



How Pervasive Are Culture History Approaches in Contemporary Global Archaeology?

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Thesis

Submitted to Flinders University

For the degree Master of Archaeology and Heritage Management

COLLEGE OF HUMANITIES, ARTS AND SOCIAL SCIENCES

Discipline of Archaeology

2024

Figure (1) Image from the cover page: Palaeolithic Stone Tool technology, taken at the University of Cambridge Museum of Anthropology and Archaeology 2004 (image: D. Wesley).

Declaration-

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ABSTRACT

This thesis is a literature-based study and works within existing knowledge about the place of culture history in archaeological practice. Culture history records and interprets past events involving humans through their social, cultural and political involvement. Culture history is based on human cultures of the past and chronological and spatial ordering of archaeological data (Fagan 1988:501).

This project sets out to investigate and describe the culture-historical approach in the practice of archaeology, identify its proponents, and understand how, and what degree, this approach is still relevant to contemporary archaeology. Culture history is both part of the history of archaeology, and an approach to doing archaeology (Webster 2008:11). Between the 19th and 21st centuries different scientific approaches to archaeology arose, including antiquarian archaeology that led to a culture history approach and the adoption of a historical format to detail and record material artefacts.

The main method utilised for this research involved a structured random sampling approach and key word analysis of more than 124 articles drawn from international and national journals, noting key terms from culture history, processual archaeology and post-processual archaeology and comparing them for frequency of use. The data analysis demonstrated that culture history terms were the most frequently used in the articles read, followed by processual and, lastly, post-processual terms.

The thesis suggests that culture-history is still part of the normative approach to doing archaeology in the interpretation and analysis of artefacts and assemblages (material culture). Culture history provides a method to create a relative sequence for interpretation, dating and formulating linkages between different culture areas, such as Egypt or Western Asia (Renfrew 2007:50). The culture-historical method was a way of conducting anthropological and archaeological research that was prevalent among western scholars between about 1910 and 1960 (Hirst 2019:1). This thesis argues that culture-history can be considered as a particular approach to doing archaeology, and how it interprets and orders information still underlies much contemporary archaeological theory and practice.

ACKNOWLEDGEMENTS

My interest in archaeology spans four decades. It began at Flinders University in 1982, when it was my good fortune to meet Dr Vincent Megaw as part of the Visual Arts Department at the university at that time. Vincent gave me my first 'A' for any subject then. I continue to be in contact with him at times through the Department of Archaeology at the university.

I want to acknowledge everyone within Archaeology at Flinders University who helped me as I constructed this thesis. This includes my lecturers and support workers, laboratory personnel, and other staff.

A thesis is a journey of discovery that illuminates and enriches the student. This would not occur without the essential support of supervisors. I want to thank my supervisor Dr Daryl Wesley for all of his invaluable support in preparing this thesis. His help and advice was a foundation stone on which I was able to build a worthwhile work of archaeology. Compiling a thesis could be a solitary task otherwise.

I would like to acknowledge the help and support of Professor Claire Smith who was helpful during my earlier studies, and Professor Wendy Duivenvoorde, who gave such positive feedback for my post-graduate work.

Professor Heather Burke who is a devotee of history and culture history has supported me and helped in correcting the thesis. Her help was invaluable in completing this project through the many adjustments that were necessary to create the thesis. Again, her feedback was invaluable in constructing a relevant thesis.

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CHAPTER 1 INTRODUCTION

General Introduction Research Question and Aims Synopsis of the Research Significance of the Research



Figure (1) Upper Palaeolithic tools, University of Cambridge Museum, 2004

(Photo: D. Wesley)

Painted Hand

Your painted hand of red ochre and white Stands the test of time in this harsh land Spat onto a rock face you never move in anger But shine as a beacon to any passing stranger You tell of this sacred site and an artist's work In the still dead of night (Battams 2001:11; 2021:11)

General Introduction

Culture history is one approach to doing archaeology that works within a 'normative approach' to culture and describing the material past. The thesis incorporates description of 'normative' view of culture where each culture has its own norms and rules of behaviour. This incorporates an aspect of shared culture, values, ideas and norms of behaviour, beliefs and ideals. This concept has its limitations as values change, and contexts differ: in an Australian context, for example, temporal demarcations of 'Palaeolithic' and Neolithic' are not used. Another aspect of appraising culture is 'diffusion' which is the spread of a cultural trait from its origin, (Bray and Trump 1982:77) which becomes adopted across other communities. This is one tenet of V. G. Childe's work (Childe 1965:29).

This thesis is focused on one major methodological aspect of the field of archaeology which had its genesis in the late 19th century in Europe, namely the culture-history school of thought and its practical applications. The thesis will outline what culture history is, its many components, and the early proponents and current users of this approach within archaeology. Lastly, the research will investigate whether and how culture history is still relevant for contemporary archaeology, something which Peter Burke (1997:151) suggests is a special case of historical scholarship in general, and

which Robert Schuyler (1988:1) suggests is a potentially productive field specifically for archaeology.

Why this thesis? Although some people have argued that culture history is still in use in different parts of the world (e.g. SE Asia), it's not clear how much consistency there is in this adoption of an underlying, structuring nature of culture history principles in all parts of the world and all types of archaeology. Plets et al. (2021), Paula Fass (2003:39) and William Peterson (1982:123) have started to look at specific archaeological traditions in defined geographic areas of the world, but there is much scope to expand this to other regions. For instance, Plets et al. (2021:1) looks at the 'evolution of archaeological knowledge' in their study. They utilise a text mining methodology to do this, which was beyond the scope of the current study.

This thesis will contribute to archaeological knowledge in the Australian situation-and examine how much Australian archaeology relies upon Culture History principles and contexts compared to other schools of thought? To better know this, I compared different traditions from other parts of the world. This is important so that Australian archaeology can better know itself.

As part of the thesis, I examine different approaches to archaeology including the processual and post-processual schools of thought and make comparison to culture history. The 'New Archaeology' (processual archaeology) as an approach has become the dominant form of archaeology in recent decades in Europe and North America. It became an intellectual movement in the 1960s and advocated logical positivism as a guiding research philosophy (Binford 1968a; Clarke 1968; Fritz and Plog 1970; Watson et al. 1975). In more recent time post-processual archaeology has entered the field as a reaction to processual archaeology and culture-history. Both processual and post-processual archaeology are examined in this thesis as alternative approaches to culture history.

In this thesis the question is asked: how pervasive is a culture history approach in contemporary global archaeology? Do archaeologists practice a culture history approach in their research and do they recognise that approach? Further, do archaeologists specify what approach they are using in their work? There is a link between the

archaeological practice of the early 1900s and the practice of the later 1950s-1960s, which included a culture history approach. The processual and post-processual approaches that developed from the 1960s onwards influenced archaeology in later years.

The role of culture history in the development of archaeology is well established (Bahn 2014; Patterson 1995; Trigger 2006; Willey and Sabloff 1993). Some archaeologists use culture history to classify material remains in space and time (Feinman and Neitzel 2020:1), an essential element of archaeology. One early proponent of culture history, Vere Gordon Childe, was able to synthesise data to establish patterns of prehistoric change in Europe and the Near East (Tringham 1983:85). The culture-history approach to archaeological investigation uses the procedure of the historian with an emphasis upon detail and the inductive method (Renfrew and Bahn 1991:486). Inductive reasoning takes specific observations and makes generalisations from them (Fagan 1988:187). An alternate form of archaeology utilises deductive reasoning, which works the other way round. It begins with a generalisation, and proceeds to form specific implications (Fagan 1988:187). Clive Gamble (2015:25) suggested that there are two important approaches to archaeology: 'culture-history' and 'anthropological archaeology'.

The literature analysed for this study incorporates articles dealing with the archaeology of the Upper Palaeolithic and early humans, the Neolithic and technological and economic change, and then into the Bronze Age in the Holocene, and the contemporary era of archaeology when early writing was used (see also Three Age System). From these areas the aim is to determine if a culture-history approach to archaeological investigation is still in use and, if so, what form it takes. In the process it will investigate whether the procedure of the historian with an emphasis upon detail and the inductive method remains part of an interpretive archaeological process (Renfrew and Bahn 1991:486). Robert Schuyler (1988:1) suggests that research grounded in culture history can be potentially impressive, productive, and a source of rich data, including written records.

One of the goals of the field of archaeology is to be able to show commonality among different cultures in society. To be able to do this we need to build up a picture of

events for interpretation, explanation, critique and theory (Bentley and Maschner 2008:1) over time. If we accept that the material remains of humanity have been around for a long time, we may combine approaches like culture history with contemporary approaches to help collate and interpret the many finds we uncover and place them into a context of human development. In this respect archaeology is a field of ideas and new theories arise as we proceed. The culture-historical method (sometimes called the cultural-historical method or culture-historical approach or theory) was a way of conducting anthropological and archaeological research that was prevalent among western scholars like Gordon Childe between circa 1910 and 1960 (Hirst 2019:1). New forms of culture history, however, are evident in the contemporary era (see Kidder 1927; Schuyler 1988; Webster 2008).

The overall aim of the new discipline of archaeology was then, and remains now, to help place human existence into a context that indicates both its deep history and its historical foundations. In effect, it looks at culture as part of the evolution of humans and how different cultures have taken us to the place we find ourselves now. The underlying premise of the culture-historical approach was that the main reason to do archaeology or anthropology at all was to build timelines of major occurrences and cultural changes in the past for groups that did not have written records as part of their (ordinary) culture (Ely 1995:19). This thesis will explore the boundary of culture history and archaeology from the view of its early proponents (such as VG Childe and Frans Boas) through to the contemporary users and proponents of this approach both within and beyond archaeology, including such as Burke (1997), Ely (1998), and Tringham (1983).

