messages constituted in their differences governed by an underlying semantic system of codes and grammatical rules, then the move made by Levi-Strauss is quite understandable. Marriage practices are analysed in terms of systems of underlying rules, such systems being variant realisations of a limited number of structural oppositions defined in their relevant difference*" (Tilley, 1991, in Pearce, 1994, 68).

The search for an "*underlying system of codes and rules*" has arguably dominated the theoretical consideration of archaeological polished axes. Ethnographic evidence has been utilised by archaeologists to form the governing rules for how polished axes may have been used in the Neolithic. Obviously, the original socially mandated rules for the use and meaning of polished axes in the Neolithic is lost to us, vanished within the archaeological record. Analogical reasoning is used to construct the governing rules. This approach is problematic for a number of reasons. As archaeologists we are unwilling to limit ourselves to the "modest number of reliable conclusions" that prehistoric material remains can provide us with, with any degree of certainty drawn from use wear and context from excavations and the surrounding landscape (Roscoe, 2009, 586). This desire to go beyond the immediate functional and practical aspects of material culture may stem from a desire to immerse ourselves in the lives of the past and experience it for ourselves. This is, of course, impossible. There is a significant risk in the use of ethnography in archaeology of using it to "*derive theories and law like generalisations*" (Gould and Watson, 1982, 361).

The discussion surrounding the use of analogy in archaeological reasoning began in American anthropological circles and British archaeological communities in the 1950s and lasted well into the 1980s and 1990s,. After a brief lull in the 1990s there has been a divide in archaeology between those who believe ethnographic fieldwork still remains a legitimate source of information and those who believe it has no place in a subjective and objective archaeology (Ravn, 2011, 717). The reasoning behind why the use of ethnographic information in archaeological contexts is problematic is because it was first used when anthropology and archaeology were still interdependent disciplines reliant upon a uni-linear evolutionary scale (Ravn, 2011, 718). Since the 1950s, archaeologists have continually sought a stronger, more scientific basis for the use of analogy, a way to scientifically justify its use. Material culture is a strong draw for analogical inference alongside conditions where subsistence and economic patterns are deemed to be similar to those in the past (Ravn, 2011, 718). Prehistoric behaviour is notoriously difficult to test because of the process of decay in the archaeological record. It has been argued that ethnographic analogy can be used to inspire ideas as long as the relevance in the connections between the present and the past can be demonstrated (Ravn, 2011, 721). With scientific progress in archaeology making extracting independent information more accessible from the archaeological record (from for example, GIS, DNA databases, isotopic analyses) it will hopefully be easier to totally reject analogies in the future (Ravn, 2011, 722).

There are multiple sources from which ethnographic evidence may be potentially relevant to the interpretation of the archaeological record. These include: experimental studies (particularly in the replication of material culture), published travellers' accounts and diaries, museum collections donated by ethnographers, literature from ethnographic studies and explicit archaeological ethnographic studies (Stiles, 1977, 91). The main problem with museum collections of ethnographic material is the lack of evidence for how they functioned in the society from which they were taken; Paul Sillitoe's (1988) collection made for the British Museum happily bucks this trend, as discussed in Chapter 4 (Stiles, 1977, 92).

Ethnoarchaeology and the use of ethnography in archaeology inherently assumes that there are behaviours in which social systems have material

expressions or correlates when found within the archaeological record; these material remains can be used to extrapolate past behaviour. Ethnoarchaeology has been a popular approach to the questions left by the gaps in the prehistoric record caused by taphonomic processes. Ethnoarchaeology is often used to elucidate social behaviour, religion, governance as well as the practical applications of material culture such as polished axes (Kramer, 1979, 1). Kramer (1979) boldly states: "*observations of contemporary behaviour can facilitate the development and refinements into past behaviours, particularly when strong similarities are shown to exist between the environments and contemporary sociocultural systems being compared*" (Kramer, 1979, 1). Kramer further justifies the use of ethnographic analogies by stating that the work of archaeologists goes beyond that conducted by ethnographers because of the focus on material culture. Kramer believes the value of ethnoarchaeology lies in the ability to observe how behaviour translates in material remains in the archaeological record (Kramer, 1979, 1). These statements suggest an inherent level of equivalence between the ethnographic present and the prehistoric past which is disingenuous.

Ethnoarchaeology is seen as a chance for the questioning and interrogation of people in the present and transferring this information onto the past. This, combined with the collection of data on material remains is used as the key justification for the use of ethnoarchaeological methods. Many of the societies studied by ethnoarchaeologists are under the threat of extinction – providing further justification for the study. Empirical documentation of ethnographic variability in material remains that may be soon altered by encroaching western influences is seen as a key aim of ethnoarchaeology (Kramer, 1979, 10). The aim of ethnoarchaeology is to "make use of the information gathered in the historical present that has relevance in interpreting and explaining archaeologically revealed residues of human behaviour (Stiles, 1977, 90).

The use of ethnography is tempting to many as it allows the reconstruction of a fuller social system around the material remains of the past. Archaeology and anthropology share a common goal in recreating cultural systems. But this leads to a problem of sampling in the referencing of ethnographic reporting by archaeologists. Only a small percentage of cultures and communities have been recorded ethnographically. The delicacy and intricacy of human interaction

cannot hope to be captured in such a small sample (Gould and Watson, 1982, 358). This difficultly is the degree to which human behaviour is limited or motivated by symbolism, ideology or religion and what is motivated or limited by practicality. There is a tendency from both archaeologists and anthropologists to take a greater leap towards ideology than is prudent before the environmental and practical limitations have been fully assessed (Gould and Watson, 1982, 367).

7.4: The problem of the use of analogy in prehistoric archaeology

"*The plausibility of products of analogical reasoning was instrumental in the successful foundation of prehistoric archaeology in the 19th Century*" (Murray and Walker, 1987, 248).

Archaeological knowledge was developed using a wide umbrella of many subjects including biology, history, geology, ancient history and ethnology. Analogies have been crucial in the development of archaeology for providing relationships between people and artefacts, economic activities and how they relate to the social life in the archaeological record and for explaining development over time (Murray and Walker, 1987, 253). Issues of archaeological meaning and archaeological knowledge making cannot be disentangled (Murray and Walker, 1987, 254). Analogy comes from the desire of recognition in the archaeological record. How else would we recognise that an axe is supposed to be an axe unless there is a known analogue in the past or present. Archaeological polished axes have been compared ethnographic examples since their recognition as prehistoric artefacts in the 18th Century. Secondary studies of axes centred on wear or use simply serve to reinforce or oppose the initial analogy (Hodder, 1982, 11). It could be argued that present analogies concerning the past are so ingrained and obvious to archaeologists that analogies are often used uncritically and unconsciously and whilst these are obviously problematic – the "calculated" use of analogies should be reflexively assessed and deconstructed as a priority (Hodder, 1982, 11). Murray and Walker (1987) have stated that the "problem of analogy, has been and is likely to remain resistant to permanent or universal solution" (Murray and Walker, 1987, 249). Their reasoning behind this statement is that analogical reasoning remains central to "functionalist" and "cognitive" archaeology. The "bear pit" of

analogical reasoning as they describe it, is tied into the process of the production of archaeological knowledge and the building of archaeological theory, and because of this it is very hard to remove the use of analogical reasoning (Murray and Walker, 1987, 249).

Wylie (1985) has argued that even those who want to remove analogical reasoning from the archaeological record are in the end not able to do so. Wylie (1985) shows that there are two camps in the archaeological community drawing upon analogical reasoning. The first camp takes ethnographic analogies from sources outside the disciplines, such as history and biology, even if they do involve inferential leaps and apply them to the archaeological record. In the second camp, there are archaeologists who require detailed studies from inside the discipline such as ethno-archaeological experiments. Testing hypotheses from these studies seems to provide a clearer link for the analogy to be used within certain defined parameters in the archaeological record (Murray and Walker, 1987, 252). Analogies give a false impression of equilibrium in the archaeological past. Culture may be changed by environments and environments or equally conversely changed by cultures within the past. Analogies also gave a false sense of predictability in the ways in which people respond and adapt to change in the archaeological record. Even when analogies are applied to "limited cases" as identified by Wylie (1985), they mainly expose the exceptional nature of that part of the archaeological record, replicating those scenarios across time and space is highly unlikely (Murray and Walker, 1987, 255). Wylie (1985) argues that in the application of analogical reasoning to the archaeological record leads to a disenfranchisement of the section being studied, or the artefacts being studied (Murray and Walker, 1987, 252).

The most common methods of analogical reasoning used in the case of the polished axe are the direct historical approach and the general comparative approach. The former is often seen as the stronger and more reliable form of analogy as it is based upon long term continuity in terms of geographical area and was pioneered in North America (Gould and Watson, 1982, 537). Once the context and type of analogue have been established (what Stahl (1993) describes as "boundary conditions") and the connections between the two situations have described there is often a concentration on limited points of connection which are then spun into a narrative to strengthen the case for the

use of archaeological analogues. This is what Stahl (1993) describes an as "illustrative analogy" and this is one of the most powerful ways with which to bolster an archaeological arguments for the use of ethnography (Stahl, 1993, 236).

Lithics have been a popular choice for the explicit archaeological studies, because of the testable nature of the outcomes and hypotheses (e.g. discard, manufacture and curation) but also because so little can be said with certainty about the position of stone tools in the fabric of prehistoric social life. For instance, Carneiro (1979) wished to recreate the "Neolithic" practice of tree felling with polished axes, which has scarcely been documented by ethnographers despite the fact that tree felling is a necessary and common activity in the clearance of land for the preparation of land for agriculture and for building materials (Carneiro, 1979, 21). The experiment was conducted with the help of members of the Yamonamo people. The polished axes used in this experiment were taken from a collection made by Napoleon A Chagnon and were not made for the experiment. Polished axes are no longer used by the Yamonamo, polished axes were used within living memory of those conducting the experiment on behalf of the ethnographer, namely by the fathers and grandfathers (Carneiro, 1979, 23). The axe was unhafted and was given to a young man named Dobrewa, from the village of Hasubowateri, Dobrewa hafted the axe but the initial attempt at felling the tree was unsuccessful due to the failure of the lashings on the haft (Carneiro, 1979, 25). Whilst trying to maintain that he does not influence the experiment, however, he undoubtedly does by choosing the axe, tree to be felled and the time and place for the tree to be felled (Carneiro, 1979, 25).

It could be argued that there is a new form of post-modern use of ethnographic analogy by archaeologists such as Thomas (2004), where knowledge of ethnography is seen as essential in order to allow archaeologists to "de-Westernise" their methods of thinking and being in order to approach European archaeological data in new ways. If this was truly how ethnography was used by modern archaeologists, it would not be as problematic as it currently is. Do we really need ethnography to show how potentially different the past could have considerably have been? It is the "measure of presumed similarity" between the past and present societies that is often not as critically assessed as it should be.

Part of the problem is where the present society is deemed to sit on the evolutionary scale provided by Western archaeologists, e.g. band or tribe (Spriggs, 2008, 542). Despite awareness of the problems and protestations in literature against the dangerous use of analogy, ethnography continues to be used to directly inform and pad out the investigation and interpretation of the Neolithic in Europe (Spriggs, 2008, 543). A lot of attention academically over the last three decades has been on how best to apply ethnographic analogues to the archaeological record and deconstructing their historic use (e.g. Gould and Watson, 1982, Orme, 1974) but it is only in the last decade that the modern use of analogy and how it is applied has been significantly challenged (Stahl, 1993, 235).

7.5: In Summary

- There is historical precedent for the use of analogical reasoning in prehistoric archaeology, and as previous chapters have shown the comparison of ethnographic and archaeological polished axes has played a central role in the orientation of the place of the polished axe in the European Neolithic.
- Analogical reasoning is flawed and illogical for the reasons outlined in this chapter; the most dangerous aspect is the false sense of equivalence with the past it creates with modern or recent societies.
- "De-Westernising" modern archaeological thinking is problematic without the use of analogy or ethnoarchaeology.

Chapter 8: Discussion and Conclusions

"Museums are no new thing, a product merely of artistically sterile ages, which, unable to create masterpieces of their own, painstakingly collect those of earlier and more virile periods. In one form or another they have graced almost every civilisation, whether as collections brought together to illuminate the past and inspire the present or as jealously guarded sanctuaries within which were preserved the relics of departed saints or heroes, together with the offerings of the pious" (Miller, 1973, 19).

This chapter focuses on the resolution of the two main aims of my thesis which were:

- To understand better the role of the British Museum in acting as a site of knowledge during the construction of prehistory
- To appreciate more fully the interplay, in the history of archaeology, between information derived from ethnographic and archaeological sources

8.1: To understand better the role of the British Museum in acting as a site of knowledge making during the construction of prehistory

"Stories provide a bridge between the tacit and the explicit, allowing tacit social knowledge to be demonstrated and learned, without the need to propositionalize ethics, specify in detail appropriate behaviour, or demonstrate why particular heroes of the past are relevant today. The reason for this is that stories do not only recount past events. They also convey the speaker's moral attitude towards these events: the protagonist of the story acted well, acted badly, is to be praised or blamed, can be taken as a model for the hearer's own behaviour. These evaluations are sometimes explicitly stated within the story, but more often are suggested through the use of a single word or phrase". (Linde, 2001, 5).

The absence of text in the archaeological record has also caused problems for the polished axe and this is a problem borne of representation. There is a discontinuity between the object in the past and the representation in the present (Shanks and Tilley, 1992, 17). The knowledge transmitted from the

British Museum could be categorised as "social knowledge". Traditionally, social knowledge takes two forms – the knowledge of the group held by individuals and "information held by the group or institutions itself" (Linde, 2001, 3). It could be argued that the majority of information transmitted and created in the British Museum is in the form of narrative. Narrative forms of communication lend themselves well to the transmission of history, values and identity. Whilst at first glance the arrangement of prehistoric and ethnographic artefacts in the British Museum, particularly during the mid-19th Century, may not appear to be in a traditional linear narrative, further examination shows that narratives were created through comparison in the exhibition space and juxtaposition in the accompanying guidebooks in the Museum, alongside scholarly work at the British Museum which projected these narratives out into the scientific communities. Construction of narrative involves the evaluation of events and meanings, and polished axes have often been used in the reconstruction of snapshots of prehistoric life (Linde, 2001, 6). As an institution, the British Museum also employs narrative social memory in the form of the Enlightenment gallery which conveys the museum's institution identity through the biographies of key patrons and the values the museum strives to embody. The gallery is a recent addition to the composition of the internal space of the British Museum, having been opened in 2003 to coincide with the 250th anniversary of the opening of the British Museum. Situated in the former King's Library, it is split into seven areas, each dedicated to telling the story of the foundation of the British Museum and the birth of archaeology as a discipline (http://www.britishmuseum.org/explore/galleries/themes/room_1_enlightenment.aspx, BM, 2015, accessed 20/09/2015).

Knowledge during the enlightenment era was not a freely available commodity to all despite the universal ideals proclaimed throughout the era. Letters requesting access to the reading room have not survived from the early era of the museum, but the admission registers have. Unfortunately this means that we are not able to see if the museum excluded persons from the reading room or limited scholarly access to certain groups of people (BM, 2013, 2). After its opening, the museum did rely on worth of mouth amongst the educated classes, however, travel and safety would still have been considerable concerns for those journeying to the museum, as in the mid-18th Century, London was still

without adequate policing (BM, 2013, 4). Initially after the museums opening, tickets were limited to ten persons per hour of admittance (9am-3pm). Access to the Reading Room was tightly controlled, and relied on personal recommendations and connections to be allowed to access the library collections. Before 1760, you had to have the reference of a trustee to be allowed to read at the British Museum, after 1760, the Principal Librarian was also allowed to grant access (BM, 2013, 7). In order to apply to visit the museum, one had to apply in writing, this considerably limited those who could benefit from the learning experience at the museum or create knowledge from it. 59% of people classed as labourers were thought to be illiterate between 1750 – 1784 so it is doubtful the British Museum would be able to share information with the individuals belonging to this class effectively even with guided tours but the Museum did have a greater impact upon the social circles of the middle and upper classes (BM, 2013, 21).

The British Museum was far from the sole source of historical knowledge available in the capital. The Royal Academy began exhibiting in 1760, and the year they began to exhibit in the refurbished Somerset House 1780, did the popularity soar, boasting over 61,000 visitors in the first year alone. The Ashmolean was already an established institution and access to the Ashmolean was considered by trustees when designing the entrance considerations to the British museum (BM, 2013, 25). The alternative sources of knowledge making in the capital and beyond in Britain were undoubtedly the libraries – the trustees took into consideration the libraries of the Bodliean, Oxford and Sion college, alongside the learned societies of the Royal Society and the Royal Academy (BM, 2013, 27). Free admission was extremely unusual for the time as was the convention that the guides at the British museum were not tipped. Which, in theory made the entrance to the museum more accessible to all regardless of income (BM, 2013, 34), as shown in the quote below:

'As admission into the Reading Room is by all regulations hitherto made, entirely left to the Committee, they think it necessary to observe that the liberty of studying in the Museum is the part of this Institution from which the Public is likely to reap the greatest benefit; and that therefore admission into the Reading Room should be made as convenient as possible: that as the number of persons applying for the liberty of the Reading room or at least of those making use of it

when granted has not hitherto caused any inconvenience the only case necessary at present is to prevent improper persons from being admitted'

General Meetings, Minutes, volume 2, page 327, 19 January 1760 (BM, 2013, 27).