Research Question and Aims

The purpose of this study is to explore the boundaries of the culture-history approach to archaeology and determine whether, and how, that approach is still relevant to contemporary archaeology. It does this by assembling a history of the concept, defining its key characteristics, and then conducting a literature review of the different types or approaches to doing archaeology to ascertain what aspects may still be in use and how. The specific research question is:

How pervasive are culture history approaches in contemporary global archaeology?

The main aims of this thesis are as follows:

- To understand how elements of culture history interface with current archaeological approaches
- To assess how influential the culture historical approach is to contemporary archaeology
- To understand the extent to which culture-history could be regarded as a legitimate part of archaeological practice now and the repercussions of this for interpretation of the human past

The main objective for this study is to investigate the components of culture-history and whether, as an approach, it has credibility in contemporary archaeology. Trying to determine this involves, in part, some philosophical rendering. Do researchers realise whether or not they are practicing a culture history approach to their work?

To achieve this, it will be important to uncover just what constitutes culture history and its uses, the current components used (Kendall 1964), and any shortcomings, such as word choice, or approaches that prevent its use in contemporary archaeology. Furthermore, the research will examine the main proponents and commentators within the field of culture history past and present, such as V.G. Childe (1956) and Gary Webster (2008), their stances as archaeologists, and how they used this approach to support their claims about human cultures. As this investigation of the history of archaeology proceeds, the trajectory of modern archaeology, its theory, methods and practices will be reviewed.

Archaeology is inherently comparative (Smith and Peregrine 2011:4), and there is no doubt that modern archaeology has changed over time from its early trajectory, as is the case with all disciplines. This does not mean the previous methods are no longer useful, only that they are continually being modified for the use of the current batch of archaeologists, although this process may not be explicitly recognised in the literature.

Synopsis of the Research

This thesis will explore the degree to which culture history is part of the contemporary approach to doing archaeology through its association with what are regarded to be norms of culture, such as behaviour and practices, and as it follows a succession of

assemblages (material culture) from the archaeological record to interpretive constructs about past human behaviour from that record. Like many ideas in archaeology, culture history has been successively refined over time as new approaches, such as processual archaeology, came in to use (Lyman and O'Brien 2004:369). The proposed research question arose after reviewing a number of texts and articles about archaeology and the culture history approach (such as Fagan 1988; Renfrew and Bahn 1991; Renfrew 2007). Each text had a section which reviewed aspects of early archaeology, especially as it operated in Europe and North America (Fagan 1988; Renfrew 2007), and how links were made between what were termed 'cultures' through their material remains.

This prompted an investigation into the place of culture history in contemporary archaeology, something which Schuyler (1988:1) has stated as an impressive, productive field, equal in many ways to other data sources, including written records. Therefore, it is important to investigate the extent to which contemporary archaeological practice recognises the influence of culture history upon the practices of archaeology. If it is still relevant and does fit, then what are the essential or core elements and principles of the culture historical approach that fit? How do we measure it now?

Significance of the Research

To be able to understand the contribution of the culture history approach to contemporary archaeological practice it is necessary to consult both early and current users of this method, such as Childe (1892-1935) and commentators such as Webster (2008). At the same time, it is important to outline some of the methods used by early archaeologists, including Childe and Arnold Toynbee (1889-1975) in England and Walter Taylor in the USA (1948), as well as later archaeologists such as Brian Fagan (1988, 1991), who advocated for the value of culture historical principles to contemporary archaeological analysis. Alternative views to the culture history approach are presented by Grahame D. Clark (1939) and Lewis Binford (1962), who both claimed that a more social aspect was needed to understand archaeological cultures and that culture history had inherent limitations generated by its normative-inductive approach (Binford 1962 in Webster 2008:19). The justification for the current study is that there appears to be a gap in the research at the nexus of archaeology and culture history, that the early use of culture history may not fit current applications or that the newer version of culture history adapted to current perceptions and became part of a wider trend that

includes the work of sociologists and anthropologists (Burke 2020:864). This study further investigates the proposition that culture history has been adapted to archaeology now.

The aim here is to show that the original use of culture-history as an approach was one of a number of ways of doing archaeology more scientifically. The early proponents of this approach did not go about promoting the fact they were culture historians, but some, such as Childe (1892-1957), were archaeologists who worked in a particular way to uncover the human past from material evidence. From that evidence people like Childe were able to show how cultures developed across places like Europe and lesser Asia (Childe 1936, 1942). The ramifications of this were that he was able to build up a picture of events that led him to define grand scale shifts in human activity (such as the Agrarian Revolution), which saw many human societies become more settled and diversify technology and their food production, and increase their populations.

Critically, this thesis looks at the extent to which contemporary archaeologists have been influenced by the work of the early archaeologists who promoted culture history. In the literature from the late 1950s to 1960s, for example, there was a call by authors such as David Clark and Lewis Binford to replace culture history with a different and 'newer' approach, based more upon what they considered to be social reality (Ely 1995; Fass 2003; Renfrew 2007; Schuyler 1988).

Although they claimed culture history had had its day, they too were influenced by the history of archaeology. It can be demonstrated in different international contexts, especially in parts of Asia, that archaeologists continue to use culture history techniques-methods to carry out their fieldwork (Katragadda Paddaya 1995:138).

In this way, such an approach could form part of the new wave of archaeological practice, of explaining the past through its own methods, not merely reconstructing the past. This research therefore represents an argument for the study of the culture historical approach from a purely historical perspective, that culture history can itself be studied as part of the history of archaeology. Through such studies it is possible to glean a wider understanding of the ongoing purpose of archaeology.

Chapter Outline

Chaper two deals in more detail with the nature and form of the cultural historical approach in archaeology from the late 19th century through to the 21st. In order to understand the place of culture history in contemporary archaeological research, this thesis also investigates its successors—processual and postprocessual archaeology and how these three both diverge and converge. It does this by adopting a language analysis approach to understand how archaeologists articulate their theoretical frameworks and the extent to which fundamental concepts from each school of thought structure the practice, nature and communication of archaeology. Chapter 3 therefore deals with the nature and form of processual archaeology and Chapter 4 with postprocessual archaeology. Chapter 5 presents the methods used in the language analysis approach, Chapter 6 presents the results and Chapter 7 the interpretation of the data. Chapter 8 is the conclusion of the thesis and its findings and outcomes. By examining the 'New Archaeology' I set out to place archaeology into a wider perspective of approaches and methods. In some ways all three approaches may have commonality in their approach based upon the historical material evidence. From that, each approach may then utilise different methods to support their claims.

CHAPTER 2 - DEFINING CULTURE HISTORY AND ITS PROPONENTS

Introduction
How Words/word Choices Shape the Way we Think
Early Culture History Approaches (19th century-1960s)
Culture History and the 'New' Archaeology (1960s-1980s)
Understanding History, Anthropology and Archaeology
Culture History Now, a Contemporary View (1980s-2000s)
Archaeology Now
Conclusion

Introduction

The literature review will present the study area, background, review of methods, and the definition of a culture history approach to archaeology. This includes an overview of the early and current proponents of the culture history approach, including Frans Boas (1858-1942) from the United States of America (USA) and his reaction to the broad evolutionary schemes of his predecessors, Lewis Henry Morgan (1818-1881) and Edward Tylor (1832-1917), where he asked for much more attention to the collection and classification of information in the field (Renfrew and Bahn 1991:32), and Vere Gordon Childe (1892-1957) in Britain, who was making comparisons between prehistoric sequences in Europe (Renfrew and Bahn 1991:32). Detractors of culture history include David Clarke (1937-1976) in England and Lewis Binford in the USA (1931-2011), who began the processual movement in archaeology. Both of these archaeologists were part of the 'New Archaeology', an expression of change from culture historical archaeology.

In Europe and North America culture historians such as Childe and Boas, during the late 19th century and early 20th century, were widely seen as being involved in classifying and correlating aggregates of human remains to build larger cultural units (Webster 2008:15). According to Irving Rouse (in Webster 2008:15), this is done by 'classifying sites instead of artefacts and structures or parts thereof' when dealing with any culturally homogenous sites or their components. This requires that sites are grouped into classes on the basis of similarities and differences in their own materials. From this it can be determined that the elements of a culture can be shared by each class of object, such as pottery in a series (called seriation), where like goes with like as we order objects: they can then be used to define the type of 'culture' represented by those classes (Rouse 1953:91).

There are publications about culture history as an approach which support the claim that it is either the de-facto approach of many archaeologists, or else is still relevant to the school of archaeology (see Ely 1995; Fass 2021; Peterson 1982-83). It is noted that to some extent all scholars have academic and political biases and attitudes arising from their times, and this is an important factor that needs to be understood in reviewing the history of archaeological practice. As a devotee of the culture history approach it is important to be aware of the need to present a balanced argument.

Both Gordon Childe, and before him Frans Boas, have been cited as early proponents of the culture history approach which held sway in archaeology from the late 19th century to the mid 20th century. As originally conceived and practiced in the 19th century by Burckhardt in relation to the Italian Renaissance, cultural history was oriented to the study of a particular historical period in its entirety, with regard not only to its painting, sculpture, and architecture, but also to the economic basis underpinning society (Burke 1991:5). Brian Stock (1987:657) has commented that Hannah Arendt in her last public lecture discussed the everyday use of reality, and the subject-object dichotomy. Human culture incorporates linguistic philosophies that form part of research. The argument goes back to Immanuel Kant (1724-1804) and metaphors of language and their relation to human reality. A sense of human history is essential to our wider understanding.

How Words/Word Choices Shape the Way We Think

The principle of linguistic relativity states that the way people think of the world is influenced directly by the language that people use to talk about it. Or more radically, people could only perceive aspects of the world for which their language has words (Despot 2021:373). Languages don't limit our ability to perceive the world or to think about the world, rather, they focus our attention and thought on specific aspects of the world. There are so many more examples of how language influences perception, in areas such as describing events (Reines 2009:1).

The linguistic relativity hypothesis, or the proposal that the particular language we speak influences the way we think about reality, forms one part of the broader question of how language influences thought. The idea of linguistic relativity, also known as the Sapir–Whorf hypothesis or Whorfianism, is a principle suggesting that the structure of a

language influences its speakers' worldview or cognition, and thus individuals' languages determine or shape their perceptions of the world (Whorf 2012).

Archaeology uses language differently to explain its findings and theories. This is seen in the use of culture history as an approach to archaeology where the use of language incorporates the historical element and places material cultures into a context. Incorporated into early archaeology, culture historical archaeology utilises the historical approach supplemented with rich detail. In this respect it can also combine with a qualitative approach to describing detail to add further richness to findings and their interpretation, beyond mere fact gathering and presentation.

One of the main issues in any change of paradigm is the language used by the old and the new. A key part of the New Archaeologists' push for change revolved around language choices and as paradigms shifted new language to describe new entities came into use. Language doesn't completely change, however, so what language of former movements survives and what doesn't? This reveals something about what we value now (what has stood the test of time) and what we've discarded (because it came and went with particular lines of research and schools of thought).

Early Culture History Approaches (19th Century-1960s)

As classic evolutionism lost significance in the early 1960s archaeologists adopted concepts from ethnology and human geography (Daniel 1963:98). Here, some such as Glyn Daniel suggested that archaeology was on the brink of a new paradigm 'beyond that of the present' (Daniel in Renfrew 2007:9) and that prehistory could be one of the facts based in archaeology (Renfrew 2007:9). One was the belief that it was possible to group archaeological collections-assemblages-aggregates that were comparable by some measure into cultural units that were analogous to ethnological cultures (Trigger 1978:100). The archaeologists who used the culture-unit concept were more interested in tracing historical relationships between cultures than the internal organisation of those cultures (Kidder 1927; Trigger 1968:530).

Archaeologist A.V. Kidder (1885-1963) had suggested that one early approach can be the development and application of a 'direct historical approach' as part of a culture historical application to the understanding of archaeological material culture sequences in the American Southwest (1915-1929). Kidder's work in his excavations of the Pecos Pueblo in the American Southwest helped establish a chronological framework for the region (Renfrew and Bahn 1991;32). From here the research of Childe and Kidder directly influenced Herbert Hale and Norman Tindale (1930) in South Australia, in their examination of human remains, sequences, and rock carvings (Hale 1930:145); this is an early example of the employment of the culture historical approach in Australian archaeology.

Once objects have been classed by typology they can be seen to fall into a developmental series called 'seriation' (Bray and Trump 1982:217). Seriation helps us to determine which items came first in a series, for example in the case of modern objects we note the progression of cars from one series to another (Museum of Ontario 2022:1). The previous cultural traditions did not merely cease as history was incorporated into much of human behaviour, however. One notion of culture history is that cultures constitute real or empirical divisions of the cultural whole, something which Edward Tylor (1871:1) defined as 'that complex whole which includes knowledge, belief, art, morals, law, custom and other capabilities and habits required or acquired by people as a member of a society' (cited in Webster 2008:12).

Bruce Trigger (1978:76) states that from this holistic or processual view, we see culture as individual actions, of ways of life, transmitted by people from one generation to another in an environment. Using this notion both Boas and Frederick Ratzl promoted the idea of cultures as geographically discrete units, whereas others, such as White (1949), had redefined culture as an adaptive system (in Feinman and Neitzel 2020:2). Others such as Binford viewed material remains as a direct derivative of past behaviours (Feinman and Neitzel 2020:2).

Culture historical texts such as Childe's (1965) *Man Makes Himself* and Clark's (1961) *World Prehistory*, are first distinguished by statements which reveal common notions about the nature of ancient cultures, their qualities, and how they related to the material record, and thus about how archaeologists might effectively study them. As Bruce Trigger (1978:100-101; 1989:161-163) has chronicled, by the turn of the twentieth century many archaeologists were looking for new concepts to put order into the

increasingly numerous or diverse collections of material remains that had been accumulated (Webster 2008:12).

A second view of culture (perhaps derived from Emile Durkheim [1895]) is the idea that cultures are bound together by common and distinct sets of norms (the normative view of culture) (Willey and Phillips 1958:18). As noted by Childe (1956:17), culture (in a partitive sense) denotes patterns of behaviour (unit concept of culture) common to a group, to all members of a society because society imposes rules upon its members. Culture here is seen as a mental construct of ideas (Taylor 1948:101). In this sense cultures can be placed and studied as homogeneous groups that can be connected by their common materials and practices.

Archaeology made a transition from antiquarianism into a more considered discipline that led to a more culture historical interpretation (as practiced by Childe and Toynbee) in Europe at the end of the 19th century and in the early 20th century (Fagan 1988:65). The new science of archaeology was preceded by advances in geology from the likes of James Hutton (1726-1797) and Charles Lyell (1797-1875) (Renfrew and Bahn 1991:22). Lyell advanced geology further through his *Principles of Geology* and proposed that geologically ancient systems on Earth were in principle similar to those of his time (Renfrew and Bahn 1991:22). Archaeologists applied these principles to the human past, and led the way forward to a fundamental notion of archaeology, that in some ways the past was very much like the present.

This became a fundamental concept to culture historians, who adopted the tenets of evolution by natural selection as well as advances in stratigraphy. Prehistory was a recent development which saw considerable antiquity for humans as they developed both biologically and culturally. It was Jacques Boucher de Perthes (1788-1868) who later established that the association of human artefacts (flaked stone, and particularly 'hand axes') with long extinct animals indicated the antiquity of humans (Renfrew and Bahn 1991:22). de Perthes argued that this evidence indicated the length of human existence (Renfrew and Bahn 1991:22). New ideas laid the groundwork for significant events in the intellectual history of the 19th century (Renfrew and Bahn 1991:22). To help determine the validity of the proposal put forward by de Perthes, two scholars,

John Evans and Joseph Prestwich, visited him in France and returned to England convinced of the accuracy of his findings (Renfrew and Bahn 1991:22).

In the early 1900s the beginnings of professional archaeology can be found in the early works of Boas (1858-1942) and Childe (Fagan 1988:60), whose broad synthesis of European cultures influenced his peers. Both were early proponents of the culture history approach, who concentrated on describing sites and objects and trying to establish a chronology for their finds (Fagan 1988:60). These two researchers also worked within the Mid-western taxonomic system in the United States (Renfrew and Bahn 1991:32) and the direct historical approach of working backwards in time from historic sites of a known age into earlier time (Fagan 1988:577). Childe had been working at making comparisons between prehistoric sequences in Europe. At the same time in the USA large concentrations of traits identified through detailed description of pots and baskets were being collected. The Mid-western taxonomic system arose from such practices and was an attempt at making comparisons between prehistoric sequences in the USA (Renfrew and Bahn 1991:32). This was an attempt at creating a synthesis of data in both regions. Under the influence of Frans Boas in the 1920s to the 1950s archaeologists who had been collecting enormous numbers of prehistoric finds from all over the Americas began to arrange them into increasingly elaborate regional sequences (Fagan 1988:66).

In Europe Childe went beyond merely describing and correlating culture sequences however, and he set out to account for their origin (Renfrew and Bahn 1991:32). No question occupied archaeologists as did establishing an age for their sites and finds (Fagan 1988:67). Once the limits of the direct historical approach were reached new approaches were sought. This came in the discovery by Andrew Douglass of the annual growth rings of trees for developing an accurate chronology that could extend back into the first century B.C. (Fagan 1988:67). The limits of this method soon put absolute dating methods in perspective and new radiocarbon dating methods helped to overcome the limits of tree ring dating, and extend dating of items back thousands of years (Fagan 1988:67).

Both Boas and Childe concentrated on constructing relative chronologies for sites and artefacts as part of the process of establishing cultural units using observations of

material and inductive reasoning. The inductive method was crucial to the study of culture history as outlined by Boas, Nels Nelson and Alfred Kidder (Willey and Sabloff 1980). This is a method of scientific enquiry that proceeds from specific observations through to the development of generalisations about a research problem, based upon those observations. A second fundamental principle of the culture history approach was a *normative* view of culture, which was based upon the behaviours considered normal within a culture (Fagan 1988:501). The normative view of culture is a descriptive approach which can describe an ancient culture during a single time period or else across much of archaeological time through its material remains (Webster 2008:12). Childe was at the forefront of adopting this approach as patterns of behaviour which are common to a particular group of people, albeit revealed through material culture rather than direct observation (Webster 2008:12).

The two fundamental principles of culture history—inductive reasoning and normative views—tied in with the 'direct historical approach' to archaeology where archaeologists tried to trace modern pottery back into the distant past (Renfrew and Bahn 1991:32). The direct historical approach is a method for working back in time to a known ethnographic period. The approach investigates the historical connection between the past and more recent time. In this way it helps to yield insights into culture histories (Fagan 1977; Willey and Sabloff 1980).

Relative chronologies were later adjusted when dating objects and sites was made easier by the introduction of dendrochronology and, later, radiocarbon dating (Fagan 1988:60). Other radiometric dating methods, such as potassium argon dating and thermoluminescence, made further advances in developing chronologies in archaeology. Science established facts about the natural world by observing objects, events and phenomena (Fagan 1988:187). In making these observations a scientist proceeds either using an inductive approach or through deductive reasoning (Fagan 1988:187).