Knowledge making at the British Museum was often centred on the movement of artefacts, but it would be ill advised to discuss knowledge making in the British Museum without recognising the impact of the space and resources of the reading room (Bernstein, 2011, 1). A regular user of the Reading Room Amy Lever described it in 1889 in a private essay as being a *"multipurpose sphere, a knowledge factory, a club, an asylum, thus melding together public and private, working and middle classes, scholarship and commercial production with social exchange*" (Lever, 1889 in Bernstein, 2011, 1). Unlike the London Library, users of the British Museum Reading Room could not take resources home, so both reading and writing and constructing knowledge had to happen in a very public sphere. The Reading Room was open to both men and women (Bernstein, 2011, 2). The librarian Panizzi was behind the replacement of the original rectangular Reading Room with the Circular one we are left with today (now largely used as an exhibition space). It was not a truly egalitarian space, however, and there were conditions for entry. A guide produced in 1866 states that the conditions of entry were: "a minimum of twenty-one years of age, 'a literary purpose — such as study, reference, or research', and 'Respectability'." (Bernstein, 2011, 5). The last condition was open to interpretation and was a very Victorian value. The Reading Room was undoubtedly though a space for intellectuals and activists (including women) to congregate and learn (perhaps the most notorious being Karl and Eleanor Marx (Bernstein, 2001, 21).

"*Words, in the form o form of printed information, lectures, published criticism and verbal opinion, were central to the social operation of Victorian art galleries and museums. Displays of art were hailed as an opportunity for curators and critics to instruct the public with the aim to improve national taste and 'inculcate virtue'*[3] *and to this end Henry Cole announced that the new South Kensington Museum 'will be like a book with its pages always open'*." (Flood, 2007, 1).

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The exhibition catalogues of the British Museum are a method of figuratively reconstructing the visual experience of visiting the museum in the 19th Century. The details of the artefacts can often be frustratingly sparse and with few illustrations in comparison with today's museum guidebooks. It also represents one of the ways in which visitors could interact with the museum, sometimes being the only thing they were encouraged to touch (Flood, 2007, 1). The development of the museum catalogue was heightened with the development of the South Kensington Museum in the 1850s, when focus was put on upon how best to educate the viewing public. In South Kensington they settled on a combination of descriptive labelling and catalogues combined with a programme of educational lectures (Flood, 2007, 4). Catalogues are far from neutrally written documents. By drawing the attention of the visitor to certain objects, or failing to describe others, narratives can be created and the experience and education of the museum visitor can be changed (Flood, 2007, 7). From the 1760s onwards, guidebooks written for the British Museum began to appear. The first of which was "*The General Contents of the British Museum: with remarks serving as a directory in viewing that noble cabinet*" (Miller, 1973, 64).

It is possible to see amongst many other things the sense of European supremacy through the use of ethnography analogy in the British Museum guidebooks. In 1867 there were still only two rooms dedicated to prehistoric British Antiquities and Ethnography in the British Museum, on the upper floor of the Museum, after the visitor had been through the mineralogical, zoological, botanical collections, as well as the classical antiquities on the ground floor (Jones, 1867, 3). In the 1867 Guidebook, there are no detailed references to the prehistoric collections held by the British Museum, only the notation of the room in which they are displayed. There is an extensive review of the Natural History and the Roman and Egyptian Collections, which seem to have been the given the priority for display in the Museum. This could have been due to the

noted public popularity, especially the mummies. A large portion of the Egyptian collection had been acquired after the defeat of Napoleon in 1802. The artefacts acquired that year included the Rosetta stone. In the 1871 Guide Book, Franks explains to the reader that the collections are arranged by chronological order "*from the earliest monuments of the Egyptian Pharaohs down to the last memorials of Roman dominion in this country*" (Franks, 1871, 63). Interestingly, the prehistoric and ethnographic rooms (still only two) are set apart at the end of this chronology, together. However, there is in this guidebook a description of the contents of both the "British" and Ethnographic collection. The British Collection is arranged by material, stone, bronze or iron. Franks states; "*The remains of the inhabitants of the British islands previous to the of Roman invasion embrace the Stone, Bronze and a portion of the Iron period of the Northern Antiquaries. They have for convenience been classed according to their materials and the order corresponding to the supposed introduction of such materials into this country*" (Franks, 1871, 124).

A decade later, though the prehistoric and ethnographic collections are still under the control of Franks, in the 1882 Guidebook Zoology and Natural History collections are omitted as they have been moved to Kensington. By the time of the publication of the 1882 Guidebook, a third room had been added for prehistoric antiquities thanks to the removal of the Natural History collections to South Kensington. A Prehistoric Room had been created which displayed a sample of the Christy Collection, as well as the temporary display of the Meyrick, Henderson and Burges Collections. The distribution and display of stone tools in the British and Medieval Room does not appear to have changed according to the description in the Guidebook (Franks, 1882, 124). The prehistoric portion of the Christy collection had been moved to the Museum but could not be displayed right away due to lack of space. Instead oriental arms were displayed alongside clocks, dials and watches and other oriental metal works. The final description of the room rather incongruously was the display of the Lewis Chessmen, bequeathed by Sir Walter C. Trevelyan (Franks, 1882, 142).

By 1892 the plan and display of the British Museum had changed significantly. Much more room was dedicated to both prehistory and ethnography. The influence of both Franks and the evolving discipline or archaeology can be seen

on the Museum. In the Prehistoric Saloon, ground stone tools are now described as belonging to the Neolithic period (Franks, 1892, 183). In this saloon there were British Stone axes and implements from the Neolithic sites of Grimes Graves and we can see the items donated by Reverend Greenwell as well (Franks,1892. 185). There are also notes in the cabinets to show viewers which stone and bronze artefacts were studied by John Evans in his work the Ancient Stone Implements of Great Britain (Franks, 1892, 187). The Ethnographic collection now had more room and the American collections were given their own room. The majority of stone axes on display were still Oceanic in origin (Franks, 1892, 233).

There is only one publication charting the temporary exhibitions at the British Museum which have been a standard feature of the British Museum's offerings to both the public and academic communities since the early 19th Century. Bowring's (2012) British Museum research is an invaluable and detailed view into the rotation of artefacts from the museum's stores and the ability of the museum to share its contained wealth of knowledge with the outside world. In terms of the history of temporary exhibitions at the British Museum and the display of prehistoric and ethnographic axes, there were no temporary exhibits of either prehistoric or ethnographic materials in the 19th Century at the British Museum. All the temporary exhibits during this period were conducted by the departments of Prints and Drawings, or that of Coins and Medals. The earliest recorded temporary exhibition at the museum was in 1839. The dominance of the departments of Coins and Medals and Prints and Drawings can be seen in both the calibre of the exhibits and the frequency of events. Exhibits included the works of Martin Luther in 1883 and the Domesday Survey in 1886. The majority of exhibits for these temporary events were sourced from the donation of the King's Library (Bowring, 2012, 6). The first temporary exhibition held by a department outside those two was a display of Japanese Prints by the Department of Ceramics and Ethnography in 1922. It must have been popular though as it was repeated in 1923 and 1925 (Bowring, 2012, 9). The first temporary exhibition of prehistoric material was held in 1929, which was a display of prehistoric Egyptian antiquities sourced from the excavations of Mr Guy Brunton. The same year there were exhibitions showcasing antiquities from excavations at both Nineveh and the Royal city of Ur (Bowring, 2012, 10). The

first temporary exhibition of stone tools was held from May-July 1934 and was based upon a collection of flint tools from Farnham and was reviewed in The Times on May 28th 1938, and was composed of tools from both the museum's collection and loans from private collections (Bowring, 2012, 12). From 1935, the department of British and Medieval Antiquities held many temporary displays of stone implements. The Sturge collection was partially exhibited in 1936 in an exhibition of artefacts from the site of Warren Hill. Palaeolithic tools from Cresswell Craggs had a temporary exhibition in the same year. An exhibition was curation in 1937 solely on Flint Technique and Patination (Bowring, 2012, 12). Just before the Second World War in 1938, there was an exhibition focused completely on the methods of hafting prehistoric and bronze axes, which may have contained the exhibition of polished axes. Interestingly, this exhibition was followed by one concentrating on the Swanscombe Man. Both were curated by the department of British and Medieval Antiquities and may indicate a resurgence of popular interest in the prehistoric man, as opposed to the classical era and later which had been the foundation of the cycle of temporary exhibitions for the previous 150 years (Bowring, 2012, 13). However, in the 1950s and 1960s, the dominance of the department of Prints and Drawings returns. There are only occasional displays by both the Department of Ethnography and Department of British and Medieval Antiquities during this period and both chose to focus on either the donations of singular collectors or the results of museum funded excavations (Bowring, 2012, 19). The 1970s and the opening of the Museum of Mankind ushered in a new era of ethnographic exhibiting at the British Museum.

Throughout this thesis I have shown how the knowledge making capacities of the British Museum have been limited by many different factors including: money, government, war and space. One way in which we can positively say that information was transmitted from the British Museum was through guidebooks and displays. Polished axes can provide a way into the large and often unmanageably diverse collections of the 19th Century and how collectors and collections used the British Museum as a reference point for their wider research. Guidebooks show donors and these can be traced to the wider literature. The British Museum is a reference point, but not always a static one.

But it has remained a repository for information as well as a platform for the display and dissemination of information. The information disseminated has changed considerably depending on the curator and the effect that external influences had upon each stakeholder in the Museum's collections.

In the elegance or clutter behind museum displays, the creator behind the object is often lost in favour of an overarching theme or concept. Displays are meant to be simultaneously persuasive, informative and aesthetically pleasing or even possibly interactive (especially for modern displays, an example of this being the Samsung centre at the British Museum). Despite advances in both display and conservation what is still often not communicated is the importance of the object to the original time and community that it belonged, in many cases this is sacrificed to being placed correctly in the taxonomic or evolutionary sequence that has been woven around the object. This can be evidenced in the ways that polished axes have been displayed in the British Museum, as described in Chapter 6. Spalding (2002) has stated that "the clarity of modern displays is often deceptive" (Spalding, 2002, 82). The current displays of polished axes in the British Museum contain little contextual information outside of their provenance and museum number. There are still agendas behind every display of every artefact in the British Museum. The curators no longer have the same amount of control over the display of prehistoric artefacts that they once did, constrained by design departments' need for conformity of style across the museum and the need for the protection of collections through conservation (Spalding, 2002, 81).

The primary way in which polished axes contributed to knowledge making was their place in collections donated to the British Museums, their commonality in their appearance in collections across a broad diversity of collectors meant that they could be used as a touchstone between the present and past. Networks of knowledge making at the British Museum were also required to be networks of cooperation. The networks at the British Museum were made up of a diverse set of collectors and scientists who held a variety of beliefs and backgrounds but held the common goal of creating "*generalisable findings*" (Star and Greismer, 1989, 387). Cooperation is required to create agreed upon findings and developing a framework for the consideration of historical material in a mutually agreed scientific framework. The movement of artefacts both through purchase

and gifting helped to cement these relationships which enabled cooperation and the creation of "*generalisable findings*" (Star and Greisemer, 1989, 387).

The social value of museums was not necessarily considered until the mid- to late twentieth century when the theoretical sociology of museums began to be studied academically in earnest. It is arguable how much of the arrangement of the British Museum in its initial one hundred and years was intended for the education of the public. Arguably the arrangement of artefacts within the British Museum was owing to its enlightenment ideals of reason, order and rationality, of bringing the world down to definable categories, as well as showcasing the power and reach of the British Empire (Fyfe, 2006, 34). The exhibition space, study spaces and libraries of the British Museum were a different matter, however, each of the rooms at the British Museum was a space in which to be seen and interact with others as well as a display of wealth and civilisation. The ownership and donation of artefacts to the British Museum was a powerful public message (Fyfe, 2006, 35). I have been argued that collections held on behalf of nations such as those at the British Museum, became symbolic of the existence of the nation itself and in extension the objects representative of peoples and places of their origin. Whilst the impression could be given that the British Museum's collections derived from solely from governmental aspirations and funding. Its acceptance of bequests and connection too many other institutions have meant that its collections are the results of hundreds of differing collecting strategies and interests. How these private collections came to be granted national status, presents challenges and questions and investigating them allows researchers to see the links between different institutions and collectors, disentangling the nationalistic veneer of the collections of the British Museum (Fyfe, 2006, 42). The choice of which artefacts to display is not necessarily a political one, but is affected by external influences and doesn't necessarily reflect the person who collected the object or the named curator.

Archaeologists have inevitably been heavily involved in writing the past – the methods behind the creation may have changed but the aim of illuminating and recreating the past remains the same. The resolution of the past has improved along with the development of better excavation and more accurate dating techniques. There still remains an unbridgeable divide between the minds of the

present and the past. It is this divide which has frustrated and intrigued archaeologists the most. Collecting, as well as demonstrating the social status of the collector, could be argued to be a method of connecting the collector to the past and consequently, an attempt to connect to the minds of the makers. Interest in technology and progress was very much a Victorian ideal and within that ideology polished axes represented the first markers of a civilisation that the middle class entrepreneurs of archaeology could relate to. Through their physical similarities in form across time and geographies the polished axe was an artefact which could make the divide between past and present seem smaller.

8.2: To appreciate more fully the interplay, in the history of archaeology, between information derived from ethnographic and archaeological sources

"*Museums operate symbolically, whether they like it or not. And much of what they contain is symbolic. This is the view of the world that we have lost, that museums have to help to recreate, if they are to give their visitors some understanding of life at a time when it was difficult to believe that death was merely a disintegration and life nothing more than a chemical reaction. A case can be made for doing away with all departments in museums and creating one for symbolism , because all objects become symbolism when they enter a museum and the job of the curator is to interpret them*" (Spalding, 2002, 73).

Often, all it took was the identification of a single polished axe in the records of the British Museum to identify the links between archaeology, ethnography and the creation of prehistory. A single polished axe (hafted) remains in the collections from Sir Edward Belcher, which the British Museum acquired in a much larger collection through Franks in 1872. The axe is from Point Hope, in Alaska. There are around 280 objects in the British Museum collections from Sir Edward Belcher, the majority of which (120) are from Oceania, with the bulk coming from Melanesia and New Guinea. The collection from Belcher was purchased with funds from the Christy Collection. Belcher collected his artefacts from the Artic in his first expedition on board the HMS Blossom, which took place during 1825 – 1827. He donated some to the British Museum, but also kept a personal and private collection (Owen, 2006, 9). The other ethnographic material in the British Museum's collections from Belcher was acquired at a public auction in 1872, where Sir John Lubbock also purchased material from

Belcher (Owen, 2006, 9). Franks and Lubbock shared a contact in Belcher, who had donated three Inupiat pieces to Lubbock's collection in 1867 (Owen, 2006, 9).

After the defeat of Napoleon of 1815 the role of the Royal Navy as a maritime protector was diminished and the role of the Royal Navy as an institution for colonial security and scientific enrichment grew considerably. Sir Joseph Banks oversaw missions of exploration to the North West passage, the Arctic Circle and the source of the Niger, which were all uncharted by Western mariners (Owen, 2006, 10). Between 1816 – 1859, there were over thirty voyager of exploration sanctioned and conducted by the Admiralty, who worked in conjunction with the Royal Society. Despite the involvement of the Royal Society these missions were far from purely scientific, all had trading, imperialist and colonial agendas that had to be fulfilled as well (Owen, 2006, 10). The mission of the HMS Blossom (1825) is a good example of these scientific missions. Collection of specimens was at the forefront of the agenda for the voyage and Belcher, was far from the only crew member to make a personal collection of artefacts. The Captain of the vessel, Captain Frederick Beechey built a personal collection of hunting and fishing equipment through trade with the Eskimo communities during the voyage (Owen, 2006, 12). The collections were built through a process indigenous barter which was well documented by Beard, Beechey and another crew member Peard (Owen, 2006, 12). Belchers publication on the Eskimo (1861), published in Transactions of the Ethnological Society, was referenced three times in Lubbock's (1865) *Prehistoric Times* (Lubbock, 1865 (1913 ed), 87,510,512, in Owen, 2006, 19). Despite his comprehensive study of ethnographic artefacts ultimately Lubbock reaches a damming conclusion about indigenous communities that is tied into the imperialist and colonialist justifying agendas of the era; he states: "*But after making every possible allowance for savages, it must I think be admitted that they are inferior, morally as well as in other respects to the more civilised races*" (Lubbock, 1913, 565).

A paper given to the American Association for the advancement of Science in 1896 by G Brown Goode upon the classification of museums, which highlights the historic relationship of the ethnographic and prehistoric collections, across museums. He characterised museums through two factors – "the character of their contents and by the purposes for which they were founded" (Brown

Goode, 1896, 154). The British Museum fell under the first category as a national, historical, anthropological and a museum of natural history and under the second category as a national museum (Brown Goode, 1896, 154). He defines a historical museum as "The Museum of History preserves those material objects which are associated with events in the history of individuals, nations or races, or which illustrate their condition at different periods in their national life" (Brown Goode, 1896, 155). The article considers that the Christy Collection was one of the best ethnographic collections in Europe, alongside the Pitt Rivers Museum in Oxford, but also states that ethnographic collections were less popular in England than elsewhere in Europe (for example Germany) in comparison to other forms of collecting (Brown Goode, 1896, 156).