The culture historical approach to archaeology is an interpretation which uses the procedure of the traditional historian, including emphasis on specific circumstances elaborated with rich detail, and the process of inductive reasoning (Renfrew and Bahn 1991:486). The notion of an archaeological culture as proposed by Gustav Kossina

(1858-1931) was taken up by Childe in his work titled *The Dawn of European Civilization* (Renfrew 2007:31).

First published in 1925, this book offered an integrated perspective of the Neolithic and Bronze Ages in Europe and became the accepted view of prehistory in Europe at that time, persisting for at least the next forty years. Here Childe adopted the views of Oscar Montelius (1843-1921) and the story of European prehistory. Since then a number of alternative theories about culture have arisen. In the literature from the late 1950s to 1960s there was a call by such authors as Clarke and Binford to replace culture history with a different approach based more upon what they considered to be social reality (Fagan 1988:34; Renfrew and Bahn 1991:14).

Culture History and the 'New' Archaeology (1960s-1980s)

It was Walter W. Taylor (1913-1997) who helped usher in the new Archaeology with his views on studying the past. His 'conjunctive approach' to the development of the 'New Archaeology' brought about a method of studying the past by combining elements of both the traditional archaeology of the period and the allied field of anthropology. This was an alternative to traditional normative archaeology in that the full range of the culture system is taken into account (Oxford Reference 2024). It was following that, that processual archaeology brought a new way to interpret archaeological evidence, through a plausibility of, or justification for, knowledge claims about the archaeological record (Watson 2020:1) (for more detail, see Chapter 3). Practitioners pursued a broader explanatory formulation concerning the human past (Watson 2020:1). This could include ways of determining a research problem, or of the research design selected for solving such a problem (Watson 2020:1). Scholars such as Lewis Binford, Kent Flannery, Albert Spaulding and Julian Steward recognised the major trends in social science and began the task of applying them to archaeology (Fagan 1988:73).

Binford's papers, lectures and seminars provoked interest among many American archaeologists, who later joined him in re-evaluating the basis of archaeology. Binford was not alone in his review of archaeology and in the early 1960s British archaeologist David Clarke wrote a monumental critique of prehistoric archaeology, arguing for a more explicit scientific method to replace the 'murky exhalation' of archaeological theory (Clarke 1968 in Fagan 1988:75).

What became known as the 'New Archaeology' became a vigorous movement in the late 1960s and 1970s and had been widely described (both then and now) as a theoretical revolution. Led by Binford in the United States of America, it shifted the theoretical foundations of archaeological research (Renfrew 2007:59), as part of this its proponents signalled their opposition to the 'old archaeology' (i.e. culture history) in both the bases of evidence and interpretation and in the language they used to describe archaeological concepts. One of the arguments against culture-history as a method suggested that Childe's use of 'diffusion' for explaining human spread over time was not a viable way of explaining past culture change (Fagan 1988:71). Rather, archaeologists were urged to adopt a more contemporary approach to understanding the dynamics of past ways of life (Binford in Fagan 1988:34). Binford argued for a much more explicit theoretical approach that could be tested against the data (Renfrew 2007:59).

The processual approach is an attempt at isolating and studying the different processes at work within a society (Renfrew and Bahn 1991:411) and between societies, and places emphasis upon relations to the environment, social relations within a society, the prevailing ideology and belief system, and the effects of interactions that take place (Renfrew and Bahn 1991:411). Archaeologists were urged to adopt a more social approach to understanding the spread of people across the globe, and to include trade and commerce amongst others (Renfrew and Bahn 1991:35). A view advocated by Carl Hempel (1905-1997) argued for law-like generalisations and that historical explanation should take the same form (Renfrew 2007:59). The later post-processual view offered an alternate view to this (Renfrew 2007:59), which included the voice of Ian Hodder in Britain (Renfrew 2007:60).

Colin Renfrew (2007:59) points out that much of post-war (World War II) archaeology focussed upon trying to construct 'regional sequences', and in correlating these between regions. It was as a reaction to this continuing culture-historical tradition of research, stimulated by the promise of radiocarbon chronologies and encouraged by the coherence of an ecological approach, that a 'New Archaeology' was born.

People (especially culture historians) also criticised processual archaeology at the time, for example, Bayard (1969:376), who said that "archaeology (like anthropology) is a

discipline rather than a "hard" science dealing with large amounts of rigorously quantifiable, replicable data; thus attempts to "prove laws" through the use of statistical methods and models borrowed from the physical sciences are often "spurious"". He also noted that most archaeologists would accept the aims of the new archaeology, but not "their current terminological expression" (Bayard 1969:376). One of the key battlefields over which competing schools of thought fought was language use. Hogarth (1972:301), also took aim at the language change:

The fact is, of course, that there is no such thing as the New Archaeology". It is merely Newspeak Archaeology, tricked out in a whole wardrobe of new vocabulary apparently designed more to impress than to enlighten. Hypothesis generation and validation, 'locational analysis', 'time space episodes,' and the like are all names comparatively new to archaeology, to be sure. But the ideas which they express or fail to conceal are not.

In hindsight, later archaeologists criticised the processual approach of the 1960s-1970s for being too focused on a materialist, functionalist approach that paid little attention to individuals (Watson 2020:6). Bruce Trigger in his book *Time and Tradition* (1978) criticized the 'New Archaeology' for its constraining approach, arguing for a more historiographic approach that is more broadly descriptive, such as that followed by the traditional historian (Renfrew and Bahn 1991:426). Kent Flannery criticised it as too trivial in the nature of its approach and the so-called laws they proposed (Renfrew and Bahn 1991:426).

Likewise, Ian Hodder felt that an archaeologist's closest links were with history and wanted to see the role of the individual in history more fully recognized (Renfrew and Bahn 1991:426). Colin Renfrew (2007:59) points out that much of the post-war (World War II) archaeology seemed to focus upon trying to construct 'regional sequences', and in correlating these between regions. It was as a reaction to this continuing culture-historical tradition of research, stimulated by the promise of radiocarbon chronologies, encouraged by the coherence of an ecological approach, that a 'New Archaeology' was born. It was seen that processual archaeology in places such as the USA, grappled with theoretical and methodological issues surrounding ethnographic analogy and site formation processes (Watson 2020:6).

Understanding History, Anthropology and Archaeology

It is important to understand how archaeology relates to other disciplines, such as anthropology and history and past human behaviours, when examining whether culture history is still part of current archaeological practice. Archaeologists have studies for example movement of people in the Southwest Pacific Region (Friedlander 2007:3) from Papua New Guinea to the Bismark Archipelago as people move and take parts of their existing culture with them (see diffusion).

Peter Burke, Professor of Cultural History at the University of Cambridge, presents culture history as part of a wider trend that includes sociologists and anthropologists, as well as other professions. He is an advocate of culture, but suggests that some culture historians can be criticized for being too rigid (Burke 2020:864). Clive Gamble (2015:25) suggests that there are two types of archaeology, 'culture history' and 'anthropological archaeology' which involves inferences about past human behaviours from artefacts and material culture. These two approaches represent different paradigms, where a paradigm is a set of beliefs and assumptions about how the world of archaeology works and how it should be investigated to gain knowledge of the past (Gamble 2015:25). The first is based upon material culture and their context, while anthropological archaeology is more the study of the human past through the medium of material culture and is especially interested in exploring social processes through time and throughout the world (Brown University 2023).

There is a link between archaeology and anthropology in the early stages of their development. Sir James Frazer (1890) set the foundations for both anthropology and archaeology in Britain (Fagan 1988:61). Anthropology in its basic form is the study of humanity, where both physical characteristics and our unique non-biological features we call culture are the focus of study (Renfrew and Bahn 1991:9). James Frazer proposed that anthropologists were tasked with the discovery of 'general principles' which regulated human societies. This has been previously stated by Edward Tylor (1871). Anthropology is based upon abstract rules which govern a culture and that are considered as normal behaviour (Fagan 1988:501).

The normative view of culture is a descriptive approach which can describe an ancient culture during a single time period or else across much of archaeological time through

its material remains (Webster 2008:12). As stated earlier, Childe also adopted this approach as patterns of behaviour which are common to a particular group of people, albeit revealed through material culture rather than direct observation (Webster 2008:12).

Here material culture provides evidence of behaviours and actions. History is a record of events that we break into recorded history (written records) and pre-recorded history (before written records)—what is often referred to as 'deep history', which examines the geological and environmental past as well as the human past (McGrath 2019:1). It is the history of the Earth before humanity. Jo McDonald (2021:313) related archaeology to deep history and the 'culture wars' of Australia, where the Indigenous knowledge of the distant past was often neglected.

Culture History Now: A Contemporary View (1980s-2000s)

Even now there is debate over what is and is not culture historical archaeology. Gary Feinman and Jill Neitzel (2020:1) contend that North American archaeology must reconsider its implicit adherence to the culture history paradigm. This is in light of the work of A.V. Kidder and his work as a culture historian, and follows the previous work of Carl Hempel, and the call to gather 'all the facts' before making announcements (Lyman 2010:505). Robert Schuyler (1988:1) suggested that historical archaeology, is 'potentially an impressive and productive field'. Further, that culture history is part of the statement of culture rather than process. By this he meant that, after the work of Walter Taylor, the reconstruction of the past could help re-establish culture history as a core to both historical and prehistoric archaeology (Schuyler 1988:7). However, he also suggested that 'prehistory' is the black box of history and that any statements about what culture history represents do not advance thought on the nature of culture or why it evolves (Schuyler 1988:1). Culture history holds to principles of seriation and stratigraphy, while an anthropological archaeology holds to linguistics, biological and social anthropology, with archaeology as a fourth arm (Gamble 2015:29).

Feinman and Neitzel (2020:1) state that, when culture historical sequences are employed to frame research, archaeologists implicitly accept, apply and communicate specific assumptions and tenets concerning human groupings and their presumed histories. Gertjan Plets et al. (2021:6) even suggest that 'culture history' remains a

structuring theoretical influence over much contemporary archaeology. Gary Webster (2008:11) states that culture history is a 'classificatory approach' suited to phenomena of uncertain historical integrity, for it is important to realize that culture historical archaeology was largely defined in retrospect and is concerned with classification and typology (Webster 2008:13).

To the reader this places culture history at the centre of contemporary archaeological thought. Colin Renfrew and Paul Bahn (1991) make many references to culture history as an approach, method and practice to further support this claim. They further cite a number of important texts written by Childe, such as *Man Makes Himself* (Childe 1936), written during his tenure as Professor of Archaeology at the University of Edinburgh in Scotland. This book provides background to elements of early archaeology, including links to early cultures, and was an assumed text at the time of its release. Glyn Daniel wrote in the preface to this book that it is meant to be 'readable' to those concerned with the detailed problems about which specialists argue (Daniel in Childe 1965:v).

Burke has suggested that there is a growing diversity of approaches permitted by current conceptions of culture (Diephouse 1999:151). Further, he suggests that historical analysis by its very nature constitutes a form of cultural encounter and historiography properly conceived constitutes a species of culture history (Burke in Diephouse 1999:151). These views are a foundation for building up a culture historical narrative, as explicated by Herodotus (ca. 484-424 B.C.E.), who was concerned with creating a properly detailed account of cultural change. In many parts of the world culture historical methods can still be glimpsed: for example, many research goals in Southeast Asian archaeology are still seen as idiographic involving methods for the reconstruction of past life-ways, the reconstruction of culture history, and preliminary data ordering (Fagan 1988:92-93; Peterson 1982:123).

Archaeological sites here are classified by attributes of time, space and cultural content into classifications which serve as a means for ordering and comparing archaeological sites (Peterson 1982:125). Much of the research carried out has been centred upon writing site reports and then reconstructing cultural histories to order their data (Peterson 1982:129). Whether there is a lag between what eventuates in Europe in

archaeology and what takes place in Asia is not clear. Perhaps Asian research is more practical. From the outset we recognise that culture histories are descriptive, and a type of special classification. Archaeological sites here are classified by attributes of time, space and cultural content into classifications which serve as a means for ordering and comparing archaeological sites (Peterson 1982:125).

Many would argue that culture history has revealed broad patterns in the evidence that have stood the test of time. We still use terms like 'Neolithic' and 'Basket weaver' to denote periods or phases, for example, and there is broad agreement on their contexts (Gamble 2015:28). The structuring principles of a culture history approach to archaeology include fact gathering and, judging relative similarities or differences between material remains, whether at the level of artefacts, assemblages or complexes (Doran and Hodson 1975:135). The practitioners of culture history emphasise the primacy of data, facts and classification (Gamble 2015:27).

A culture history approach to archaeology can be delineated by particular elements. Boas in the USA, who used culture history methods in his studies of American archaeology to better know the "Basketmaker and Pueblo periods" in the American Southwest, and the Woodland and Mississippian periods in the east (Kidder 1927; Jennings 1983, 1989), and Childe in England and their followers made collecting data a primary objective in both New and Old World archaeology (Fagan 1988:65). European archaeologists were intent on studying their prehistoric origins, constructing descriptive, historical schemes and tracing European society from its hunter-gatherer origins up to the threshold of recorded history (Fagan 1988:65). Some of the diagnostic features of a culture history approach include (Webster 2008:11-20):

- Normative theory; culture historical texts reveal statements about common notions about the nature of ancient cultures and their qualities, and sets of norms;
- Partitive culture or cultures; cultures constitute real or empirical divisions of the cultural whole;
- Stratigraphy; the study of stratified rocks (sediments and volcanic) in sequences in time and how cultural material is laid down;

• Chronology; helps in establishing a sequence and a relative timeline and date for materials from the rock-bedding strata.

The importance of stratigraphy in the earliest stages of archaeology cannot be overstated. Most archaeological relative chronologies employed careful observation of sequences of occupation levels, as well as correlation of these with cultural sequences at other sites (Fagan 1988:113). Stratigraphic layers allowed archaeologists to apply a relative date to their material through utilising aspects of the 'Law of Superposition' and time (Whitten and Brooks 1976:435).

Archaeology Now

Culture history holds to principles of seriation and stratigraphy, while an anthropological archaeology holds to linguistics, biological and social anthropology, with archaeology as a fourth arm (Gamble 2015:29). Feinman and Neitzel (2020:1) state that, when culture historical sequences are employed to frame research, archaeologists implicitly accept, apply and communicate specific assumptions and tenets concerning human groupings and their presumed histories. Plets et al. (2021:6) even suggest that 'culture history' seems to be a structuring theoretical influence over much contemporary archaeology. Webster (2008: 11) states that culture history is a 'classificatory approach' suited to phenomena of uncertain historical integrity because it is largely defined in retrospect, and that culture history is concerned with classification and typology (Webster 2008:13). To the reader this places culture history at the centre of contemporary archaeological thought. Renfrew and Bahn (1991) also make references to culture history as an approach, method and practice to further support this claim.

There was a reaction to the use of culture history methods by some researchers who claimed a more processual approach to archaeology, to explain cultural change (Fagan 1988:34). Many researchers claimed to want to better know and understand the social connections made by people within a particular culture (Renfrew and Bahn 1991:307) and Burke suggested that there was a growing diversity of approaches permitted by current conceptions of culture (Diephouse 1999:151). Further he suggests that historical analysis by its very nature constitutes a form of cultural encounter and historiography properly conceived constitutes a species of culture history (Burke in Diephouse

1999:151). These views are a foundation for building up a culture historical narrative, as explicated by Herodotus from about (ca. 484-424 B.C.E.) where his concern was for a properly detailed account of cultural change. Burke (2021:864) presents culture history as a part of a wider trend that includes sociologists and anthropologists, as well as other professions. The different approaches or paradigms present different ways of doing archaeology, of measuring different archaeologies. In this respect culture histories are seen as indispensable for communication within the discipline and especially for communication across disciplines (Peterson 1982:126).

Summary

The roots of culture history originated in the intellectual contexts of North America and Europe during the mid-nineteenth century, a time when new scientific fields of study confronted challenges of classifying and interpreting bodies of evidence (Darnell 1977 in Feinman and Neitzel 2020:1). The role of culture history in the development of archaeology is well established (Bahn 2014: Patterson 1995; Trigger 2006; Willey and Sabloff 1993). This approach became a framework for situating aspects of archaeology from the evidence in places such as North America (Feinman and Neitzel 2020:1).

Two centuries ago, the idea of a human prehistory did not exist (Renfrew 2007:3). Early developments in the field of prehistory in Europe had to contend with versions of human development that were associated with the Bible, especially the Old Testament, and the teachings of Archbishop Ussher (Fagan 1988:41), who suggested that humanity was created in 4004 BCE (Renfrew 2007:3). Since then, many advances in science have led to a greater understanding of the antiquity of humanity. The growth of science and literature has enabled a more comprehensive overview of what it is to be human. The notion of a deep time of human antiquity was not possible even a century ago. Now it is recognised that humans have many thousands of years of cultural development, and millions of years of evolutionary development.

CHAPTER 3 THE NEW ARCHAEOLOGY

The Rise of the New Archaeology

Much of post WWII archaeology seemed to focus upon the task of constructing regional cultural sequences, and correlating these sequences between regions (Renfrew 2007:59). For example, survey and excavation have produced insights into the origins of Maya society (see Flannery and Marcus 1983). It was as a reaction to a continuing culture-historical tradition of research, stimulated by radio-carbon chronologies, and encouraged by the coherence of the ecological approach, that a 'New Archaeology' was born (Renfrew 2007:59). Which was more of a different approach to archaeology. Previously Clark Wissler in 1917 had coined the term 'New Archaeology' to denote culture history and its potential to move beyond the mere 'collection of fine objects and curios' towards a new science using the 'conditions and inter-associations [between objects] that really tell a story'. New Archaeology became a vigorous movement between the 1960s and the 1970s described as a theoretical revolution (see Hodder 1989; Watson 2020). Within the theoretical foundations of archaeology at the time (1960s) the form of prior research was questioned and there was a desire for a much more explicit theoretical approach (Renfrew 2007:59).

During the 1960s processual or 'New' archaeology was being introduced by people such as Lewis Binford, Walter Taylor, Albert Spaulding and Kent Flannery in the USA and Grahame Clark and David Clarke at Cambridge University in England (Fagan 1988:520; Renfrew 2007:59; Watson 2020:1). The new processual archaeology advocated for deductive research and a methodology employing a research design, the formulation of explicit research hypotheses, and testing these against the available data to deduce their consequences (Fagan 1988:520). These methods are cumulative, and apply a working model approach to explain culture change (Fagan 1988:520). As part of the shift, processual archaeology as introduced by Binford sought to replace culture history as a way of doing archaeology (Renfrew and Bahn 1991:34). Its basis was the need for what Binford and his supporters considered a more precise and a focus upon a social aspect, using processes of culture development to interpret archaeology, and calling for greater study of the social processes at work (through deduction). The argument was that the 'potential of the archaeological evidence' was much more than had been previously realised. Processual archaeology dominated the North American

and western European scene from the 1960s to the 1980s, and became central to North American and western European archaeology. In fact, it is still central to American archaeology (Watson 2020:1).