His description of Museums of Anthropology gives a good viewpoint into the rationale behind the use of anthropological and archaeological artefacts in a museum environment *"The Museum of Anthropology includes such objects as illustrate the natural history of Man, his classification in races and tribes, his geographical distribution, past and present, and the origin, history and methods of his arts, industries, customs and opinions, particularly among primitive and semi-civilized peoples. In practice, Historical Archaeology is usually assigned to the latter, and Prehistoric Archaeology to the former. This is partly because Historic Museums, which are usually national in scope and supported on documentary evidence, treat the prehistoric races as extra limited; partly because prehistoric material is studied to best advantage through the natural history methods in use among anthropologists but not among historical students." (Brown Goode, 1896, 155).* The highlighted sentence at the end of the quote reinforces the separation of prehistoric archaeology, of the need for the development of a separate methodology due to the nature of the evidence available to archaeologists at the time. This legacy however, of comparative approaches between anthropological sciences and archaeology can still be viewed in the use of analogy, despite the fact that comparative approaches to display have been removed from the from the British Museum display cases for decades. How the British Museum has negotiated the relationships between archaeological and anthropological artefacts has been a major focus of this thesis.

These relationships began with artefacts from the objects from the voyages of discovery from the 17th Century onwards. Museum collections of artefacts from early voyages are extremely important records of ways of life and communities that no longer exist. However, lack of accompanying data and what does remain is superficial and often coloured by prejudices of the time, which is a problem shared by the artefacts recovered from the earliest anthropological fieldwork as well (Sillitoe, 1996, 6). The collection of material culture often took the place of meaningful dialogue between indigenous people and colonial officers or expeditionary groups. Manufacturing techniques are often easier to record than other aspects of social life such as social expectations or religious beliefs as they can be tangibly observed and have removable, collectable proof of their existence. Observations of the manufacture of material culture are also strongly tied to the need to record the lives of indigenous communities' lifestyles before their disappearance under the colonial influences. This is known in anthropology as "salvage ethnography" (Sillitoe, 1996, 8). Victorian scholars often gave ethnographic artefacts a false equivalence with natural products and natural history specimens. Paradigms of classification were transferred from the natural sciences and applied to human products, which also drew parallels between the human communities and the Victorian view of them as "fossilised" or "primitive" or living examples of ancestors in the present (Sillitoe, 1996, 9).

Ethnographic polished axes were used in the British Museum as a way of connecting visitors to their shared past through an exotic lens of the ethnographic present. Haast (1996) argues that one of the most important voices in anthropology, historic museum collections, has been lost in struggles of power, representation and the burden of managing large collections (Haast, 1996, 2). The problem with ethnographic artefacts in museums is that they have largely attempted to represent culture rather than display culture (Haast, 1996, 1). The European use of objects in a Museum setting is a comparative one. Objects when compared against each other, yield *"accurate information."* These direct comparisons are often used to give narrative accounts of "*what really happened*." (Pearce, 1996, 7). Although many histories give the beginnings of archaeological discourse to the Renaissance, attempts at constructing a critical history of national pasts did not begin in Europe till the late 17th Century (Pearce, 1996, 7). It is often not possible to disentangle the history of archaeological

artefacts and study in Museums as it is so closely tied to the history of the museums themselves (Pearce, 1996, 8).

The "gaze" of the 19th Century must have been very different from today. Scientists were preoccupied with the aesthetics of the natural world. The word species comes from the Latin word, "*specere*" which translated means 'to look at'. Darwin aimed to find why the animal and plant species of the world look alike or different. Aesthetic similarities were a key factor in the interpretation of polished axes in the mid-19th Century, especially in the comparison with their ethnographic counterparts (Spalding, 2002, 65). During the first voyages of discovery, the collection of material culture represented many different things: a form of communication despite obvious language barriers, a way of gathering information on the natural resources of newly colonised areas, aesthetic appreciation of local crafts and "enlightened" scientific endeavour (Thomas, 1989, 42). Subsequent contact between societies has obviously been mediated with colonial government, missionary movements, anthropologists and aid workers. All of whom have made further collections of artefacts removed to the West (Thomas, 1989, 43).

"*What is done with "curiosities" may therefore express a major historical transformation from culture as unconscious experience to culture as a fabricated identity*" (Thomas, 1989, 43).

There is no longer an ethnographic department at the British Museum, instead we are left with the department of Africa, Oceania and the Americas. "Oceania" is almost a misleading term as it belies the culturally diverse nature of the Pacific Islands and conveys a level of homogeneity which is not present. Oceania has held a unique place in the development of both anthropology and ethnographic fieldwork and this can be explored through the exchanges of artefacts, European, American, Australasian and colonial exchanges. Objects have commanded a central role in the exploration and study of Oceanic culture. Bell and Geismar (2009) have pointed out how anthropologists have selected objects and "*redefined in terms of their innate subjectivities, their role as social agents and their "promiscuous" material qualities*" (Bell and Geismar, 2009, 4). Rather than being studied for their form and classified as a typology, Oceanic artefacts have become part of a lived experience, where the objects are the result of the

beliefs and desires and have a transformative effect on the lives of their owners and makers. Objects and people become entangled in the process of everyday life. Through taking this processual view of objects, biographies have been formed surrounding seemingly concrete moments in time – the moment of the objects creation, moments where it is used and the disposal (temporary or permanent) of object and reconstructing these moments to find meaning in the form of biography. This view is very different from early conceptions of objects, both in anthropology and archaeology, which saw objects inhabiting a separate realm, whilst still being part of everyday life out of necessity (e.g. Haddon 1920) (Bell and Geismar, 2009, 6).

Artefacts both ethnographic and archaeological become representative of temporal periods, cultures and become the inanimate embodiments of lost peoples in the western narrative of man within the museum environment. Artefacts in a sterile collections environment are used to create the consciousness of entire communities. It is necessary to disentangle what "*badges*" the objects have been given and what is representative of their original identity of the artefact. These "badges" of representation of a particular time and place can also be used to mask the more utilitarian uses of the artefact towards a more stylised symbolic narrative view (Thomas, 1989, 43). Because both the prehistoric past and many ethnographic situations exemplify worlds which are now lost to modern science, there are the temptations of analogy as described in Chapter 7. A difficulty when examining ethnographic collections, even when examining them through a single artefact type is that the objects brought into the museum have become recontextualised and slotted into new histories from a western perspective and often re-categorised in the process as symbols of the corrosion of the culture of indigenous communities (Thomas, 1989, 41). During the first voyages of discovery, the collection of material culture represented many different things: a form of communication despite obvious language barriers, a way of gathering information on the natural resources of newly colonised areas, aesthetic appreciation of local crafts and "enlightened" scientific endeavour (Thomas, 1989, 42). Subsequent contact between societies has obviously been mediated with colonial government, missionary movements, anthropologists and aid workers. All of whom have made further collections of artefacts removed to the West (Thomas, 1989, 43). One pressing problem of

museum ethnography is the increasing isolation from ethnographic fieldwork. There has been a failure from museum's to run dedicated fieldwork based on research from collections (Sillitoe, 1988, 6). Sillitoe (1996) criticises the isolating of ethnographic artefact studies to museums, arguing that this has led to artefacts being viewed as oddities and reinforces their removal from their original context (Sillitoe, 1996, 11).

We must strive, as archaeologists, to create narratives of history that are based on scientific fact, not padded out with the belief systems of the ethnographic present, creating a form of scientific fiction that is not representative of the experiences of either culture, present or past. Accepting that much of the social diversity of humanity in past is beyond the reach of archaeologists, does not mean giving up on the discipline, but rather frees us as archaeologists to examine what we can see, rather than looking for the ghosts of religions and economies past.

Grand narratives of prehistory were arguably a way of figuring out archaeology's place as a scientific discipline. As well as orienting the place of the author on a social and academic level, they also positioned the country behind the publication's history on a geopolitical map whilst reinforcing national stories of creation and shared heritage. One of the most challenging aspects of approaching the world histories is to not use the recent past as a basis for the exploration of past societies. There is a danger that prehistory and later periods can be reduced to stages on the greater path to contemporary society. There is a need to question contemporary social logics and values which we take for granted when approaching the study of past societies. Colonialism as a force is a dynamic one which changes all the parties involved merging values and societies and creating new ones. In the process of creating the past, the complex struggles involved in the process of colonisation is often reduced or takes a secondary position to the prehistoric narrative being woven (Gosden, 2008, 23).

It has been argued that the history of archaeology, and particularly the history of archaeology within areas that were previously colonies do not sufficiently recognise the impact of the colonial viewpoint on how the histories of archaeology are being presented and the extent to which the colonial, and to some extent, nostalgic gaze affects the histories we produce as western

archaeologists (Moro-Abadia, 2006, 4). One particular criticism of the history of archaeologies written in the last century is their "internalist" focus, which is what I hoped to avoid with this thesis (Moro-Abadia, 2006, 4). There is no easy remedy for undoing the colonial bias which has been inherent in the schooling of Western archaeologists, which has been present since their primary schooling. Nationalistic presentations of history are by no means a new concept, and are a well-established means of political control.

The ultimate complication with the use of ethnographic artefacts is that their study and retrieval of ethnographic artefacts from the 18th, 19th and early 20th Centuries cannot be judged as coming ultimately from a place of scholarly intent -but of gathering information for modelling foreign policy of colonial states and to be bartered and collected objects of monetary rather than cultural value. Early expeditions financed by governments engaged in the maintenance and building of colonies could not afford to be solely focused on the material culture or interaction with the material culture that they were witnessing. Also problematic is the fact that many of these early expeditions which have become almost "type fossils" for anthropological engagement took place when anthropology itself was still emerging and evolving as a discipline (Borneman, 1995, 663). In the last two decades, anthropology has sought to consider the role it has played in defining international policy and world order. The emergence of anthropology as a discipline has had a very different legacy to that of archaeology's emergence. Anthropology, like archaeology, has been engaged in the reconstruction of sequences of evolution, and patterns of migration and diffusion. Linguistic and biological patterns of movement across the globe have been used by archaeologists in the construction of archaeological timelines (Borneman, 1995, 665). Anna Laura Jones (1993) has argued that traditionally museum ethnography and anthropology has not been included in the training of anthropologists or as a major focus of research and that its potential value has been underestimated (Jones, 1993, 201). Jones (1993) put forward the position that the study of the history of the use of ethnographic artefacts in museums can show "the post-colonial bias in the representation of other cultures, the ethical responsibilities of anthropologists, and the epistemological status of analytical categories ("art," "text," and "culture")" (Jones, 1993, 201). Despite the fact the curators of anthropological material in museums often conduct

fieldwork, publish their work in journals and other academic publications, as well as hosting events at their institution it can be argued that there has been a deterioration in the amount of power that museum curators can wield. This is due to the publicly funded nature of most museum collections and the necessity of the reduction of artefacts on display to simplified representations of themselves in order to be understood by the broadest audience possible (Jones, 1993, 202). The most common criticism of the display of ethnographic artefacts in museums is that it is more often than not reductionist and gives the impression that the cultures displayed are primitive (Jones, 1993, 204). Especially in art museums, ethnographic artefacts have often not been exhibited with the same reverence for the individual authorship and creativity of each piece, instead being only seen as representative of a group or people, in the same way archaeological artefacts are exhibited (Jones, 1993, 205). The "authenticity" of ethnographic artefacts is an important factor in the ability of an artefact to contribute to ethnography study with a divide being artificially placed between material culture produced before and after contact or colonisation (Jones, 1993, 206).

8.3: Stories written in Stone: a final word

"*Late eighteenth century antiquarianism is marked by the presence and absence of particular desires. The desire to possess the past in the form of artefacts and to own relics which had metonymic relationships to stories about the past or about myth, were key characteristics of collectors who sought, as Krzysztof Pomian puts it, "to hold in their hands the physical ties between the visible and invisible worlds*"" (Crane, 1997, 187).

The prehistory of Europe is essentially a well-crafted story, backed in part with scientific fact and in part with philosophical metaphor. There has always been considerable diversity in how European scholars have conceptualised prehistory and found metaphors to describe it. Europe has consistently had competing schools of philosophical approaches to prehistory, dependent upon the region and political background of the practitioners of prehistory (Sherratt, 1990, 4). Although the mid-19th Century, has undoubtedly been the dominant period? in terms of the evolution of prehistoric discourse and the period in which

prehistory was solidified as a prehistoric discipline, it was only possible as a progression of the enlightenment ideals before it (Sherratt, 1990, 5). There has also been diversity in the responses of the British Museum to the changing perceptions of prehistory; there has not been a unified unchanging narrative within the museum.

Prehistoric archaeology has always been a self-reflexive discipline, maybe owing to the fact that it is a search for origins and definitions of fundamental human conditions. The search for the definition of historical investigation in prehistoric archaeology and the search for empirical evidence of the past have always been central to the discipline since its foundation in the mid-19th Century. Arguably, the most prominent figure in the last forty years of searching for the definition and theoretical chronology of prehistoric archaeology has been Bruce Trigger. Trigger has identified the peculiarity of the development of prehistoric archaeology, as opposed to other forms of archaeology, because it is of course "lacking the tools of history proper" (Trigger, 1970, 27). The lack of historical texts forces the interaction with artefacts in a way that goes beyond other forms of archaeology. Traditionally in prehistory artefacts are often still considered through their connection to sequential events or part of a larger typological sequence (Trigger, 1970, 28). The construction of a method of historical enquiry is central to the way artefacts have been treated by prehistorians. Polished axes were just one piece of this construction, however, their durability, traceable petrographic qualities and ubiquity in Neolithic sites across wide geographic areas have meant that their appeal to archaeologists have endured since the mid-19th Century. The consideration of the literary texts produced from the study of polished axes only form part of the story of prehistory, though Schlanger (2004) proposes that they be considered as a literary genre in their own right (Schlanger, 2004, 166). Individual artefact narratives, become part of institutional narratives which in turn influenced the academic narratives of prehistory.

It can be argued that Romanticism has played a significant part in the role of the polished axe in prehistory. The imagined past has been largely drawn from the ethnographic present. Excavations in the 18th and 19th centuries were mainly used to reinforce knowledge rather than create it (Sherratt, 1990, 8). Objects became sources of metaphor and imagery. Images conjured from objects have

been long lasting and pervasive in archaeological writing. Romanticism, concealing colonialism and subjugation, guised in the spirit of exploration has been responsible for these comparisons between the present and the past. Artefacts from the ethnographic present became synonymous with European prehistory through a campaign of concerted comparisons in literature and display.

What this thesis ultimately boils down to is how objects in museum collections have been used in the authorship of the past. Authorship of the past is connected to both excavations and collections of artefacts from which the past. Prehistory has a tendency to be closeted off from the rest of archaeology which has created its own tradition of writing, evidence building and creation of knowledge. The creation of knowledge in prehistory has been delineated with a set of rules set in motion in the mid-19th Century, but constantly revised as science evolved and excavation techniques improved. The separation of prehistory as a separate discipline has been framed with an uneasy alliance with ethnography and social anthropological theories. In some areas the separation is largely metaphorical, with the lines becoming blurred between the archaeological past and ethnographic present in the narrative created by archaeologists as discussed in Chapters 4 and 5.

The British Museum's catalyst for its role in the creation of prehistory can be distilled down to the work and collecting activities of A.W. Franks. Before his employment at the museum, there was no internal impetus for the collection of British prehistoric artefacts or nationalistic archaeology at all and the ethnographic section was in considerable disarray, although there were connections with external learned societies and these were strengthened through the formidable skills at correspondence and diplomacy. Although his personal passions drove large portions of his acquisition, he showed a dedicated and completest approach to collecting stone tool technology which were far outside of the realm of his original collecting interests of numismatics.

The British Museum database, Merlin shows the huge swell in Prehistoric artefacts recorded as being either Neolithic or Bronze Age during this period:

Year of accession recorded	Number of artefacts
1814 – 1850	229
1853 – 1898 (Period Franks worked at the British Museum)	4320
1900 – 1945	4945
1946 – 2013	42,423

Table 6: Artefacts in the British Museum collection marked as either Neolithic or Bronze Age

The few numbers of prehistoric artefacts acquired before 1851 shows how the attitude of the museum curators changed after Franks was employed and indigenous archaeology gained popularity thanks to men such as Charles Roach Smith. I believe the dramatic increase in numbers between 1946 and 2013 can be attributed to two things: the museum sponsored archaeological excavations during this period, meaning that the Museum was no longer reliant on donations or the ability to purchase artefacts from the market. The second reason is during the latter half of the twentieth century, many artefacts were catalogued that were previously undocumented in the British Museum's collections. Polished axes were not a leading artefact, but rather formed part of a wider part of the database used by researchers in the formation.

The polished axe has ultimately not been the focus of this thesis, but a conduit through which to explore the complex geographies of collecting that has radiated out from the British Museum and how the British Museum was connected to the ways in which prehistory has been written. Long term movements and relationships are considered to move beyond the short and immediate moments which traditionally dominate the biographies of both institutions and artefacts. Histories traditionally favour concentration upon boundaries, and breaks from tradition and the story of the polished axe is nothing different, concentrating upon the boundaries between civilised and primitive, hunter gatherer and farming (Greenhill-Hooper, 1992, 11).