The New Archaeologists were influenced by Karl Popper, who stressed a more scientific hypothesis, and Carl Hempel, who sought law-like generalizations in the field of the philosophical basis of science (Wren 2023:1). Hempel suggested a historical explanation should take the same form as a scientific one, that was testable and worked at law like generalisations and that historical explanation should take the same form (Renfrew 2007:59). As part of this approach the new archaeologists were keen to seek cross cultural regularities in human behaviour, and, in doing so, uncover laws of human culture process (Renfrew 2007:59). Archaeologists such as Kent Flannery and Henry Wright in the USA, and David Clarke in England, were also advocates of quantitative methods, and of an explicit formulation of models of culture change whose efficacy could be openly examined (Renfrew 2007:60). The new wave of archaeologists turned away from the pure historical approach to a more scientific (defined narrowly as a quantitative) approach linked to mathematical outcomes. This was part of the work of Clarke (1937-1976) in Britain, whose book *Analytical Archaeology* (1968) outlined new approaches to doing archaeology, employing more sophisticated quantitative approaches.

In 1968 Binford published his influential article 'Post Pleistocene Adaptation', in which he set out to explain the 'origins of farming' and food production (Renfrew and Bahn 1991:413). He stated that, as communities became more sedentary, their populations increased, as women had more children in a more settled environment. This change, he argued, could be seen in the Natufian culture of 9,000BC, which became sedentary and changed from a mobile lifestyle to a more settled life (Renfrew and Bahn 1991: 413). Natufian culture was a Mesolithic culture from the region of Palestine and southern Syria. The Natufians, originally foragers (Mann 2011:1), settled into small villages and were later noted for their cultivation of wheat and barley and their materials were further characterised by the use of microliths and bone for implements (Renfrew 2007:18, 57). This change, from a predominant hunting and gathering lifestyle, was a response to environmental changes and movement to coastal and riverine environments, which brought cultural change (Binford 1968:29).

Earlier attempts to explain the adoption of agriculture had been made by Childe (Renfrew and Bahn 1991:413) and Robert Braidwood (Renfrew and Bahn 1991:413), who argued that agriculture began on the 'hilly flanks of the fertile crescent' (Renfrew 2007:57) in a small farming community that grew wild wheat and barley which indicated early farming practice (Renfrew 2007:57). Binford's account concentrated upon generalisations, arguing that the Mesolithic was a cultural readaptation to post-Pleistocene environments. This conception became an awkward one on a world-wide scale, however, since there is evidence that the same trends began to manifest in some areas before the end of the Pleistocene (Binford and Binford 2008:321). In comparison to the culture history approach of Childe, Binford's explanation had one important feature not found in previous explanations, in that he set out to explain the origins of farming worldwide, not only in the Near East or the Mediterranean.

When in 1962 Lewis Binford wrote 'Archaeology as Anthropology' he argued for a new approach to doing archaeology and stated that colleagues should rethink their methods and aims (Rice 1985:2). Binford urged a new approach where, instead of viewing culture as simply a collection of shared values which regulate behaviour within a society, archaeologists should look at it as a means of human adaptation to both the natural and social environment (Rice 1985:2). He further suggested that all aspects of the culture system should be investigated—the social as well as the ideational, and the technological as well as the ecological (Renfrew 2007:60). Despite this claim, many explanatory models put forward the idea that the emphasis in practice often lay within the field of ecology, upon subsistence and environmental change (Renfrew 2007:60). As a result, the early New Archaeology can be seen to follow a more functionalist approach (Renfrew 2007:60) based upon social structures.

Rice (1985:127) states that, between the 1960s and the 1980s, archaeology as a scientific discipline had undergone a series of radical changes in both its orientation and methods. This gave rise to a 'New Archaeology' which, although not a coherent intellectual movement, was more of a social science 'theory' regarding human behaviour and cultural evolution. Interestingly, Brian Fagan has suggested that the processual approach was still firmly based on 'culture history' data obtained from inductive research and chronological-spatial frameworks from prehistory and descriptive methods from years of fieldwork (Fagan 1988:520), although this was rarely

acknowledged in the New Archaeology paradigm. Lewis R. Binford (1968:267, 2013:267) tacitly noted this, for example, in his article in the *Southwestern Journal of Anthropology* (1968), when he stated that a knowledge and understanding of historical events can lead to placement of processual factors in proper perspective. Sabloff and Willey (1967, cited in Binford 1968:267) discussed some approaches to culture historical versus processual archaeology when they acknowledged the need to give research priority to the reconstruction of historical events and argued that understanding such events lead to the placement of processual factors in a proper perspective, rather than the reverse (Sabloff and Willey 1967:130).

Similarly, Schuyler (1988:1), an historical archaeologist, in his article 'Archaeological Remains, Documents, and Anthropology: a Call for a New Culture History', suggested that, in viewing the historic record (of sites), a view grounded on 'culture history' archaeology is both impressive and productive. He further suggested that historic ethnography, based equally on archaeology and written sources, was the future natural sphere for the archaeological investigations of the modern world (A.D. 1400-20th century).

The New Archaeology was a challenge to the existing paradigm of culture historical research. To do archaeology well, processual archaeologists argued it was necessary to make it explicit, and examine the underlying assumptions as explained by Clark when, in 1973, he wrote about 'the loss of innocence in archaeology' (Renfrew and Bahn 1991:37). The new approach of questioning events and places takes the form of more detailed and quantitative procedures that led to new developments in research.

What is Processual Archaeology?

It was as a reaction to the continuing culture-historical tradition of research that a New Archaeology was born (Renfrew 2007:59). This became a vigorous movement during the 1960s and 1970s. Lewis Binford, in the United States determined a more theoretical approach to archaeological investigation, and the application of scientific rigour with the application of explicit hypotheses that could be tested against available data (Renfrew 2007:59-60):

 The key principles of processual archaeology include the formulation of explicit hypotheses;

- Testing hypotheses against the available data;
- Disregarding the diffusionist approach of culture-historians;
- Seek cross cultural regularities;
- Uncover the laws of culture process;
- Use of quantitative methods;
- Construction of models of change.

Binford argued that all aspects of the culture system could be investigated-the social and the ideational (Renfrew 2007:60). The early processualist archaeology could be seen to follow a functionalist line of research. The new approach to doing archaeology was influential in promoting explicit models of change, and bringing in the underlying assumptions that prehistorians used in their work (Renfrew 2007:59-60)

To do archaeology well, processual archaeologists argued it was necessary to make it explicit, and examine the underlying assumptions as explained by David Clark when, in 1973, he wrote about 'the loss of innocence in archaeology' (Renfrew and Bahn 1991:37). The new approach of questioning events and places took the form of more detailed and quantitative procedures that would lead to new developments in research. Efforts in the 1960s to demonstrate the value of the 'new archaeology' also involved showing that the competing culture-history paradigm was inferior.

One allegedly weak plank in that paradigm had to do with how culture historians viewed culture as a set of ideas transmitted in the form of ideal norms or mental templates (Lyman and O'Brien 2004:369). Lewis Binford referred to this view as 'normative theory'. In archaeology that view was manifest in the equation of artefact types with prehistoric norms an equation that, according to Binford, the culture historians had made so that they could track the flow of ideas through time and thus write culture history (Lyman and O'Brien 2004:369). Culture historians regularly subscribed to cultural transmission as the theoretical backdrop for their artefact-based chronometers such as sedation and the direct historical approach, but with few exceptions they perceived only a weak relationship between norms and artefact types. It was not until 1960, in a paper by James Gifford, that what Binford labelled as normative theory appeared in anything approaching a complete form. Ironically, the first applications of normative theory were products of the new archaeologists, not the culture historians (Lyman and O'Brien 2004:369).

The Language of Processual Archaeology

Outlining the change in language introduced a new interpretive type of approach to archaeology. The approach includes a debate about the orthodoxy of the reaction to a 'new archaeology' of the 1960s-1970s (Hodder et al. 1995:1). Here we are looking at the character and scope of archaeology. The basis is interpretation and debate in Anglo-American archaeology between processual and post-processual approaches (Hodder et al. 1995:1). Processual approaches are a reaction to the culture-historical and descriptive approaches. Some of the key tenets of processual archaeology include (Hodder et al. 1995:1):

- Archaeology conceived as anthropological science rather than allied with history;
- Explanation of the past valued over description;
- Explanation via the incorporation of particular observations of the material past into cross-cultural generalisations pertaining to (natural and social) process (hence the term 'processual');
- Explanation via explicit methodologies modelled on the hard sciences.

Various scholars criticised the processual approach, both at the time and later. Crucially, language was one of the key battlefields over which proponents from these competing schools of thought fought where some archaeologists should concern themselves with processual questions but argue that archaeologists must give research priority to the 'reconstruction of historical events' (Binford 1968:267). Sabloff and Willey (1967) have stated that an understanding of historical events would help place processual factors in a proper perspective (Binford 1968:267).

Summary

Part of the strategy for showing the limited value of culture history was to argue that it was based in large part on 'normative theory,' a term that quickly became a pejorative label for any effort to examine the history of cultures. It subsequently evolved into a synonym for masking variation among cultural phenomena. The interesting fact here is that Binford and this new archaeology was itself based upon his views of 'normative culture'. Further to this, it is interesting to note that it was

the new archaeologists who based their views of culture upon a normative approach (Lyman and O'Brien 2004:370). This is further highlighted by Sharer and Ashmore (2003:67), for example, who indicate that the 'normative concept of culture holds that within a given society, behaviour patterns are the result of adherence to a set of rules, or norms, for behaviour.' They go on to state that 'norms really specify the ranges and limits' of tolerated behaviours and that 'the remains of past cultures recovered by the archaeologist may be assumed to represent past behavioural norms. As an example, pottery can be viewed as a reflection of norms governing technological behaviour. Fagan (1997:91) indicates that norms 'define the range of acceptable behaviour,' and that archaeologists argue that 'artefacts represent norms of technological behaviour, if nothing else.'

Efforts in the 1960s to demonstrate the value of the 'New Archaeology' involved showing that the competing culture-history paradigm was inferior. One allegedly weak plank in that paradigm had to do with how culture historians viewed culture as a set of ideas transmitted in the form of ideal norms or mental templates (Lyman and O'Brien 2004:369). Lewis Binford referred to this view as 'normative theory'. In archaeology that view was manifest in the equation of artefact types with prehistoric norms an equation that, according to Binford, the culture historians had made so that they could track the flow of ideas through time and thus write culture history (Lyman and O'Brien 2004:369). Culture historians regularly subscribed to cultural transmission as the theoretical backdrop for their artefact-based chronometers such as sedation and the direct historical approach, but with few exceptions they perceived only a weak relationship between norms and artefact types. It was not until 1960, in a paper by James Gifford, that what Binford labelled as normative theory appeared in anything approaching a complete form. Ironically, the first applications of normative theory were products of the new archaeologists, not the culture historians (Lyman and O'Brien 2004:369).

CHAPTER 4 POST- PROCESSUAL ARCHAEOLOGY

Post Processual Archaeology

Processual archaeology made contributions to archaeological theory by encouraging the notion of culture as adaptive, and by applying systems theory, information exchange theory and a host of other general theories (Hodder 1986:147). But, much like the rise of the New Archaeology as a reaction against culture history, post-processual archaeology arose in the 1980s as a reaction to processual archaeology, and it came to be used as an umbrella term covering a wide range of approaches that engaged with contemporary social theory and acknowledged the historical dimensions of knowledge production. Previously it was stated that processual archaeology had many different facets, too, and maybe it's the case that culture history was equally as wide ranging and heterogeneous, but that this complexity has been lost in the subsequent 70 years of alternative approaches. Maybe all of the processual/postprocessual debates of the past seven decades has done culture history a disservice by presenting it as more homogeneous (and therefore less vibrant, flexible and insightful) than it really was. It is probably pretty typical of debate that the opposition (the 'old') has to be presented as monolithic, unchanging, inflexible and redundant, but that also means we should be critical of such characterisations and look carefully back at the history of thought with more nuance.

These approaches have included discussions of power and ideology, feminism, shifts to and from the notion that material culture can be read as a text, phenomenology, accounts of agency, landscape, the body, memory, materiality, the links between archaeology and heritage, Indigenous rights, and ethics (Hodder 2018:2). Other authors, such as Fagan (1988), Renfrew (2007), and Renfrew and Bahn (1991), have commented upon the theories and position of archaeology in light of these new approaches.

In the 1980s processual archaeology was still the dominant orthodoxy in the largest communities of archaeology (Shanks 2008:1). In a series of influential works published throughout the 1990s (see Hodder 2018; Shanks 2008) post processual archaeology identified a series of oppositions to the processual approach that included systems and structures, behaviour and agency, anthropology and history, and object and subject (Hodder 2018:1). The post-processualists rejected the deterministic arguments and

logical positivist methods of processual archaeology as being too limited to encompass the wide variety of human motivations. This approach brought a new way of focusing upon human cultures.

Post-processualist archaeology began to build connections through 'archaeological data' (Shanks 2008:3). It looked at contemporary issues and interests, rather than knowledge for its own sake (Shanks 2008:3). Michael Shanks (2008:1) has suggested that a post-processual approach was not a replacement for processual archaeology (which was still the dominant form), instead it was a critique, 'rooted in the dissatisfaction with the way archaeology was going' (Shanks 2008:3; Watson 2020:1). This approach brought a new way of focusing upon human cultures.

Post-processual archaeology stemmed from critical debates about the nature of archaeology in the 1980s in Britain, Scandinavia, and the United States, leading to much controversy in the 1980s and 1990s (see Shanks 2008; Watson 2020) and is a movement in archaeological theory that emphasises the subjectivity of archaeological interpretations (Hodder 2018:1). While there were other paradigms that suggested alternative ways forward, such as the structuralist archaeology of the 1970s, the post-processual paradigm that stressed that the ideas and beliefs of past societies should not be overlooked in any archaeological explanation became dominant (Renfrew and Bahn 1991:405). During the first decade of the twenty-first century, the debate has settled down, and many archaeologists attempt to integrate divergent perspectives within the disciplines or pick and choose between them (Hodder 2018:1).

This included some elements of culture history. For example, Philip Duke and Michael Wilson (1997:482) determined that 'to work out a true prehistory of the Great Plains, we must read for details in everything from the material culture to traditions, but not in one or two cultures alone'. Post-processualists argued for attention to 'specific culture histories', rather than disembodied cultural processes (Watson 2020:7), to individual agency in past societies (in particular relating to issues of domination and resistance), and to evidence for ancient cognitive systems (Watson 2020:7), as well as explicit recognition of multiple societal forces profoundly affecting individual archaeologists and shaping an entire discipline (Watson 2020:7).

It was here that post-processualists denied that unbiased, unproblematic, objective access to 'the real past' was possible (Watson 2020:7). Instead, post-structuralism shares a great deal with processual archaeology, including an outlook on the critical prevailing status quo, being primarily research oriented, reflecting upon procedures and concepts of the discipline (although processualist archaeology looks more at method), an optimism that social archaeology has a significant voice about societies, and an anthropological, sociological outlook (Shanks 2008:3).

The introduction of processual archaeology saw the rise of explicit theory and methodology (Renfrew and Sherratt 1997:Introduction). More recently as part of a post-modern approach post-processualists have disputed scientific pretensions of the subject by situating it in the context of the present day (Yoffee and Sherratt 1997:Introduction). Earle and Preucel (1987:501) have suggested that new archaeology searches for general laws and theory building. In contrast to this a criticism of the post-processual approach is that it fails to explain variability in past human behaviour (Earle and Preucel (1987:501).

The Language of Postprocessual Archaeology

Post-processual archaeology was not introduced to replace processual archaeology in the broadest sense. Instead, it is more a 'container' for different trends (Shanks 2008:1). As a new approach it is still a matter of controversy (Shanks 2008:1) and it can be found in a number of text books and where archaeology is a matter of debate, and appears to lack a methodology that can deliver any kind of secure knowledge (Shanks 2008:1). Post-processual archaeology forms part of the post-modern approach to archaeology.

Blanco in Hodder (2013:1) suggests that 'we are already post-modern'. Others such as Huyssen (in Hodder 2013:1) suggests that the 1970s saw the limits of modernism, and Nairne (1987 in Hodder 2013:1) goes further to suggest that there is a new depthlessness and all culture becomes a parody of the past. There is a superabundance of explanations and purposes to 'suit any inquisition' or situation (Hodder 2013:1). We are compounded with ideas and images. This makes it difficult to pick one approach to archaeology and claim it as 'the approach' to use. Lewis Binford in his article 'Science to séance' (2009:Chapter 3) has commented that we may query further, has science really failed in terms of its goals, the accumulation of knowledge and understanding

of the world as we know it? Such a claim would certainly be difficult to defend. Faced with this type of logical situation, what is the form that debate over this issue is likely to take? Where does this place modern archaeology and its approach to understanding the material record? Which path should the field archaeologist follow? Further how do they write up and report their findings?

In examining the language and scope of post-processual archaeology to interpret what we see in the archaeological record, inferences must be made regarding (a) the formation processes of the material record and how they reflect the role that places played in the organization of the past and (b) how that role (and the organizations as well) changed through time (Binford 1989:Abstract). Ian Hodder (1989:147) suggests that while processual archaeology made contributions to archaeological theory by encouraging the notion of culture as adaptive, and applying systems theory among others, many of its ideas existed in earlier approaches to archaeology. Archaeological language has changed over time as have its approaches. It may be that a combination of culture history, processual and post-processual archaeology will be the future for archaeological practice.

Summary

With these competing views of archaeology it is easy to lose sight of the basic premise of much archaeology, namely that all forms rely upon a normative component (Hodder 1989:148). This is a culture history fundamental, as are a number of devices such as seriation and typology. And many of these larger observations about what survived from previous paradigms to be incorporated into the newer ones is really only possible in hindsight, when what people claimed they were doing and what they actually did can be compared. Which highlights the value of synthesising data to understand patterning.

Alternatively, Lewis Binford and others introduced a processual approach that superseded culture history and focused upon a more process-oriented archaeology (Fagan 1988:520) and the way that cultural systems functioned. Another way of doing archaeology is the post-processual approach that sets out to view cultures as adaptive and that the ideas of past societies should not be disregarded (Renfrew and Bahn 1991:405). Both post-processual and processual archaeology share some common ground, as stated previously, all looking toward a more social analysis of societies.

CHAPTER 5-METHODS

Introduction

The questions we ask in archaeology, and the ways we order data to build interpretations of the past, are strongly influenced by the theoretical frameworks we deploy (Plets et al. 2021:3). Although some archaeologists do not state their theory, we always employ analytical lenses in our work. In this study the concepts utilised are individual words that operate as signifiers in which intellectual and interpretative frameworks are encoded (Kress 2011:1). Such signs are specific at the time of their making, and are remade by those who interpret them; they are also specific, albeit differently specific, signs (Kress 2011:1). Whoever uses the word/signifier has made a sign which is precise for her or him at that moment (Kress 1997, 2010). The words selected for each approach to archaeology are representative of that approach during a particular timeframe (i.e. culture-history works across the early 1900s to the 1960s, processual archaeology works across the 1960s to the 1980s, and post-processual archaeology across the 1970s to the 1990s).

To answer the research question of whether, and to what extent, culture history is still operational within contemporary archaeological practice, a review of the archaeological literature was necessary. According to Google Scholar, there are over 600,000 archaeology articles and books published between 2010 and 2020. The published output is immense, therefore only a sample of this record is possible for this research. This project sampled articles from a number of key, globally significant archaeology journals.