In order to complete this story, it is necessary to go back to the mid-19th Century, where much of my thesis has taken place. The place of the polished axe in prehistory as a marker of the Neolithic was determined during this period, alongside the place of the British Museum in the knowledge sharing networks

that were creating prehistory. One of the contributing factors to the place of the British Museum was the composition of artefacts during this period. The visitor experience is hard to recreate but guidebooks can give the reader some idea. In 1859, the British Museum's foremost librarian and Keeper of Printed Books, Anthony Panizzi published *a Guidebook to the Exhibition Rooms of the Departments of Natural History and Antiquities*. Coincidentally this is the same year of the publication of Charles Darwin's *Origin of the Species.* Panizzi leads us through the halls, giving the reader an idea of the experience of visiting the museum. The Guide was written after the purchase of Montague House, which allowed the expansion of the museum's collections and the better display of artefacts. In order to reach the archaeological collections, visitors first had to walk through the Natural History, Mineralogy and Botany galleries. After gaining their tickets, the visitor was invited to proceed upstairs. The central saloon on the upper floor would have been an impressive sight. Visitors would have been flanked by animals of the Great African Plains, nestled amongst more familiar sheep and antelope (Panizzi, 1859, 4). The museum boasted an African elephant and a hippopotamus as well. The animals were arranged together in known branches of taxonomy nestled behind glass cases, containing the exotic, majestic, rare and extinct. A prize specimen of these galleries was a case containing a dodo's foot, a powerful example of man's effect on nature (Panizzi, 1859, 5). The Victorian order of nature was gently reinforced in the visitors' minds. The animals are described for the natural behaviours peculiar to their species and the donor of each specimen is clearly referenced. In the Guide the Visitor's attention is drawn to specific busts of donors to the museum during their journey, such as the bust of Sir Joseph Banks. Donors are also listed in the guide, in full at the end of each section. Association with the museum and philanthropy could be an important marker of social standing during this period (Panizzi, 1859, 4).

After the visitor's journey through the Great Plains, the visitor would pass through halls bearing the fruits of the ocean, the museum had a particularly exemplary collection of both corals and fossil fish (Panizzi, 1859, 26). The visitor would have then continued through the North Gallery to the geological collections and herbarium of vegetables and plants. Nowhere else in the country during this perio, was such an arrangement possible in a permanent location.

The experience of visiting the British Museum would have been one of part cabinet of curiosity and part international fair. The library collections, too would have been unrivalled apart from the libraries of Oxford and Cambridge, but arguably the British Museum was far more widely accessible than academic institutions during this period. The impact that polished axes may have had upon visitors can only really be gauged through the publications of people known to have visited the British Museum and engaged with its collections such as Sir John Lubbock and Sir John Evans.

Collections are often made for aesthetic effect, even those that have had scientific aims behind their retrieval. All of the collections stored in the British Museum are the result of "private passions" which have been chosen to merit public safeguarding. The impetus for this thesis was driven by individual collectors and collections that have made their way into the British Museum's collections. Collections are often created to become emblems of the real world. The process of acquisition and ordering of a collection into a series can often act *"as a symbolic miniaturisation of wider world"* (King, 1994, 238). The fact that objects have been gathered together into a collection can add considerably to their perceived value and significance. Collections are also often gathered with the advice of museum collectors and then given back to the museum. There is often a symbiotic relationship between collectors, curators and museum collectors (Spalding, 2002, 44). Artefacts have a greater value placed upon them due to their inclusion and display in museum settings. The collector behind the museum collections creates the market for artefacts but museums often determine the worth. Artefacts are often referred to as being of "museum-quality" if they are found to be unbroken or suffering from little decay (Spalding, 2002, 26). Through the previous chapters of this thesis I have demonstrated that there have been a variety of stakeholders in the biographies of the polished axes held in the British Museum's collections. These include, but are not limited to:

- The manufacturers and original users
- Curators
- Archaeologists
- Public/Visitors to the Museum
- Anthropologists
- Collectors

The polished axe also hold differing values concurrently within the same Museum collection. The polished axe holds cult value, communicative value and exhibition value (Shanks and Tilley, 1992, 71). I would like to end with antiquarianism, where both this thesis and the story of the British Museum began. The antiquarians' desire to preserve the past is juxtaposed with the often fragmentary nature of their collections, which were frequently based on personal interest rather than possible future instructional qualities. Writers like Sir Walter Scott have caricatured the antiquarian pursuit, which belies the achievements of early collectors. There was a transition in history of collecting, which bridged the divide between the late 18th and early 19th Century. Crane (1997) has described this transition as "*shifting from personal, idiosyncratic and elite networks to nationalistic, collective and representative ones*" and that this transition took objects from "*from stories to histories, from fragments to totalities, cabinets to museums*" (Crane, 1997, 187). The polished axe is a both a boundary and transitional object, occupying different time periods and societies, contributing to histories on many different levels, personal, societal and academic.

Prehistory has generated its own terminology, analytical processes and descriptors of artefacts. Because of the lack of evidence, certain pieces of durable evidence carry a greater level of significance than they may have done in the past, simply because of the fact that they remain. Providing a narrative of "what happened" in prehistory, with limited physical evidence drove the search for evidence elsewhere. The search for comparisons drew in the use of ethnographic artefacts. The spirit of exploration has always been strong in the study of prehistory; however, this spirit has often been the cause of inappropriate use of analogy and has spurred the use of ethno-history and ethnoarchaeology as a source of secondary information. Taylor (2008) describes the power and lure of these comparisons as "hypnotic" (Taylor, 2008, 5).

Polished axes were one method of applying boundaries to the unknown that prehistory represented, as a type fossil, it joined a compendium of artefacts that became synonymous with each of the tripartite divisions of prehistory and further subdivided the Stone Age. If prehistory is studied historiographical

manner, it can be shown that the discipline has been preoccupied with the production of definitions, boundaries and the production of an intellectual tradition that could recover meanings, values, societies and events from the archaeological record. Prehistory has been driven by the need to understand humanity, which is rooted into to the enlightenment ideals responsible for the initial steps towards antiquarian endeavour in the 18th Century, which still affect prehistoric archaeology (Taylor, 2008, 3).

Appendix

European Collectors considered by time period

Please note this list is not exhaustive as acquisition data is not available for all the axes in the British Museum collection

1750 -1851	1851-1891	1891-1945	1945-PRESENT
Richard Payne Knight (1824-1900)	Franks (collecting, 1865-1897) Curator/Collector	Luke Collings (1894)	Samuel Hazzledine Warren (1958 - Bequeathed) Archaeologist / Collector
	Henry Christy (1860 – 1869) Banker and Collector	Paul Vouga (1929) Archaeologist	Charles Taylor Trechmann (1964 / 1965- Bequeathed) Chemist / Archaeologist
	Charles Roach Smith (1865)	William Sturge (1919 – Bequeathed, separately from Greenwell) Medical Doctor / Collector	Francis Pryor (1987) Archaeologist
	Christy Fund (1867-1977)	WE Grant (1938) Archaeologist	Charles Raphael Oscar (1946 – Bequeathed) FSA Founding Member
	Frederick Brome (1866)	Francis Brent (1903) Collector / Fellow of the Society of Antiquaries	Wellcome Institute (1964) Museum
	Alfred Harris (1863)	Sir John Lubbock (1916) MP / Banker / Collector	
	Henry J Drummond (1953)	James Flanagan (1943) Sold Artefacts to the BM from Ireland	
	Robert Clutton (1852) Collector	Leon Morel (1901 – Bequeathed) Archaeologist / Tax Collector	
	Charles Monkman (1868)	George J Buscall Fox (1928)	

	Archaeologist / Collector	Donator of stone tools from Middle East and Africa	
	Reverend James Beck (1872 with Christy Fund and 1919 with Sturge Collection) Clergy / Collector	Paul Aveneau de la Granciere (1928) Archaeologist	
	Sir John Evans (1870 / 1873 / 1905) Archaeologist / Keeper of the Ashmolean Museum	Fenton and Sons Ltd (1894-1927) Dealership and London Auction House	
	Reverend William Greenwell (1879 / 1919 - incorporating part of the Sturge collections) Clergy / Archaeologist		
	TL Cooke (1854) Historian / Collector		
	Sir Charles Hercules Read (1857 – 1929) Keeper of the Department of Prehistory and Ethnography at BM		
	Dr. Gustav Freidrich Klemm (1868) Anthropologist / Collector / Director of Royal Dresden Library		
	George Fabian Lawrence (1862-1939)		

New Zealand Collectors considered by time period

Please note this list is not exhaustive as acquisition data is not available for all the axes in the British Museum collection

1750 -1851	**1851-1891**	**1891-1945**	**1945-PRESENT**
Henry Christy Banker and Collector	Franks (collecting) Curator/Collector	Geoffrey and Irene Beasley (*collecting*) Brewery Owner/Private Collector/Collected from field	Geoffrey and Irene Beasley (*bequeathed/sold 1944, 1959-1977*) Brewery Owner/Private Collector/Collected from field
London Missionary Society (*collecting from 1795*)	Henry Ogg Forbes (Franks) (Collection sent through Royal Society in 1882 for Read to choose from) Ornithologist/Explorer	Archibald Liversidge (*collection bequeathed*) British Scientist/Professor at Uni of Sydney	William Oldman Collection (*1949 – donated by wife brought with American Collections*) Dealer/Collector of Artefacts
James Cook – (one polished axe) Explorer/Military	Archibald Liversidge (*collecting*) British Scientist/Professor at Uni of Sydney	Frederick Meinertzhagen (*donated by wife 1895*) Banking/Collector	
	Meinertzhagen (*collecting*) Banking/Collector		
	London Missionary Society (*donations - 1890*)		
	Government of Victoria (*donated to Franks 1891*)		
	Christy Fund		
	James Hector – Colonial Museum New Zealand (*most donated in 1876*) Colonial Administrator		
	William Sparrow – (*purchased with Christy Fund*) Clergy		
	George Grey (*donated in 1854 and also wrote publication on stone tools in 1868*) Explorer and Colonial Governor		

	Rev R Taylor (*donated in 1863 – Church Missionary Society*) Clergy		

Papua New Guinea Collectors considered by time period

Please note this list is not exhaustive as acquisition data is not available for all the axes in the British Museum collection

1750 -1851	1851-1891	1891-1945	1945-PRESENT
Henry Christy Banker and Collector	Franks (collecting) *Collected artefacts from Whitten and Peter Comrie and other various sources (HMS Basilisk*) Curator/Collector	Geoffrey and Irene Beasley (*collecting*) Brewery Owner/Private Collector/Collected from field	Geoffrey and Irene Beasley (*bequeathed/sold 1944*) Brewery Owner/Private Collector/Collected from field
London Missionary Society (*collecting from 1795*)	Colonial and Indian Exhibition (Hugh Hastings Romilly – 1886) Colonial Administrator	Archibald Liversidge (*collection bequeathed 1928*) British Scientist/Professor at Uni of Sydney	William Oldman Collection (*1949 – donated by wife brought with American Collections*) Dealer/Collector of Artefacts
	Archibald Liversidge (*collecting*) British Scientist/Professor at Uni of Sydney	Meinertzhagen (*donated by wife 1895*) Banking/Collector	Maria Wronska Friend (1982 – *personally collected from field*) Anthropologist
	Meinertzhagen (*collecting*) Banking/Collector	Natural History Museum (*Voyage of HMS Basilisk transferred in 1893*)	Paul Sillitoe (sold to the museum in 1979 – collected from the field Anthropologist
	London Missionary Society (*donations - 1890*)	Bronislaw Malinowski (*purchased with Christy Fund, 1922*) Anthropologist	Geoffrey Elworthy (1979) Vendor to the Museum
	Government of Victoria (*donated to Franks 1891*)	Charles Seligman and W. Cooke-Daniels *(collected from field 1903-1904 and acquired 1906)* Seligman – Ethnologist Cooke-Daniels – Military	Wellcome Museum *(Axes possibly acquired in 1954 but exact date unknown)*
	Christy Fund	William Macgregor (*May have been acquired as part of Franks Bequest or to use as Christy Collection duplicates 1897*)	

		Colonial Administrator Governor of British New Guinea	
		Captain F.R. Barton *Donated 257 artefacts in 1919 – part of Christy Collection – collected from field* *Military Captain (Army)*	
		James Edge Partington (*collected from field, collection donated as part of Christy fund 1919)* BM Volunteer/Qualified Solicitor	
		Walter Edward Guinness (axes donated 1934 collected from field) Politician	

Bibliography

Alberti, S.J.M.M., 2005. Objects and the Museum. *Isis*, 96(4), pp.559–571. Available at: http://www.journals.uchicago.edu/doi/10.1086/498593 [Accessed October 2, 2016].

Ames, M., 1992. *Cannibal Tours and Glass Boxes: The Anthropology of Museums*, University of British Columbia.

Appadurai, A., 1994. Commodities and the politics of value. In S. Pearce, ed. *Interpreting Objects and Collections: Leceister Readers in Museum Studies*. Leceister: Leceister University Press .

Appadurai, A., 1988. *The Social Life of Things: Commodities in Cultural Perspective: Cambridge Studies in Social and Cultural Anthropology*, Cambridge : Cambridge University Press.

Arnold, K., 2006. *Cabinets for the Curious: Looking back at Early English Museums*, Aldershot: Ashgate.

Arthur, K.W., 2010. Feminine Knowledge and Skill Reconsidered: Women and Flaked Stone Tools. *American Anthropologist*, 112(2), pp.228–243. Available at: http://doi.wiley.com/10.1111/j.1548-1433.2010.01222.x [Accessed October 2, 2016].

Bangert, S., 2008. Evans, Scandinavia and International Exchange Networks. In A. MacGregor, ed. *Sir John Evans 1823-1908: Antiquity, Commerce and Natural Science in the Age of Darwin*. Ashmolean Museum: Biddles of Norfolk.

Barber, I., 1995. CONSTRUCTIONS OF CHANGE: A HISTORY OF EARLY MAORI CULTURE SEQUENCES on JSTOR. *The Journal of Polynesian Society*, 104(4), pp.357–396. Available at: http://www.jstor.org/stable/20706633?seq=1#page_scan_tab_contents.

Barkai, R., 2011. The Evolution of Neolithic and Chalcolithic woodworking tools and the intensification of human production: axes, adzes and chisels from Southern Levant. In M. Davies, V; Edmonds, ed. *Stone Axe Studies III*. Oxbow Books.

Barker. G., 2006. *The Agricultural Revolution in Prehistory: why did Foragers become Farmers?* 1st ed., Oxford: Oxford University Press.

Barton, R., 1990. “An influential set of chaps”: The X Club and Royal Society politics 1864 – 85. *The British Journal for the History of Science*, 23(1), pp.53–81.

Barton, R., 1998. Huxley, Lubbock and Half a Dozen Others: Professionals and Gentlemen in the Formation of the X Club: 1851 – 1864. *Isis*, 89(3), pp.410–444.

Bell, J.A. & Geismar, H., 2009. Materialising Oceania: New ethnographies of things in Melanesia and Polynesia. *The Australian Journal of Anthropology*, 20(1), pp.3–27. Available at: http://doi.wiley.com/10.1111/j.1757-6547.2009.00001.x [Accessed October 2, 2016].

Benedict, B., 1991. International exhibitions and national identity. *Anthropology Today*, 7(3), pp.5–9.

Bennett, T., 2004. *Pasts Beyond Memory: Evolution, Museums, Colonialism*, London : Routledge.

Bennett, T., 1995. *The Birth of the Museum: History, theory and politics*, London : Routledge.

Bernstein, S.D., 2011. Reading Room Geographies of Late-Victorian London: The British Museum, Bloomsbury and the People's Palace, Mile End. *Interdisciplinary Studies in the Long 19th Century*, 19(13), pp.1–6.

Best, S., 1977. THE MAORI ADZE: AN EXPLANATION FOR CHANGE on JSTOR. *The Journal of the Polynesian Society*, 86(3), pp.307–337. Available at: https://www.jstor.org/stable/20705270?seq=1#page_scan_tab_contents.

Blackwood, B., 1950. *The Technology of a Modern Stone Age People in New Guinea.*, Oxford: Pitt Rivers Museum.

Bolton, L. et al., 2013. *Melanesia : art and encounter* 1st ed., London: British Museum Press.

Bolton, Lissant; Thomas, Nicholas; Bonshek, Elizabeth; Adams, Julie; Burt, B. ed., 2013. Significant collectors and donors of the British Museum Melanesia collection. In *Melanesia Art and Encounter*. British Museum Press, pp. 335–356.

Bolton, L., 2003. The Object in View: Aborigines, Melanesians and Museums. In A. K. Peers, L; Brown, ed. *Museums and Source Communities: A Routledge Reader.* London : Routledge.

Bond, C.J., 2009. Biographies of Stone and Landscape: Lithic Scatters. *Internet Archaeology 26*, 26(1), pp.1–5. Available at: http://intarch.ac.uk/journal/issue26/1/toc.html.

Bonshenk, E., 2013. Introduction: Papua New Guinea, the south and south east. In J. Bolton, L., Bonshenk, E., Thomas, N; Adams, ed. *Melanesia Art and Encounter*. London : British Museum Press,.

Borneman, J., 1995. American anthropology as foreign policy. *American Anthropologist*, 97(4), pp.663–672.

Bouard, M., 1992. Trade in Neolithic Jade Axes from the Alps: New Data. In C. Healy, F; Scarre, ed. *Trade and Exchange in Prehistoric Europe. Oxbow Monographs 33.* Oxford : Oxbow Books.

Bowden, M., 1991. *Pitt Rivers: The Life and Archaeological Work of Lieutenant-General Augustus Henry Lane Fox Pitt Rivers, DCL, FRS, FSA.*, Cambridge : Cambridge University Press.

Bowring, J., 2012. *Chronology of Temporary Exhibitions at the British Museum.*, London : British Museum Press,.

Bradley, R.; Edmonds, M., 1993. *Interpreting the axe trade: production and exchange in Neolithic Britain*, Cambridge : Cambridge University Press.

Bradley, R., 2005. *Ritual and Domestic Life in Prehistoric Europe.*, London : Routledge.

Braunholtz, H.J.; Digby, A. 1952., 1952. The Beasley Collection. *The British Museum Quarterly*, 15(1), pp.103–105.

Braunholtz, H.J., 1937. Ethnographical Collection from New Guinea. *The British Museum Quarterly*, 11(4), pp.163–167.

Braunholtz, H.J., 1938. Ethnographical Museums and the collector: Aims and Methods. *The Journal of the Royal Anthrpological Institute of Great Britain and Ireland,*, 68(1), pp.1–16.

Braunholtz, H.J., 1929. Ethnographical Objects from Micronesia and Melanesia. *The British Museum Quarterly*, 3(4), pp.109–110.

Braunholtz, H.J., 1953a. History of Ethnography in the Museum after 1753 (Part 1). *The British Museum Quarterly*, 18(3), pp.90–93.

Braunholtz, H.J., 1953b. History of Ethnography in the Museum after 1753 (Part 2). *The British Museum Quarterly*, 4(18), pp.109–120.

Braunholtz, H.J., 1938. Presidential Address, 1938. Ethnographical Museums and the Collector: Aims and Methods. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 68, p.1. Available at: http://www.jstor.org/stable/2843981?origin=crossref [Accessed October 2, 2016].

Braunholtz, H.J., 1953. The Sloane Collection: Ethnography. *The British Museum Quarterly* , 18(1), pp.23–26.

British Museum. et al., 2010. *The Maori collections of the British Museum*, British Museum Press.

British Museum. & Wilson, D.M. (David M., 1989. *The collections of the British Museum*, British Museum Publications for the Trustees of the Museum.

British Museum Trustees, 2013. British Museum Accessing Enlightenment Study Pack. Available at: https://www.britishmuseum.org/pdf/British Museum Study Pack Accessing Enlightenment.pdf.

Brown, A, Coote, J and Gosden, C., 2000. TYLOR'S TONGUE: MATERIAL CULTURE, EVIDENCE, AND SOCIAL NETWORKS. *Journal of the Anthropological Society of Oxford* , 31(3), pp.257–276. Available at: https://www.scribd.com/document/267294764/TYLOR-S-TONGUE-MATERIAL-CULTURE-EVIDENCE-AND-SOCIAL-NETWORKS.

Brown Goode, G., 1896. *The Principles of Museum Administration*, York : Coultas and Volans.

Bruck, J., 1999. Ritual and Rationality: Some problems of interpretation in European Archaeology. *European Journal of Archaeology*, 2(3), pp.313–344.

Brumm, A., 2011. Power tools: Symbolic considerations of stone axe production and exchange in 19th Century South – Eastern Australia. In M. Davies, V; Edmonds, ed. *Stone Axe Studies III*. Oxford: Oxbow Books.

Burt, B., 2013. Introduction: Solomon Islands. In B. Bolton, Lissant; Thomas, Nicholas; Bonshek, Elizabeth; Adams, Julie; Burt, ed. *Melanesia Art and Encounter*. British Museum Press, pp. 191–310.

Campbell – Smith, W.C., 1965a. The Distribution of Jade Axes in Europe with a supplement to the catalogue of those from the British Isles. *Proceedings of the Prehistoric Society (New Series),*, 31(1), pp.25–33.

Campbell – Smith, W.C., 1965b. The Distribution of Jade Axes in Europe with a supplement to the catalogue of those from the British Isles. *Proceedings of the Prehistoric Society (New Series)*, 31(1), pp.25–33.

Carneiro, R.L., 1979. Forest clearance among the Yanomamo, observations and implications. *Anthropologica*, 52(1), pp.39–76.

Cassen, S, Pétrequin,P, Boujot, C., Domínguez-Bella, S, Guiavarc'h, M and Querré, G.., 2010. Measuring distinction in the megalithic architecture of the Carnac region: from sign to material. In J. Furholt, M., Luth, F. and Muller, ed. *Megaliths and Identities: Early Monuments and Neolithic Societies from the Atlantic to the Baltic, 3rd European Megalithic Studies Group Meeting 13th – 15th of May 2010*. Bonn: Rudolf Habelt, pp. 225–228.

Cassen, S., Pétrequin, P., Boujot, C., Domínguez-Bella, S., Guiavarc'h, M., & Querré, G., 2010. Measuring distinction in the megalithic architecture of the Carnac region: from sign to material. *Journal of Neolithic Archaeology*, 1(1), pp.1–49.

Cassen, S., 2005. Pigeon-Raven and sperm whale, magical objects and domestic horned. The division of the world during the early neo-Neolithic in Western France. *Documenta Praehistorica*, 32(1), pp.197–204.

Caygill, M and Cherry, J., 1997. *A.W. Franks: Ninteenth Century Collecting and the British Museum,* London: British Museum Press.

Caygill, M., 1997. Franks and the British Museum – the cuckoo in the nest. In J. Caygill, M and Cherry, ed. *A.W. Franks: Ninteenth Century Collecting and the British Museum*. London: British Museum Press.

Caygill, M., 1981. *The Story of the British Museum.* London, ed., London: British Museum Press.

Chapman, W., 1989. The organizational context in the history of archaeology: Pitt Rivers and other British archaeologists in the 1860s. *The Antiquaries Journa*, 69(1), pp.23–42.

Chapman and Hall, 1838. *A visit to the British Museum: containing a familiar description of every object of interest in the various departments of that establishment ; with numerous illustrations*, London : rustees of the British Museum.

Chappell, S., 1987. *Stone axe morphology and distribution in Neolithic Britain* 177th ed., British Archaeological Reports.

Childe, V.G., 1944. Archaeological ages as technological stages. *Journal of the Anthropological Institute of Great Britain and Ireland*, 74(1), pp.7–24.

Childe, V.G., 1957. The evolution of society. *Antiquity*, 31(124), pp.210–213.

Childe, V.G., 1948. The Final Bronze Age in the Near East and in Temperate Europe. *Proceedings of the Prehistoric Society (New Series*, 14(1), pp.177–195.

Childe, V.G., 1949. The origin of Neolithic culture in northern Europe. *Antiquity*, 23(91), pp.123–135.

Clare, T., 2009. An Asymmetrical Trade: Trade in the Exotic and Our Understanding of Axes and Early Neolithic Exchange. *Internet Archaeology Volume 26*. Available at: http://intarch.ac.uk/journal/issue26/4/toc.html.

Clark, G., 1979. Archaeology and Human Diversity. *Annual Review of Anthropology*, 8(1), pp.1–21. Available at: http://www.annualreviews.org/doi/10.1146/annurev.an.08.100179.000245 [Accessed October 2, 2016].

Clark, G., 1965. Traffic in Stone Axe and Adze Blades. *Economic History Review*, 18(1), pp.1–28.

Classen, C; Howe, D., 2006. The museum as sensescape: western sensibilities and indigenous artefacts. In R. Gosden, C. Edwards, E and Philips, ed. *Sensible Objects: Colonialism, Museums and Material Culture.* Oxford : Berg.

Cleghorn, P.L., 1984. AN HISTORICAL REVIEW OF POLYNESIAN STONE ADZE STUDIES on JSTOR. *The Journal of the Polynesian Society*, 93(4), pp.399–421. Available at: https://www.jstor.org/stable/20705891?seq=1#page_scan_tab_contents.

Clough, T. H., Cummins, W.A., 1988. *Stone Axe Studies Volume 2: the petrology of prehistoric stone implements from the British Isles*, London: Council for British Archaeology .

Clough, T.H.M.; Cummins, W.., 1979. *Stone Axe Studies, Volume 1, CBA Report 23*, Council for British Archaeology.

Coles, J., 1979. An Experiment with Stone Axes. In *Stone Axe Studies, Volume 1, CBA Report 23*. London: Council for British Archaeology.

Cook, J., 1997. A Curator's Curator: Franks and the Stone Age Collections. In J. Caygill, M; Cherry, ed. *A.W. Franks: Ninteenth Century Collecting and the British Museum*. London : British Museum Press.

Cooney, G; Mandal, S., 1995. Getting to the core of the problem: petrological results from the Stone Axe Project. *Antiquity*, 69(10), pp.969–980.

Cooney, G., 2002. So many shades of rock. In G. Jones, A; MacGregor, ed. *Colouring the past: The significance of Colour in Archaeological Research*. London and New York: Berg.

Cooney, G. et al., 1998. *The Irish Stone Axe Project.*, Wordwell.

Corbey, R., 1993. Ethnographic Showcases, 1870-1930. *Cultural Anthropology*, 8(3), pp.338–369. Available at: http://doi.wiley.com/10.1525/can.1993.8.3.02a00040 [Accessed October 2, 2016].

Counsel, P., 2016. *Higher Education and Research Bill*, Published by Authority of the House of Commons.

Crane, S., 1997. Memory, Distortion and History in the Museum. *History and Theory*, 36(4), pp.44–63.

Cummings, V., 2002. Texture and transformation in the Neolithic world. *Oxford Journal of Archaeology,*, 21(4), pp.249–261.

Cummings, W.A., 1974. The Neolithic stone axe trade in Britain. *Antiquity*, 48(1), pp.201–208.

Daniel, G., 1950. *A hundred years of archaeology.*, London: Duckworth.

Darvill, T. et al., 2011. Excavations at a Neolithic Enclosure on The Peak, near Birdlip, Gloucestershire. *Proceedings of the Prehistoric Society*, 77(1–4), pp.139–204. Available at: http://www.journals.cambridge.org/abstract_S0079497X00000669 [Accessed October 27, 2016].

Darvill, T., 1989. The Circulation of Neolithic Stone and flint axes - a case study from Wales and the mid-West of England. *Proceedings of the Prehistoric Society*, 55(1), pp.27–45.

Davidson, J.N.R., 2004. *The Oldman collection of Maori artifacts*, Polynesian Society.

Davis, V. & Edmonds, M.R. (Mark R.., 2011. A time and place for the Belmont Hoard. In V. Davis & M. R. (Mark R. . Edmonds, eds. *Stone axe studies III*. Oxbow Books, p. 441.

Dornan, J.L., 2002. Agency and Archaeology: Past, Present, and Future Directions. *Journal of Archaeological Method and Theory*, 9(4), pp.303–329. Available at: http://link.springer.com/10.1023/A:1021318432161 [Accessed October 2, 2016].

Edmonds, M., 1992. Towards a Context for production and exchange: the polished axe in Earlier Neolithic Britain. In C. Scarre et al., eds. *Trade and exchange in prehistoric Europe : proceedings of a conference held at the University of Bristol, April 1992*. Oxbow Books in association with the Prehistoric Society and the Société préhistorique française, p. 255.

Edmonds, M.R., 2001. *Stone tools and society : working stone in Neolithic and Bronze Age Britain*, Routledge.

Edmonds, M.R. (Mark R.., 1999. *Ancestral geographies of the Neolithic : landscapes, monuments and memory*, Routledge.

Edwards, E., 1870. *Lives of the Founders of the British Museum: With Notices of Its Chief Augmentors : Internet Archive* 1st ed., Trübner and Company. Available at: https://archive.org/details/livesfoundersbr00edwagoog.

Etemad, B., 2007. *Possessing the world : taking the measurements of colonisation from the eighteenth to the twentieth century*, Berghahn Books.

Evans, J., 1872. *The ancient stone implements, weapons, and ornaments of Great Britain* 2nd ed., London: Longman Green & Co. Available at: https://archive.org/details/ancientstoneimpl00evanuoft.

FEEST, C.F., 1993b. EUROPEAN COLLECTING OF AMERICAN INDIAN ARTEFACTS AND ART. *Journal of the History of Collections*, 5(1), pp.1–11. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/5.1.1 [Accessed October 2, 2016].

Flood, C., 2007. "And Wot does the Catlog tell me?" Some Social Meanings of Nineteenth-Century Catalogues and Gallery Guides. *19: Interdisciplinary Studies in the Long Nineteenth Century*, 0(5). Available at: http://www.19.bbk.ac.uk/articles/10.16995/ntn.461/ [Accessed October 27, 2016].

Forgan, S., 2005. Building the Museum. *Isis*, 96(4), pp.572–585. Available at: http://www.journals.uchicago.edu/doi/10.1086/498594 [Accessed October 2, 2016].

Franks, A.., 1882. *Synopsis of the Contents of the British Museum* 1st ed., London: Trustees of the British Museum.

Franks, A.W., 1997. An Apology of My Life. Private Manuscript (1892). In M. Caygill & J. F. Cherry, eds. *A.W. Franks : nineteenth-century collecting and the British Museum*. Published for the Trustees of the British Museum by British Museum Press, p. 372.

Franks, A.W., 1870. *Guide to the Christy collection of prehistoric antiquities and ethnography.* 1st ed., London: Trustees of the British Museum.

Franks, A.W., 1868. *Guide to the Christy collection of prehistoric antiquities and ethnography temporarily placed at 103 Victoria Street Westminster.* 1st ed., London: Trustees of the British Museum.

Franks, A.W., 1871. *Synopsis of the Contents of the British Museum* 1st ed., London: Trustees of the British Museum.

Franks, A.W., 1882. *Synopsis of the Contents of the British Museum* 1st ed., London: Trustees of the British Museum.

Franks, A.W., 1862. *Synopsis of the Contents of the British Museum* 1st ed., London: Trustees of the British Museum.

Franks, A.W., 1877. *Synopsis of the Contents of the British Museum.* 1st ed., London: Trustees of the British Museum.

Friedman, J., 1985. Captain cook, culture and the world system. *The Journal of Pacific History*, 20(4), pp.191–201. Available at: http://www.tandfonline.com/doi/abs/10.1080/00223348508572520 [Accessed October 27, 2016].

Fyfe, G., 2006. Sociology and the social aspects of museums. In S. Macdonald, ed. *A companion to museum studies*. Blackwell Pub, p. 570.

Gamble, C., 2009. *Origins and revolutions : human identity in earliest prehistory*, Cambridge University Press.

Gamble, C. & Kruszynski, R., 2009. John Evans, Joseph Prestwich and the stone that shattered the time barrier. *Antiquity*, 83(320), pp.461–475. Available at: http://www.journals.cambridge.org/abstract_S0003598X00098574 [Accessed October 27, 2016].

Gamble, C. & Moutsiou, T., 2011. The time revolution of 1859 and the stratification of the primeval mind. *Notes and Records of the Royal Society*, 65(1).

Gasgoine, J., 2001. Joseph Banks and the Expansion of Europe. In M. Lincoln, ed. *Science and Exploration in the Pacific*. Boydell and Brewer, pp. 39–51.

Gathercole, P., 1982. Gordon Childe: man or myth? *Antiquity*, 56(218), pp.195–198. Available at: http://www.journals.cambridge.org/abstract_S0003598X00054685 [Accessed October 27, 2016].

Gathercole, P., 2001a. Lord Sandwich's Collection of Polynesian Artefacts. In M. Lincoln, ed. *Science and Exploration in the Pacific*. Boydell and Brewer, pp. 103–115.

Gathercole, P., 2001b. Lord Sandwich's Collection of Polynesian Artefacts. In *Science and Exploration in the Pacific*.

Geneste, J.-M. et al., 2012. The Origins of Ground-edge Axes: New Findings from Nawarla Gabarnmang, Arnhem Land (Australia) and Global Implications for the Evolution of Fully Modern Humans. *Cambridge Archaeological Journal*, 22(1), pp.1–17. Available at: http://www.journals.cambridge.org/abstract_S0959774312000017 [Accessed October 2, 2016].

Gijn, A.L. van, 2008. *Exotic flint and the negotiation of a new identity in the "margins" of the agricultural world: the case of the Rhine-Meuse delta.* H. Fokkens et al., eds., Universiteit Leiden.

Gilman, A. et al., 1981. The development of social stratification in Bronze Age Europe. *Current*. Available at: http://www.jstor.org/stable/2742414 [Accessed October 15, 2016].

Goodrum, M.R., 2008. Questioning Thunderstones and Arrowheads: The Problem of Recognizing and Interpreting Stone Artifacts in the Seventeenth Century. *Early Science and Medicine*, 13(5), pp.482–508. Available at: http://booksandjournals.brillonline.com/content/journals/10.1163/157338208x345759 [Accessed October 27, 2016].

Goodrum, M.R. et al., Recovering the Vestiges of Primeval Europe: Archaeology and the Significance of Stone Implements, 1750–1800. *Journal of the History of Ideas*, 72(1), pp.51–74.

GOODRUM, M.R., 2002. The meaning of ceraunia: archaeology, natural history and the interpretation of prehistoric stone artefacts in the eighteenth century. *The British Journal for the History of Science*, 35(3). Available at: http://www.journals.cambridge.org/abstract_S0007087402004776 [Accessed October 2, 2016].

Gosden, C., 1999. *Anthropology and archaeology : a changing relationship*, Routledge.

Gosden, C., 2004. *Archaeology and colonialism : cultural contact from 5000 B.C. to the present*, Cambridge University Press.

Gosden, C. & Knowles, C., 2001. *Collecting colonialism : material culture and*

colonial change, Berg.

Gosden, C., Larson, F. & Petch, A., 2007. *Knowing things : exploring the collections at the Pitt Rivers Museum, 1884-1945*, Oxford University Press.

Gosden, C. & Lock, G., 1998. Prehistoric histories. *World Archaeology*, 30(1), pp.2–12. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438243.1998.9980393 [Accessed October 2, 2016].

Gould, R.A. & Watson, P.J., 1982. A dialogue on the meaning and use of analogy in ethnoarchaeological reasoning. *Journal of Anthropological Archaeology*, 1(4), pp.355–381.

Hamon, C., 2008. Functional analysis of stone grinding and polishing tools from the earliest Neolithic of north-western Europe. *Journal of Archaeological Science*, 35(6), pp.1502–1520. Available at: http://linkinghub.elsevier.com/retrieve/pii/S030544030700204X [Accessed October 2, 2016].

Hamon, C., Quilliec, B. & European Association of Archaeologists. Annual Meeting (11th : 2005 : Cork, I., 2008. *Hoards from the Neolithic to the metal ages : technical and codified practices : session of the XIth Annual Meeting of the European Association of Archaeologists*, Archaeopress.

Hardy, K and Silitoe, P., 2003. Material Perspectives: Stone tool use and Material Culture in Papua New Guinea. *Internet Archaeology, Volume 14.* Available at: http://intarch.ac.uk/journal/issue14/hardy_index.html.

Harris, Claire, O'Hanlon, M., 2013. The ethnographic museum: Its future. *Anthropology Today*, p.8–12`.

Hawkes, K., 1984. : Anthropology for Archaeologists: An Introduction . Bryony Orme. *American Anthropologist*, 86(3), pp.767–768. Available at: http://doi.wiley.com/10.1525/aa.1984.86.3.02a00750 [Accessed October 2, 2016].

Hawkins, E., 1859. *A Guide to the Exhibition Rooms in the Departments of Natural History and Antiquities* 1st ed., London: Trustees of the British Museum.

Hawkins, E., 1873. *A Guide to the Exhibition Rooms in the Departments of Natural History and Antiquities (Reprint of 1859 edition with amendments).* 1st ed., London: Trustees of the British Museum.

Hawkins, E., 1856. *Synopsis of the Contents of the British Museum* 1st ed., London: Woodfall and Kinder.

HAYNES, C., 2008. A "Natural" Exhibitioner: Sir Ashton Lever and his Holosphusikon. *Journal for Eighteenth-Century Studies*, 24(1), pp.1–13. Available at: http://doi.wiley.com/10.1111/j.1754-0208.2001.tb00427.x [Accessed October 2, 2016].

Henare, A.J.M., 2005. *Museums, anthropology and imperial exchange*, Cambridge University Press.

Henare, A.J.M., Holbraad, M. & Wastell, S., 2007. *Thinking through things :*

theorising artefacts ethnographically, Routledge.

Herle, A., 2003. Objects, Agency and Museums: Continuing dialogues between the Torres Strait and Cambridge. In L. L. (Laura L. Peers & A. K. (Alison K. Brown, eds. *Museums and source communities : a Routledge reader*. Routledge, p. 280.

Herle, A. & Rouse, S., 1998. *Cambridge and the Torres Strait : centenary essays on the 1898 anthropological expedition*, Cambridge University Press.

Hill, K., 2005. *Culture and class in English public museums, 1850-1914*, Ashgate.

Hodder, I., 2012. *Archaeological theory today*, Polity Press.

Hodder, I., 1994. The Contextual analysis of symbolic meanings. In Interpreting objects and collections, ed. *Interpreting objects and collections*. Routledge, p. 343.

Hodder, I., 1991. *The meanings of things : material culture and symbolic expression*, HarperCollins Academic.

Hodder, I., *The present past : an introduction to anthropology for archaeologists*,

Hodder, I. & Lane, P., 1982. A Contextual Examination of Neolithic Axe Distribution. In J. Ericson & T. Earle, eds. *Contexts for Prehistoric Exchange.* New York : Academic Press. Available at: https://books.google.co.uk/books?hl=en&lr=&id=CiqLBQAAQBAJ&oi=fnd&pg=PA213&dq=A+contextual+Examination+of+Neolithic+Axe+Distribution+in+Britain.&ots=d5cKn2FTel&sig=aTa3RPE2dUlP_zbomhlaOwpDGgI [Accessed October 27, 2016].

Hodder, I. & University of Cambridge., 1982. *Symbolic and structural archaeology*, Cambridge University Press.

Hollowell, J., & Nicholas, G., 2008. A critical assessment of ethnography in archaeology. In Q. E. Castañeda & C. N. Matthews, eds. *Ethnographic archaeologies : reflections on stakeholders and archaeological practices*. AtlaMira Press, p. 212.

Hooper-Greenhill, E., 1992a. *Museums and the shaping of knowledge*, Routledge.

Hooper-Greenhill, E., 1992b. *Museums and the shaping of knowledge*, Routledge.

Hoskins, J., 2008. Agency, Biography and Objects. In C. Y. Tilley, Sage Publications., & Sage eReference (Online service), eds. *Handbook of material culture*. SAGE, p. 556.

Huxley, R., 2003. Natural history collectors and their collection sampling macaronis and instruments of empire. In K. Sloan, A. (Andrew M. . Burnett, & British Museum., eds. *Enlightenment : discovering the world in the eighteenth century*. British Museum Press, p. 304.

Jenkins, R., 1994. Rethinking ethnicity: Identity, categorization and power. *Ethnic and Racial Studies*, 17(2), pp.197–223. Available at: http://www.tandfonline.com/doi/abs/10.1080/01419870.1994.9993821 [Accessed October 27, 2016].

Jensen, J.V. & Crosland, M.P., 1970. The X Club: Fraternity of Victorian Scientists. *The British Journal for the History of Science*, 5(1), p.63. Available at: http://www.journals.cambridge.org/abstract_S0007087400010621 [Accessed October 27, 2016].

Jones, A., 2005. Lives in fragments?: Personhood and the European Neolithic. *Journal of Social Archaeology*, 5(2), pp.193–224. Available at: http://jsa.sagepub.com/cgi/doi/10.1177/1469605305053367 [Accessed October 2, 2016].

Jones, A., MacGregor, G. & European Association of Archaeologists. Annual Meeting (5th : 1999 : Bournemouth, E., 2002. *Colouring the past : the significance of colour in archaeological research*, Berg.

Jones, A.L., 1993. Exploding Canons: The Anthropology of Museums. *Annual Review of Anthropology*, 22(1), pp.201–220. Available at: http://www.annualreviews.org/doi/10.1146/annurev.an.22.100193.001221 [Accessed October 27, 2016].

Jones, J.W. & Jones, J.W., 1867. *A guide to the exhibition rooms of the departments of natural history and antiquities.*, [London,] : printed by order of the Trustees,. Available at: http://www.biodiversitylibrary.org/bibliography/104697 [Accessed November 1, 2016].

Joyce, T and Dalton, O.M., 1910. *Handbook to the ethnographical collections : British Museum. Dept. of British and Mediaeval Antiquities and Ethnography : Free Download & Streaming : Internet Archive*, London : Trustees of the British Museum . Available at: https://archive.org/details/handbooktoethnog00brit.

Joyce, T.A., 1910. *Handbook to the ethnographical collections*, Printed by order of the Trustees. Available at: https://archive.org/details/handbooktoethnog00brit.

Kaeppler, A.L., 1994. Paradse Regained: The role of Pacific Museums in the Forging of National Identity. In F. Kaplan, ed. *Museum and the Making of Ourselves: The role of objects of National Identity*. Leicester University Press, pp. 20–40.

KAEPPLER, A.L., 1979. Tracing the History of Hawaiian Cook Voyage Artefacts in the Museum of Mankind in Captain Cook and the South Pacific. *British (The) Museum Yearbook London*, (3), pp.167–197.

Kaeser, M.-A. et al., 2002. On the international roots of prehistory. *Antiquity*, 76(291), pp.170–177. Available at: http://www.journals.cambridge.org/abstract_S0003598X0008995X [Accessed October 2, 2016].

Kaplan, F.S., 1996. *Museums and the making ourselves the role of objects in national identity*, Leicester University Press.

Keiller, A. et al., 1941. First Report of the Sub-Committee of the South-Western Group of Museums and Art Galleries on the Petrological Identification of Stone Axes. *Proceedings of the Prehistoric Society*, 7(1), pp.50–72. Available at: http://www.journals.cambridge.org/abstract_S0079497X00020272

[Accessed November 1, 2016].

Kidd, D., 1977a. Charles Roach Smith and his museum of London antiquities. *The British Museum Yearbook London*, (2), pp.105–135. Available at: http://www.openbibart.fr/item/display/10068/1154906.

Kidd, D., 1977b. Charles Roach Smith and his Museum of London Antiquities. In D. Kidd, ed. *Collectors & Collections, the British Museum Yearbook 2.* London : British Museum Press., pp. 105–135. Available at: http://www.britishmuseum.org/research/search_the_collection_database/term_details.aspx?bioId=80347.

King, J.C.H., 1994. Ethnographic Collections. In A. MacGregor, ed. *Sir Hans Sloane : collector, scientist, antiquary, founding father of the British Museum*. London : Published for the Trustees of the British Museum by British Museum Press in association with Alistair McAlpine, p. 308.

King, J.C.H., 1997. Franks and Ethnography. In M. Caygill & J. F. Cherry, eds. *A.W. Franks : nineteenth-century collecting and the British Museum*. London: Published for the Trustees of the British Museum by British Museum Press, p. 372. Available at: https://catalyst.library.jhu.edu/catalog/bib_1959331 [Accessed November 1, 2016].

KING, J.C.H., 1996. NEW EVIDENCE FOR THE CONTENTS OF THE LEVERIAN MUSEUM. *Journal of the History of Collections*, 8(2), pp.167–186. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/8.2.167 [Accessed October 2, 2016].

KING, J.C.H., 1994a. VANCOUVER'S ETHNOGRAPHY: A preliminary description of five inventories from the voyage of 1791 95. *Journal of the History of Collections*, 6(1), pp.35–58. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/6.1.35 [Accessed November 1, 2016].

KING, J.C.H., 1994b. VANCOUVER'S ETHNOGRAPHY: A preliminary description of five inventories from the voyage of 1791 95. *Journal of the History of Collections*, 6(1), pp.35–58. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/6.1.35 [Accessed October 2, 2016].

Kirch, P.V., 2000. *On the road of the winds : an archaeological history of the Pacific islands before European contact*, University of California Press.

Knapp, A.B. & van Dommelen, P., 2008. Past Practices: Rethinking Individuals and Agents in Archaeology. *Cambridge Archaeological Journal*, 18(1), pp.15–34. Available at: http://www.journals.cambridge.org/abstract_S0959774308000024 [Accessed October 2, 2016].

Kopytoff, I., 1988. The cultural biography of things: commoditization as process. In A. Appadurai, ed. *The Social Life of Things: Commodities in Cultural perspective*. Cambridge University Press. Available at: http://www.cambridge.org/gb/academic/subjects/anthropology/social-and-cultural-anthropology/social-life-things-commodities-cultural-perspective?format=PB&isbn=9780521357265.

Kramer, C., 1979. *Ethnoarchaeology : implications of ethnography for archaeology* C. Kramer, ed., New York: Columbia University Press. Available at: http://trove.nla.gov.au/work/8546064?selectedversion=NBD1269301.

Kramer, C., 1979. *Ethnoarchaeology : implications of ethnography for archaeology / Carol Kramer, editor. - Version details - Trove* 1st ed. C. Kramer, ed., New York: Columbia University Press. Available at: http://trove.nla.gov.au/work/8546064?selectedversion=NBD1269301.

Kuklick, H., 2011. Personal equations: reflections on the history of fieldwork, with special reference to sociocultural anthropology. *Isis; an international review devoted to the history of science and its cultural influences*, 102(1), pp.1–33. Available at: http://www.ncbi.nlm.nih.gov/pubmed/21667774 [Accessed November 1, 2016].

KUKLICK, H., 1996. islands in the Pacific: Darwinian biogeography and British anthropology. *American Ethnologist*, 23(3), pp.611–638. Available at: http://doi.wiley.com/10.1525/ae.1996.23.3.02a00090 [Accessed November 1, 2016].

Lamberg-Karlovsky, C.C., 1990. Tracing Archaeology's Past. The Historiography of Archaeology. Andrew L. Christenson, Ed. Southern Illinois University Press, Carbondale, 1989, xii, 252 pp., illus. $29.95. Publications in Archaeology. Based on a Conference, Carbondale, IL, May 1987. *Science (New York, N.Y.)*, 247(4942), pp.581–2. Available at: http://www.ncbi.nlm.nih.gov/pubmed/17743997 [Accessed October 2, 2016].

Lamdin-Whymark, H., 2015. Sir John Evans: Experimental Knapping and the Origins of Lithic Research. *Lithics – The Journal of the Lithic Studies Society*, 0(30), p.45.

Larson, F., 2007. Anthropology As Comparative Anatomy?: Reflecting on the Study of Material Culture During the Late 1800s and the Late 1900s. *Journal of Material Culture*, 12(1), pp.89–112. Available at: http://mcu.sagepub.com/cgi/doi/10.1177/1359183507074563 [Accessed November 1, 2016].

Larson, F., 2010. The Things About Henry Wellcome. *Journal of Material Culture*, 15(1), pp.83–104. Available at: http://mcu.sagepub.com/cgi/doi/10.1177/1359183510355225 [Accessed November 1, 2016].

Larson, F., Petch, A. & Zeitlyn, D., 2007a. Social Networks and the Creation of the Pitt Rivers Museum. *Journal of Material Culture*, 12(3), pp.211–239. Available at: http://mcu.sagepub.com/cgi/doi/10.1177/1359183507081886 [Accessed November 1, 2016].

Larson, F., Petch, A. & Zeitlyn, D., 2007b. Social Networks and the Creation of the Pitt Rivers Museum. *Journal of Material Culture*, 12(3), pp.211–239. Available at: http://mcu.sagepub.com/cgi/doi/10.1177/1359183507081886 [Accessed October 2, 2016].

Larsson, L., 2011. The ritual use of axes. In V. Davis & M. R. (Mark R. . Edmonds,

eds. *Stone axe studies III*. Oxbow Books, p. 441.

Lemmonier, P., 2004. Technological choices. In V. Buchli, ed. *Material culture : critical concepts in the social sciences Vol. 3*. Routledge.

Lincoln, M. & National Maritime Museum (Great Britain), 2001. *Science and exploration in the Pacific : European voyages to the Southern oceans in the eighteenth century*, Boydell & Brewer.

Linde, C., 2001. Narrative and social tacit knowledge. *Journal of Knowledge Management*, 5(2), pp.160–171. Available at: http://www.emeraldinsight.com/doi/10.1108/13673270110393202 [Accessed November 1, 2016].

Liversidge, A., 1894. Notes on some Australasian and other stone implements. *Journal and Proceedings of the Royal Society of New South Wales*, 28, pp.232–245. Available at: http://royalsoc.org.au/council-members-section/101-jprocrsnsw-vol-28.

Lubbock, J., 1879. *Origin of Civilization and the Primitive Condition of Man; mental and social condition of savages*, D. Appleton and Co. Available at: https://archive.org/details/TheOriginOfCivilizationAndThePrimitiveConditionOfManMentalAnd.

Lubbock, J., 1865. *Pre-historic times, as illustrated by ancient remains, and the manners and customs of modern savages*, D. Appleton and company. Available at: https://archive.org/details/prehistorictime05lubbgoog.

Macdonald, S., Collecting Practices. In *A Companion to Museum Studies*. Malden, MA, USA: Blackwell Publishing Ltd, pp. 81–97. Available at: http://doi.wiley.com/10.1002/9780470996836.ch6 [Accessed November 1, 2016].

MacGregor, A., 1997. Collectors, Connoisseurs and Curators in the Victorian Age. In M. Caygill & J. F. Cherry, eds. *A.W. Franks : nineteenth-century collecting and the British Museum*. Published for the Trustees of the British Museum by British Museum Press, p. 372.

MacGregor, A., 2007. *Curiosity and enlightenment : collectors and collections from the sixteenth to the nineteenth century*, Yale University Press.

MacGregor, A., 2009. Exhibiting evolutionism: Darwinism and pseudo-darwinism in museum practice after 1859. *Journal of the History of Collections*, 21(1), pp.77–94. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/fhn034 [Accessed October 2, 2016].

MacGregor, A., 2007. Forming an Identity: The Early Society and its context. In S. M. Pearce & Society of Antiquaries of London., eds. *Visions of antiquity : the Society of Antiquaries of London, 1707-2007*. Society of Antiquaries of London, p. 451.

MacGregor, A., 1994. Prehistoric and Romano-British Antiquities. In A. MacGregor, ed. *Sir Hans Sloane : collector, scientist, antiquary, founding father of the British Museum*. London : Published for the Trustees of the British Museum by British Museum Press in association with Alistair

McAlpine, p. 308.

MacGregor, A. & Ashmolean Museum., 2008. Sir John Evans: model Victorian, Polymath and Collector. In A. MacGregor & Ashmolean Museum., eds. *Sir John Evans 1823-1908 : antiquity, commerce and natural science in the age of Darwin*. Ashmolean Museum, University of Oxford, p. 326.

MacGregor, G., 2002. Making monuments out of mountains: the role of colour and texture in the constitution of meaning and identity at recumbent stone circles. In A. Jones & G. MacGregor, eds. *Colouring the past : the significance of colour in archaeological research*. Berg, pp. 141–158.

Mack, J., 1999. Antiquities and the Public: The expanding Museum 1851 -96. In M. Caygill & J. F. Cherry, eds. *A.W. Franks : nineteenth-century collecting and the British Museum*. Published for the Trustees of the British Museum by British Museum Press, p. 372.

Malinowski, B., 2002. *Argonauts of the western pacific : an account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea*, [Read Books].

Malinowski, B., *Argonauts of the western Pacific : an account of native enterprise and adventure in the archipelagos of Melanesian New Guinea*,

Malone, C., 2003. The Italian Neolithic: A Synthesis of Research. *Journal of World Prehistory*, 17(3), pp.235–312. Available at: http://link.springer.com/10.1023/B:JOWO.0000012729.36053.42 [Accessed October 2, 2016].

McCarthy, C., 2007. *Exhibiting Māori : a history of colonial cultures of display*, Berg.

McNabb, J., 2012. *Dissent with modification : human origins, palaeolithic archaeology and evolutionary anthropology in Britain 1859-1901*, Archaeopress.

Miller, D., 1994. Things ain't what they used to be. In S. Pearce, ed. *Interpreting objects and collections*. Routledge, p. 343.

Miller, E., 1973. *That Noble Cabinet A History of the British Museum by Miller, E.*, London : Deutsch. Available at: http://www.pemberleybooks.com/product/that-noble-cabinet-a-history-of-the-british-museum/19745/.

Moro-Abadía, O., 2006. The History of Archaeology as a "Colonial Discourse." *Bulletin of the History of Archaeology*, 16(2), p.4. Available at: http://www.archaeologybulletin.org/articles/abstract/10.5334/bha.16202/ [Accessed October 25, 2016].

Murray, T., 2002. Epilogue: why the history of archaeology matters. *Antiquity*, 76(291), pp.234–238. Available at: http://www.journals.cambridge.org/abstract_S0003598X00090037 [Accessed October 2, 2016].

Murray, T., 2005. The Historiography of Archaeology and Canon Greenwell. *Bulletin of the History of Archaeology*, 15(2), p.26. Available at: http://www.archaeologybulletin.org/articles/abstract/10.5334/bha.15203/

[Accessed October 25, 2016].

Murray, T. & Walker, M.J., 1988a. Like WHAT? A practical question of analogical inference and archaeological meaningfulness. *Journal of Anthropological Archaeology*, 7(3), pp.248–287.

Murray, T. & Walker, M.J., 1988b. Like WHAT? A practical question of analogical inference and archaeological meaningfulness. *Journal of Anthropological Archaeology*, 7(3), pp.248–287. Available at: http://linkinghub.elsevier.com/retrieve/pii/0278416588900104 [Accessed October 2, 2016].

Myrone, M. & Peltz, L., 1999. *Producing the past : aspects of antiquarian culture and practice, 1700-1850*, Ashgate.

Neich, R., 2005. Pacific collections here and there. *Journal of Museum Ethnography* , 17, pp.172–175. Available at: https://www.jstor.org/stable/40793778?seq=1#page_scan_tab_contents.

O'Hanlon, M. & Welsch, R.L., 2000. *Hunting the gatherers : ethnographic collectors, agents and agency in Melanesia, 1870s-1930s*, Berghahn Books.

Orme, B., 1974a. Twentieth-Century Prehistorians and the Idea of Ethnographic Parallels. *Man*, 9(2), p.199. Available at: http://www.jstor.org/stable/2800074?origin=crossref [Accessed October 25, 2016].

Owen, J., 2008. A significant friendship: Evans, Lubbock and a Darwinian world order. In A. MacGregor, ed. *Sir John Evans 1823-1908: Antiquity, Commerce and Natural Science in the Name of Darwin*. Oxford : Gazelle DIstribution.

Owen, J., 2006. Collecting artefacts, acquiring empire: Exploring the relationship between Enlightenment and Darwinist collecting and late-nineteenth-century British imperialism. *Journal of the History of Collections*, 18(1), pp.9–25. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/fhi042 [Accessed October 2, 2016].

Owen, J., 2014. From Down House to Avebury: John Lubbock, prehistory and human evolution through the eyes of his collection. *Notes and Records of the Royal Society*, 68(1).

Owen, J., 2014. From Down House to Avebury: John Lubbock, prehistory and human evolution through the eyes of his collection. *Notes and Records: the Royal Society journal of the history of science*, 68(1), pp.21–34. Available at: http://rsnr.royalsocietypublishing.org/cgi/doi/10.1098/rsnr.2013.0048 [Accessed October 2, 2016].

Owen, J., 2000. *The collecting activities of Sir John Lubbock (1834-1913).* Durham . Available at: etheses.dur,ac.uk/1603 [Accessed October 2, 2016].

Owen, J., 1999. The Collections of Sir John Lubbock, the First Lord Avebury (1834-1913): "An Open Book?" *Journal of Material Culture*, 4(3), pp.283–302.

Owen, J. 2013. *Darwin's apprentice : an archaeological biography John Lubbock* , Pen and Sword Books Limited, UK.

Panizzi, A., 1859. *Memoirs of libraries: including a handbook of library economy (Volume 2)* 2nd ed., London: Trübner & Company. Available at: https://archive.org/details/memoirslibrarie06edwagoog.

Pearce, S., 1999. Presenting Archaeology. In N. Merriman, ed. *Making early histories in museums*. Leicester University Press, p. 212.

Pearce, S.M., 1996a. *Archaeological curatorship*, Leicester University Press.

Pearce, S.M., 1996b. *Exploring science in museums*, Athlone.

Pearce, S.M., 1994. *Interpreting objects and collections*, Routledge.

Pearce, S.M., 1999. Museums of Anthropology or Museums as Anthropology? *Anthropologica*, 41(1), p.25. Available at: http://www.jstor.org/stable/10.2307/25605915?origin=crossref [Accessed October 2, 2016].

Pearce, S.M., 1995. *On collecting : an investigation into collecting in the European tradition*, Routledge.

Pearce, S.M. & Society of Antiquaries of London., 2007. *Visions of antiquity : the Society of Antiquaries of London, 1707-2007*, Society of Antiquaries of London.

Pearson, M.P. et al., 1998. Stonehenge for the ancestors: the stones pass on the message. *Antiquity*, 72(276), pp.308–326.

Peers, L., 1999. "Many Tender Ties": The Shifting Contexts and Meanings of the S BLACK Bag on JSTOR. *World Archaeology*, 31(2), pp.288–302. Available at: https://www.jstor.org/stable/125063?seq=1#page_scan_tab_contents.

Petch, A., 2006a. Chance and certitude: Pitt Rivers and his first collection. *Journal of the History of Collections*, 18(2), pp.257–266. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/fhl028 [Accessed October 25, 2016].

Petch, A., 2006b. Chance and certitude: Pitt Rivers and his first collection. *Journal of the History of Collections*, 18(2), pp.257–266. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/fhl028 [Accessed October 2, 2016].

Petch, A., 2006. Chance and certitude: Pitt Rivers and his first collection. *Journal of the History of Collections*.

Petch, A., 2003. Collecting Immortality: the Field Collectors who Contributed to the Pitt Rivers Museum, Oxford on JSTOR. *Journal of Museum Ethnography*, 16(1), pp.127–139. Available at: http://www.jstor.org/stable/40793747?seq=1#page_scan_tab_contents.

Petrequin, P., Sheridan, A., Cassen, S., Erreta, M., Gauthier, E, Klassen, L., Le Muax, N and Pallier, Y., 1993. Neolithic Quarries, the Exchange of Axes and Social Control in the Southern Voyages. In C. Scarre et al., eds. *Trade and exchange in prehistoric Europe : proceedings of a conference held at the University of Bristol, April 1992*. Oxbow Books in association with the Prehistoric Society and the Société préhistorique française, p. 255.

Petrequin, P and Petrequin, A.M., 2011. The Twentieth Century polished stone

axeheads of New Guinea: why study them? In. In V. Davis & M. R. (Mark R. . Edmonds, eds. *Stone axe studies III*. Oxbow Books, p. 441.

Petrequin, P.& A.-M.P., 1993. From polished stone tool to the sacred axe: the axes of the Danis of Irian Jaya, Indonesia. In A. Berthelet & J. Chavaillon, eds. *The Use of Tools by Human and Non-human Primates*. Oxford University Press. Available at: http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780198522638.001.0001/acprof-9780198522638 [Accessed October 25, 2016].

Pettitt, P. & White, M., 2014. John Lubbock, caves, and the development of Middle and Upper Palaeolithic archaeology. *Notes and Records: the Royal Society journal of the history of science*, 68(1), pp.35–48. Available at: http://rsnr.royalsocietypublishing.org/cgi/doi/10.1098/rsnr.2013.0050 [Accessed October 25, 2016].

Pettitt, P. & White, M., 2014. John Lubbock, caves, and the development of Middle and Upper Palaeolithic archaeology. *Notes and Records of the Royal Society*, 68(1).

Pfaffenberger, B., 1992. Social Anthropology of Technology. *Annual Review of Anthropology*, 21(1), pp.491–516. Available at: http://www.annualreviews.org/doi/10.1146/annurev.an.21.100192.002423 [Accessed October 25, 2016].

Philip, R., Melanesia Art and Encounter. In E. Bonshek et al., eds. *Melanesia : art and encounter*. p. 362.

Pierre, P. & Pétrequin, P., 2008. Neolithic Alpine axeheads, from the Continent to Great Britain, the Isle of Man and Ireland. , pp.262–279.

Piggott, S. and Powell, T.G.., 1951. The excavation of three Neolithic Chambered Tombs in Galloway, 1949. *Proceedings of the Society of the Antiquaries of Scotland* , 83(1).

Pitts, M. et al., 1996. The Stone Axe in Neolithic Britain. *Proceedings of the Prehistoric Society*, 62(2), pp.311–371. Available at: http://www.journals.cambridge.org/abstract_S0079497X00002838 [Accessed October 25, 2016].

Politis, G. & Alberti, B., 1999. *Archaeology in Latin America*, Routledge.

Quinnell, M., 2000. Before it has become too late" The making and repatriation of Sir William MacGregor's Official Collection from British New Guinea. In M. O'Hanlon & R. L. Welsch, eds. *Hunting the gatherers : ethnographic collectors, agents and agency in Melanesia, 1870s-1930s*. Berghahn Books, p. 286.

R. M. D., R.M., 1943. Time and Chance: the Story of Arthur Evans and his Forebears. By Joan Evans. Pp. xi + 410; pl. 16. London: Longmans, Green & Co. 1943. 21s. *The Journal of Hellenic Studies*, 63, p.121. Available at: http://www.journals.cambridge.org/abstract_S0075426900034121 [Accessed October 27, 2016].

Ravn, M., 2011a. Ethnographic analogy from the Pacific: just as analogical as any other analogy. *World Archaeology*, 43(4), pp.716–725. Available at:

http://www.tandfonline.com/doi/abs/10.1080/00438243.2011.624781 [Accessed October 25, 2016].

Ravn, M., 2011b. Ethnographic analogy from the Pacific: just as analogical as any other analogy. *World Archaeology*, 43(4), pp.716–725. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438243.2011.624781 [Accessed October 2, 2016].

Read, C.H., 1910. *British Museum. Handbook to the Ethnographical Collections* 1st ed., London: Trustees of the British Museum.

Renfrew, C., 2007. The archaeology of ritual, of cult, and of religion. In E. Kyriakidis & E. Κυριακίδης, eds. *The archaeology of ritual*. Cotsen Institute of Archaeology, University of California, Los Angeles, p. 319.

Renfrew, C., 1985. *The Prehistory of Orkney*, Edinburgh: Edinburgh University Press.

Renfrew, C., 1969. Trade and Culture Process in European Prehistory. *Current Anthropology*, 10(2/3), pp.151–169. Available at: http://www.journals.uchicago.edu/doi/10.1086/201066 [Accessed October 25, 2016].

Renfrew, C., 1993. Trade Beyond the Material. In C. Scarre et al., eds. *Trade and exchange in prehistoric Europe : proceedings of a conference held at the University of Bristol, April 1992*. Oxbow Books in association with the Prehistoric Society and the Société préhistorique française, p. 255.

Van Reybrouck, D., 2012. *From primitives to primates : a history of ethnographic and primatological analogies in the study of prehistory*, Sidestone Press.

Van Riper, A.B., 1993. *Men among the mammoths : Victorian science and the discovery of human prehistory*, University of Chicago Press.

Roberts, A and Barton, N., 2008. Reading the unwritten history: Evans and Ancient Stone Implements. In A. MacGregor, ed. *Sir John Evans 1823-1908: Antiquity, Commerce and Natural Science in the Age of Darwin*. Oxford : Ashmolean Museum, Biddles of Norfolk. .

Roger, N., 2009. Tutauru, the adze of ngahue, in myth and history. , 118(4), pp.361–368.

Roscoe, P., 2000a. New Guinea Leadership as Ethnographic Analogy: A Critical Review. *Journal of Archaeological Method and Theory*, 7(2), pp.79–126. Available at: http://link.springer.com/10.1023/A:1009512726844 [Accessed October 15, 2016].

Roscoe, P., 2000b. New Guinea Leadership as Ethnographic Analogy: A Critical Review. *Journal of Archaeological Method and Theory*, 7(2), pp.79–126. Available at: http://link.springer.com/10.1023/A:1009512726844 [Accessed October 2, 2016].

Roscoe, P., 2009a. On the “Pacification” of the European Neolithic: ethnographic analogy and the neglect of history. *World Archaeology*, 41(4), pp.578–588. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438240903345621 [Accessed October 15, 2016].

Roscoe, P., 2009b. On the “Pacification” of the European Neolithic: ethnographic analogy and the neglect of history. *World Archaeology*, 41(4), pp.578–588. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438240903345621 [Accessed October 2, 2016].

Rowley-Conwy, P., 2007. *From genesis to prehistory : the archaeological three age system and its contested reception in Denmark, Britain, and Ireland*, Oxford Univ. Press.

Rowley-Conwy, P., 2006. The Concept of Prehistory and the Invention of the Terms “Prehistoric” and “Prehistorian”: The Scandinavian Origin, 1833–1850. *European Journal of Archaeology*, 9(1), pp.103–130. Available at: http://www.tandfonline.com/doi/full/10.1177/1461957107077709 [Accessed October 2, 2016].

Schlanger, N., 2002. Ancestral Archives: Explorations in the History of Archaeology. *Antiquity*, 76(291), pp.127–131. Available at: http://www.journals.cambridge.org/abstract_S0003598X00089882 [Accessed October 2, 2016].

Schlanger, N., 2004. The Past Is in the Present: On the History and Archives of Archaeology. *Modernism/modernity*, 11(1), pp.165–167. Available at: http://muse.jhu.edu/content/crossref/journals/modernism-modernity/v011/11.1schlanger.html [Accessed October 15, 2016].

Sebire, H., 2008. The Archaeological Observations of the Lukis Family of Guernsey. *English Heritage Historical Review*, 3(1), pp.129–136. Available at: http://www.tandfonline.com/doi/full/10.1179/175201608797653058 [Accessed October 15, 2016].

Shanks, M. & Tilley, C.Y., 1992. *Re-constructing archaeology : theory and practice*, Routledge.

Shelton, A.A., Museums and Anthropologies. In *A Companion to Museum Studies*. Malden, MA, USA: Blackwell Publishing Ltd, pp. 64–80. Available at: http://doi.wiley.com/10.1002/9780470996836.ch5 [Accessed October 15, 2016].

Shennan, S.J., 2012. Darwinian cultural evolution. In *Archaeological Theory Today*. Cambridge: Polity Press, pp. 15–36. Available at: https://iris.ucl.ac.uk/iris/publication/883244/1.

Sheridan, A. et al., 1992. Stone Axe Studies in Ireland. *Proceedings of the Prehistoric Society*, 58(3), pp.389–416. Available at: http://www.journals.cambridge.org/abstract_S0079497X00004242 [Accessed October 15, 2016].

Sherratt, A. et al., 2002. Darwin among the archaeologists: the John Evans nexus and the Borneo Caves. *Antiquity*, 76(291), pp.151–157. Available at: http://www.journals.cambridge.org/abstract_S0003598X00089924 [Accessed October 2, 2016].

Sherratt, A., 1990a. Gordon Childe: Paradigms And Patterns In Prehistory. *Australian Archaeology*, 30(1), pp.3–13. Available at: http://www.tandfonline.com/doi/full/10.1080/03122417.1990.11681358

[Accessed October 15, 2016].

Sherratt, A., 1990b. The genesis of megaliths: Monumentality, ethnicity and social complexity in Neolithic north-west Europe. *World Archaeology*, 22(2), pp.147–167. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438243.1990.9980137 [Accessed October 15, 2016].

Sherratt, A., 1989. V. GORDON CHILDE: ARCHAEOLOGY AND INTELLECTUAL HISTORY. *Past and Present*, 125(1), pp.151–186. Available at: http://past.oxfordjournals.org/cgi/doi/10.1093/past/125.1.151 [Accessed October 15, 2016].

Shott, M.J. & Sillitoe, P., 2001a. The Mortality of Things: Correlates of Use Life in Wola Material Culture Using Age-at-Census Data. *Journal of Archaeological Method and Theory*, 8(3), pp.269–302. Available at: http://link.springer.com/10.1023/A:1011669407409 [Accessed October 15, 2016].

Shott, M.J. & Sillitoe, P., 2001b. The Mortality of Things: Correlates of Use Life in Wola Material Culture Using Age-at-Census Data. *Journal of Archaeological Method and Theory*, 8(3), pp.269–302. Available at: http://link.springer.com/10.1023/A:1011669407409 [Accessed October 2, 2016].

Shott, M.J. & Sillitoe, P., 2005. Use life and curation in New Guinea experimental used flakes. *Journal of Archaeological Science*, 32(5), pp.653–663.

Sillitoe, P., 1996. *A place against time : land and environment in the Papua New Guinea highlands*, Harwood Academic Publishers.

Sillitoe, P., 1982. All DocumentsThe Lithic technology of a Papua New Guinea Highland People. *The Artefact*, 7(1), pp.19–38. Available at: https://www.mendeley.com/library/#.

Sillitoe, P., 1978. Ceremonial exchange and trade: two contexts in which objects change hands in the Highlands of Papua New Guinea. *Mankind*, 11(1), pp.265–275.

Sillitoe, P., 1985. Divide and No One Rules: The Implications of Sexual Divisions of Labour in the Papua New Guinea Highlands. *Man*, 20(3), p.494. Available at: http://www.jstor.org/stable/2802443?origin=crossref [Accessed October 2, 2016].

Sillitoe, P. et al., 2003a. Living Lithics: ethnoarchaeology in Highland Papua New Guinea. *Antiquity*, 77(297), pp.555–566. Available at: http://www.journals.cambridge.org/abstract_S0003598X00092619 [Accessed October 15, 2016].

Sillitoe, P. et al., 2003b. Living Lithics: ethnoarchaeology in Highland Papua New Guinea. *Antiquity*, 77(297), pp.555–566. Available at: http://www.journals.cambridge.org/abstract_S0003598X00092619 [Accessed October 2, 2016].

Sillitoe, P., 1988. *Made in Niugini : technology in the highlands of Papua New Guinea*, Published for the Trustees of the British Museum by British

Museum Publications in association with the University of Durham Publications Board.

Sillitoe, P., 1998. The Development of Indigenous Knowledge. *Current Anthropology*, 39(2), pp.223–252. Available at: http://www.journals.uchicago.edu/doi/10.1086/204722 [Accessed October 2, 2016].

Sillitoe, P., 2006. Why Spheres of Exchange? *Ethnology*, 45(1), p.1.

Skinner, G.M., 1986. Sir Henry Wellcome's museum for the science of history. *Medical history*, 30(4), pp.383–418. Available at: http://www.ncbi.nlm.nih.gov/pubmed/3534489 [Accessed October 15, 2016].

Skinner, H.D., 1919. A MAORI STONE AXE. *The Journal of the Polynesian Society*, 28(4), pp.240–241. Available at: https://www.jstor.org/stable/20701756?seq=1#page_scan_tab_contents.

Skinner, H.D., 1917. MAORI AND OTHER POLYNESIAN MATERIAL IN BRITISH MUSEUMS on JSTOR. *The Journal of the Polynesian Society*, 26(3), pp.134–137. Available at: http://www.jstor.org/stable/20701193?seq=1#page_scan_tab_contents.

Sloan, K., Burnett, A. (Andrew M.. & British Museum., 2003. *Enlightenment : discovering the world in the eighteenth century*, British Museum Press.

Sloane, K., 2003. "Aimed at Universality and belonging to the Nation": the Enlightenment and the British Museum. In K. Sloane, ed. . *Enlightenment: Discovering the world in the eighteenth century.* . British Museum Press.

Smith, R.A., 1931. *The Sturge Collection :An Illustrated Selection of Foreign Stone Implements Bequeathed in 1919 by William Allen Sturge - Smith, Reginald A. ;*, British Museum Trustees. Available at: http://www.archaeologyplus.co.uk/?page=shop/flypage&product_id=14673&keyword=Smith+A&searchby=author&offset=20&fs=1.

Spalding, J., 2002. *The poetic museum : reviving historic collections*, Prestel.

Spielmann, K.A., 2002. Feasting, Craft Specialization, and the Ritual Mode of Production in Small-Scale Societies. *American Anthropologist*, 104(1), pp.195–207. Available at: http://doi.wiley.com/10.1525/aa.2002.104.1.195 [Accessed October 2, 2016].

Spriggs, M., 2008a. Ethnographic parallels and the denial of history. *World Archaeology*, 40(4), pp.538–552. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438240802453161 [Accessed October 15, 2016].

Spriggs, M., 2008b. Ethnographic parallels and the denial of history. *World Archaeology*, 40(4), pp.538–552. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438240802453161 [Accessed October 2, 2016].

Squier, E.G. & Davis, E.H., 1848. Ancient Monuments of the Mississippi Valley.

Stahl, A.B., 2002. Colonial Entanglements and the Practices of Taste: An

Alternative to Logocentric Approaches. *American Anthropologist*, 104(3), pp.827–845. Available at: http://doi.wiley.com/10.1525/aa.2002.104.3.827 [Accessed October 2, 2016].

Stahl, A.B., 1993. Concepts of Time and Approaches to Analogical Reasoning in Historical Perspective. *American Antiquity*, 58(2), p.235. Available at: http://www.jstor.org/stable/281967?origin=crossref [Accessed October 2, 2016].

Star, S.L. & Griesemer, J.R., 1989. Institutional Ecology, `Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19(3), pp.387–420. Available at: http://sss.sagepub.com/cgi/doi/10.1177/030631289019003001 [Accessed October 15, 2016].

Starkey, D., D. Gaimster, and B.N.E. (eds) R.A. of A. (Great B. & Society of Antiquaries of London., 2007. *Making history : antiquaries in Britain, 1707-2007*, Royal Academy of Arts.

Steibing, W.H., 1993. *Uncovering the past : a history of archaeology* 18th ed., New York: Prometheus Books. Available at: http://www.worldcat.org/title/uncovering-the-past-a-history-of-archaeology/oclc/26974908?page=citation.

Steinhauer, C.L., 1862. *Catalogue of the collection of ancient and modern stone implements and other weapons, tools and utensils of the Aborigines of various countries in the possession of Henry Christy F.G.S.C London.*, London: British Museum Trustees .

Stiles, D., 1977. Ethnoarchaeology: A Discussion of Methods and Applications. *Man*, 12(1), p.87. Available at: http://www.jstor.org/stable/2800996?origin=crossref [Accessed October 2, 2016].

Stocking, G.W., 1995. *After Tylor : British social anthropology, 1888-1951*, University of Wisconsin Press.

Stocking, G.W., 1986. *Malinowski, Rivers, Benedict and others : essays on culture and personality*, University of Wisconsin Press.

Stone, J. F. S., & Wallis, F.S., 1947. Second Report of the Sub-Committee of the South-Western Group of Museums and Art Galleries on the Petrological Identification of Stone Axes. *Proceedings of the Prehistoric Society (New Series)*, 13(1), pp.47–55.

Swain, H., 2007. *An introduction to museum archaeology*, Cambridge University Press.

Sweet, R. et al., 2001. Antiquaries and Antiquities in Eighteenth-Century England. *Eighteenth-Century Studies*, 34(2), pp.181–206. Available at: http://muse.jhu.edu/content/crossref/journals/eighteenth-century_studies/v034/34.2sweet.html [Accessed October 2, 2016].

Sweet, R., 2007. The incorporated Society and its public role. In S. Pearce, ed. *Visions of Antiquity: The Society of Antiquaries of London 1707-2007*.

London: The Society of Antiquaries.

Taylor, T., 2008. Prehistory vs. Archaeology: Terms of Engagement. *Journal of World Prehistory*, 21(1), pp.1–18. Available at: http://link.springer.com/10.1007/s10963-008-9011-1 [Accessed October 2, 2016].

Thomas, J., 1994. "Discourse, Totalisation and "The Neolithic." In C. Tilley, ed. *Interpretive Archaeology*. London: Berg.

Thomas, J., 1984. A tale of two polities: kinship, authority and exchange in the Neolithic of south Dorset and north Wiltshire. *Neolithic Studies* , 1(1), pp.161–176.

Thomas, J., 2004. Current debates on the Mesolithic-Neolithic transition in Britain and Ireland. *Documenta Praehistorica*, pp.113–130. Available at: http://www.academia.edu/download/35186053/debates_transicion_neolitico.pdf [Accessed October 15, 2016].

Thomas, J. et al., 1988. Neolithic Explanations Revisited: The Mesolithic-Neolithic Transition in Britain and South Scandinavia. *Proceedings of the Prehistoric Society*, 54(2), pp.59–66. Available at: http://www.journals.cambridge.org/abstract_S0079497X00005752 [Accessed October 15, 2016].

Thomas, J., 1999. *Time, culture, and identity : an interpretative archaeology*, Routledge.

Thomas, J. & Thomas, J., 1999. *Understanding the Neolithic*, Routledge.

Thomas, N., 1991. *Entangled objects : exchange, material culture, and colonialism in the Pacific*, Harvard University Press.

Thomas, N., 1989a. Material Culture and Colonial Power: Ethnological Collecting and the Establishment of Colonial Rule in Fiji. *Man*, 24(1), p.41. Available at: http://www.jstor.org/stable/2802546?origin=crossref [Accessed October 15, 2016].

Thomas, N., 1989b. Material Culture and Colonial Power: Ethnological Collecting and the Establishment of Colonial Rule in Fiji. *Man*, 24(1), p.41. Available at: http://www.jstor.org/stable/2802546?origin=crossref [Accessed October 2, 2016].

Thomas, N., 2013. Melanesia Art and Encounter: Introduction. In B. Bolton, L; Bonshenk, E; Adams, J and Burt, ed. *Melanesia Art and Encounter*. London : British Museum Press.

Thompson, M.W. (Michael W., 2009. *Darwin's pupil : the place of Sir John Lubbock, Lord Avebury (1834-1913), in late Victorian and Edwardian England*, Melrose Books.

Thorpe, I.J., 1996. *The origins of agriculture in Europe*, Routledge.

Thrane, H; Collett, E.J., 2016. *The Worsaae Collection in the British Museum*, London: British Museum Press . Available at: http://www.britishmuseum.org/research/search_the_collection_database/term_details.aspx?bibId=8024.

Tiley, C., 1993. Interpretation and a poetics of the past. In C. Tilley, ed. *Interpretative Archaeology,* . Oxford: Providence, pp. 1–27.

Tilley, C., 1993. *Interpretative Archaeology*, Bloomsbury Academic. Available at: http://www.bloomsburycollections.com/book/interpretative-archaeology [Accessed October 2, 2016].

Tilley, C., 1991. Materialism and an archaeology of dissonance. *Scottish Archaeological Review*, 8(1), pp.14–22.

Tilley, C., 2008. Objectification. In P. In Tilley, C., Webb, K., Kuchler, S., Rowlands, M and Spyer, ed. *Handbook of Material Culture.* . London and New York: Sage Publishing.

Tilley, C.Y., 2003. *An ethnography of the Neolithic : early prehistoric societies in southern Scandinavia*, Cambridge University Press.

Torrence, R. & Clarke, A., 2000. Negotiating difference: Practice makes theory for contemporary archaeology in Oceania. In R. Clarke, A; Torrence, ed. *The archaeology of difference: negotiating cross-cultural engagements in Oceania*. London: One World Archaeology, Taylor and Francis, pp. 1–31. Available at: https://books.google.co.uk/books?hl=en&lr=&id=zK6IAgAAQBAJ&oi=fnd&pg=PA1&dq=Negotiating+difference:+Practice+makes+theory+for+contemporary+archaeology+in+Oceania.&ots=tUGiExChNj&sig=Ba18VgK3A1ugXvgnzoDf2Rgzh9g [Accessed October 15, 2016].

Trigger, B., 1981. Anglo-American archaeology. *World Archaeology*, 13(2), pp.138–155. Available at: http://www.tandfonline.com/doi/abs/10.1080/00438243.1981.9979822 [Accessed October 15, 2016].

Trigger, B.G., 1989. *A history of archaeological thought*, Cambridge University Press.

Trigger, B.G. et al., 1970. Aims in Prehistoric Archaeology. *Antiquity*, 44(173), pp.26–37. Available at: http://www.journals.cambridge.org/abstract_S0003598X00040953 [Accessed October 15, 2016].

Trigger, B.G., 1980. Archaeology and the Image of the American Indian. *American Antiquity*, 45(4), p.662. Available at: http://www.jstor.org/stable/280140?origin=crossref [Accessed October 15, 2016].

Trigger, B.G., 2003. *Understanding early civilizations : a comparative study*, Cambridge University Press.

Tylor, E., 1871. *Primitive culture: researches into the development of mythology, philosophy, religion, art, and custom* 2nd ed., Murray. Available at: https://books.google.co.uk/books?hl=en&lr=&id=wslaAAAAcAAJ&oi=fnd&pg=PA40&dq=Primitive+culture:+researches+into+the+development+of+mythology,+philosophy,+religion,+art,+and+custom&ots=lU_yfXzUu_&sig=SjFF4enmW4V18vseVirZV2ydExc [Accessed October 15, 2016].

Urry, J., 1972. Notes and Queries on Anthropology and the Development of Field

Methods in British Anthropology, 1870-1920. *Proceedings of the Royal Anthropological Institute of Great Britain and Ireland*, (1972), p.45. Available at: http://www.jstor.org/stable/3031732?origin=crossref [Accessed October 2, 2016].

Watkins, T., 2010a. New light on Neolithic revolution in south-west Asia. *Antiquity*, 84(325), pp.621–634. Available at: http://www.journals.cambridge.org/abstract_S0003598X00100122 [Accessed October 15, 2016].

Watkins, T., 2010b. New light on Neolithic revolution in south-west Asia. *Antiquity*, 84(325), pp.621–634. Available at: http://www.journals.cambridge.org/abstract_S0003598X00100122 [Accessed October 2, 2016].

Watkins, T., 2008. Supra-Regional Networks in the Neolithic of Southwest Asia. *Journal of World Prehistory*, 21(2), pp.139–171. Available at: http://link.springer.com/10.1007/s10963-008-9013-z [Accessed October 15, 2016].

Wentink, K., 2008. Crafting axes, producing meaning. Neolithic axe depositions in the northern Netherlands. *Archaeological Dialogues*, 15(2), p.151. Available at: http://www.journals.cambridge.org/abstract_S1380203808002651 [Accessed October 15, 2016].

Wentink, K. et al., 2008. *Neolithic depositions in the Northern Netherlands.*, Oxford : Archaeopress.

West, A., 1996. THE ETHNOGRAPHY OF CURIOSITIES: BEING THE PROBLEM OF DESCRIBING LORD LEVER'S'ETHNOGRAPHIC'COLLECTION. *Journal of Museum Ethnography*, 5(1), pp.22–48. Available at: http://www.jstor.org/stable/40795046 [Accessed October 15, 2016].

Williams, G., 2001. The Endeavour Voyages: A Coincidence of Motives. In M. Lincoln, ed. *Science and Exploration in the Pacific*. Boydell and Brewer, pp. 3–16.

Wilson, D., 1997. Augustus Wollaston Franks –Towards a Portrait. In M. Cherry, J; Caygill, ed. *A.W. Franks: Nineteenth Century Collecting and the British Museum*. London: British Museum Press.

Wilson, D.M. (David M., 2002. *The British Museum : a history*, British Museum Press.

Wilson, D.M. (David M., 1989. *The British Museum : purpose and politics*, British Museum Publications.

Wilson, D.M. (David M., 1984. *The forgotten collector : Augustus Wollaston Franks of the British Museum*, Thames and Hudson.

Wobst, H.M., 1978a. The Archaeo-Ethnology of Hunter-Gatherers or the Tyranny of the Ethnographic Record in Archaeology. *American Antiquity*, 43(2), p.303. Available at: http://www.jstor.org/stable/279256?origin=crossref [Accessed October 15, 2016].

Wobst, H.M., 1978b. The Archaeo-Ethnology of Hunter-Gatherers or the Tyranny

of the Ethnographic Record in Archaeology. *American Antiquity*, 43(2), p.303. Available at: http://www.jstor.org/stable/279256?origin=crossref [Accessed October 2, 2016].

Wood, B; Cotton, J., 1999. The Representation of Prehistory in Museums. In N. Merriman, ed. *Making Early Histories in Museums: Making Histories in Museums*. Leicester: Leicester University Press.

Woolf, D., 2007. Images of the Antiquary in the Seventeenth Century. In S. Pearce, ed. *Visions of Antiquity: The Society of Antiquaries of London 1707-2007*. London: The Society of Antiquaries .

Wylie, A., 1982. An Analogy by Any Other Name is Just as Analogical: A Commentary on the Gould-Watson Dialogue,. *Journal of Anthropological Archaeology*, 1(1), pp.382–401.

Wylie, A., 1985. The Reaction against Analogy. *Advances in Archaeological Method and Theory*, 8(1), pp.63–111. Available at: https://www.jstor.org/stable/20170187?seq=1#page_scan_tab_contents.

Yaya, I., 2008. Wonders of America: The curiosity cabinet as a site of representation and knowledge. *Journal of the History of Collections*, 20(2), pp.173–188. Available at: http://jhc.oxfordjournals.org/cgi/doi/10.1093/jhc/fhm038 [Accessed October 15, 2016].

Yerkes, R.W.; Barkai, R; Gopher, Avi; Bar Yosef, O., 2003. Microwear analysis of early Neolithic (PPNA) asxes and bifacial tools from Netiv Hagdud in the Jordan Valley, Isreal. *Journal of Archaeological Science*, 30, pp.1051–1066.

Young, M., 2000. The Careless Collector: Malinowski and the Antiquarians. In R. O'Hanlon, M., Welsch, ed. *Hunting the Gatherers: Ethnographic Collectors, agents and agency in Melanesia, 1870s-1930s. Methodology and History in Anthropology, Volume 6*. London: Berghahn Books.