Because it is not practical to review all available articles, a sample of 124 articles was determined using a structured random sampling approach. In this study documents became the data source (Bowen 2009:1) through intensive reading and note-taking of selected articles then graphing the results to determine the frequency that selected terms appear in the literature of specific approaches to archaeology. This chapter covers the selection of journals, and the sampling strategy for articles. It then examines the recording attributes for gathering data from the articles sampled.

The Language of Culture History

Archaeological theory is expressed through its use of particular language to describe materials, places and events. From a historical point of view a culture history approach to doing archaeology includes language from the 19th century and the early to mid 20th century (such as 'diffusion', and 'prehistory'), terms well documented in archaeology. The link between history and archaeology is evident, as Ian Hodder, in his book *Symbols in Action* (1982), suggests that there are parallels with 'new archaeology' through its ties with history. Across time languages evolve and meanings change. This is echoed in semiotics, which is the study of signs (Abercrombie et al. 1994:373). The basis of communication here is the association between signifier, signified and sign. The relationship between signifier and signified can be direct (Abercrombie et al. 1994:373). As in all disciplines, language use changes over time, and Daniel Wickberg (2020:661) suggests that 'the new culture history arose out of the social history revolutions of the 1960s and 1970s'. Such events contained changes that reflect modern European and American history influenced by various forms of cultural studies (Wickberg 2020:661).

Sampling Strategy—Choosing the Journals

The articles chosen were from well regarded journals that cover a diverse range of topics, geographic areas and time periods, from the Palaeolithic into the Bronze Age and the present. The journals chosen included: the journal of *Australian Archaeology*, *American Journal of Archaeology*, *Antiquity*, and *the Journal of the British Archaeological Association*, with a supplementary scholarly quarterly journal, the *Journal of Field Archaeology*, that publishes articles that are the result of field research worldwide. The sample was further expanded by papers chosen from ten selected International Archaeology Conferences from 2021-2022 chosen to help cross reference terms used in the study (Appendix 1).

Journals were selected on the basis of their temporal range and coverage of archaeology topics. Each journal was readily available online and easy to access. Further, each journal was selected based upon their global ranking. Most articles selected were peer reviewed, with the exception of the conference papers. *Antiquity* was established by Trust Deed in 1963, and amended in 2009. The charitable objectives of the Antiquity Trust (Charity no. 313229) are to promote archaeological research, education and

learning by means of the continued publication of the learned periodical called Antiquity. The American Journal of Archaeology is the peer-reviewed journal of the Archaeological Institute of America. Archaeologists examine the physical remains of humankind to answer questions animated by our present. The material record helps us understand the production of inequality, the representation of power, and targeted discrimination of communities. Australian Archaeology is the journal of the Australian Archaeological Association and is a refereed journal published since 1974. Although Australian Archaeology does not carry specific global content, it has been included in this review in order to gauge whether culture history is apparent in Australian archaeological practice in comparison with international examples.

The *Journal of the British Archaeological Association* was founded in 1843 to promote the study of archaeology, art and architecture and the preservation of the national antiquities. It encourages original research and published new work on art and antiquities of Roman to post-medieval date, although the art, architecture and archaeology of the Middle Ages form the core of its interests.

The *Journal of Field Archaeology* is published for professionals concerned with the interpretation of the archaeological record. The *Journal of Field Archaeology* is a peer reviewed academic journal that covers archaeological fieldwork from any part of the world. It is published by Routledge on behalf of Boston University and its editor-inchief is Christina Luke. The journal was established in 1974 by the Association for Field Archaeology. The International Archaeology Conference was chosen because it was seen to represent current issues in archaeology, and the date range was chosen to mirror those used for the article sample selection.

Sampling Strategy—Choosing the Articles

The sampling strategy selected articles published between 2010 and 2020. To determine the population and therefore a valid sample size and gain a more representative sample size, the Australian Bureau of Statistics Sample Size calculator was applied. The maximum number of articles to be sampled was determined to be 384, with a minimum number sampled of 124. This was supplemented by a sample of ten international conference papers (see Appendix 1). Table (1) provides the 95% confidence level and was applied with a 0.5% confidence interval, with a standard error

of 0.02551. As this is only an initial investigation, the minimum number (124) was selected.

Table (1) Results from the ABS Sample Size Calculator determining a valid article sample size.

Attribute	Value	Value
Confidence Level	95%	95%
Population Size	670,000	670,000
Confidence Interval	0.05	0.07280
Standard Error	0.02551	0.03715
Relative Standard Error	5.10	7.43
Sample Size	384	124

To reach the minimum number, 31 articles were chosen from each journal. This meant three articles for each year of publication for each journal, supplemented by one additional article. Each journal article was chosen at random using a structured random sample format as an approach to selecting articles. These were chosen based on their place in the list of articles for that year: first article then last article, then second articles in the list to make up three articles. One further article from each journal was selected on the basis of a random choice, making up 31 articles needed for assessment. Table (2) outlines the journals and number of articles for each journal sampled.

Table (2) Population of Journal Articles (2010-2020)

#	Journal	#	Articles	
		Issues	Reviewed	
1	American	44	31	
	Journal of			
	Archaeology			
2	Antiquity	85	31	
	Journal			
3	Australian	24	31	
	Archaeology			
4	British Journal	11	31	
	of Archaeology			
Total	4	164	124	

Recording Attributes

To analyse the data I employed descriptive statistics (the graphs) and each term was listed by its frequency of occurrence. First, a set of key terms had to be generated for each school of thought (Table 3). One difficulty that needed to be dealt with in this process was that terms may not directly correlate or be in use in the present. To deal with this issue a thesaurus was developed for the top 25 terms for culture history, the top 14 terms for processual archaeology, and top 18 terms for post-processual archaeology as taken from a number of related key texts for each approach to archaeology. The key texts used were chosen after discussion with peers, and included Webster's (2008) 'Culture history: A culture history approach', Watson's (2020) 'Processualism and after', and Shanks' (2008) 'Post-processual archaeology and after'.

To expand this list further a number of key texts were sampled, including Fagan (1988), Gamble (2015), Hodder (2013), Renfrew and Bahn (1991), and Renfrew (2007). Further to this a number of seminal journal articles were scrutinised for terms that related to each approach, including Lyman and O'Brien (2004) 'A history of normative theory in Americanist archaeology', and Plets et al. 'Excavating archaeological texts: Applying digital humanities to the study of archaeological thought and banal nationalism'.

Following compilation of the thesaurus, the presence and frequency of these terms had to be determined for each article. Terms had to appear at least twice in an article to be counted. Data were then entered into a spreadsheet which was used to compare and contrast the use of terms associated with each school of thought.

Table (3) List of Terms chosen from each approach to archaeology

Culture History Processual Post-Processual

Abstract	Causality	Agency
Aggregate	Comparison	Body
Artefact	Deductive	Critical
Assemblage	Economic	Divergent
Attribute	Empirical	Individualise
Boundary	Environment	Habitus

Chronology	Explicit	Homogenous
Class	General	Historical
Classification	Geographical	Ideology
Culture	Individual	Knowledge production
Culture centre	Process	Landscape
Culture unit	Social	Materiality
Development	Transmission	Memory
Diffusion	Variation	New Marxist
Distribution		Phenomenological
Empirical		Power relations
Homogeneous		Social theory
Inductive		Structural
Material		
Migration		

Following the compilation of the thesaurus, the presence and absence of these terms had to be determined for each article. Terms had to appear at least twice in an article to be counted. Then data was entered into an Excel spreadsheet and used that to compare and contrast the use of terms associated with each school of thought.

CHAPTER 6-RESULTS

The terms chosen for each approach to archaeology were ranked according to the number of times they appeared in the literature. Section 6.1 presents the total number of terms characteristic of each approach across all three journals combined. Section 6.2 discusses the terms by journal. Section 6.3 compares these data between journals.

The results are presented in a series of figures, with each approach to archaeology represented. From those figures it is possible to determine the differences between each approach over time and how well represented each approach is. A comparison was made with the article by Plets et al. (2021) and their findings of the occurrence of culture history discourse, processual discourse and post-processual discourse in Belgium, to observe the patterns of change over time and what that could mean.

Total Number of Terms

Archaeologists draw upon concepts when assembling knowledge about the past (Plets et al. 2021:4). Concepts are individual words that operate as signifiers in which intellectual and interpretive frameworks are encoded (Plets et al. 2021:4). Across the three journals sampled, the most frequently appearing culture history terms are artefact, assemblage, chronology, and inductive, with lesser peaks in the appearance of terms such as material, migration and empirical (Figure 4).

From the results it is evident that the most frequently occurring terms are 'artefact', 'assemblage', 'chronology', and 'inductive'. These terms have been in use in culture history research for a century. Other terms such as 'material' and 'migration' appear next most often in the literature. The term 'culture' appears only once.

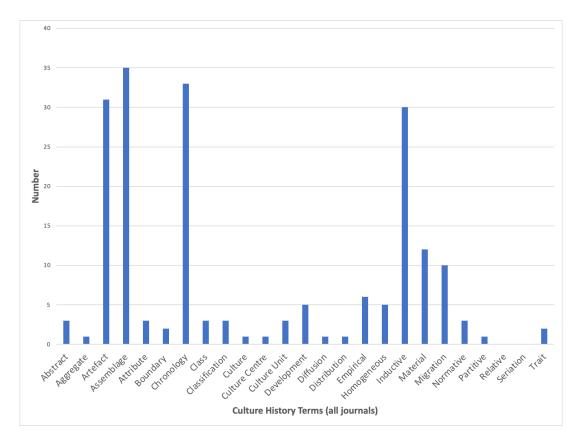


Figure (2) Number of culture history terms (all journals)

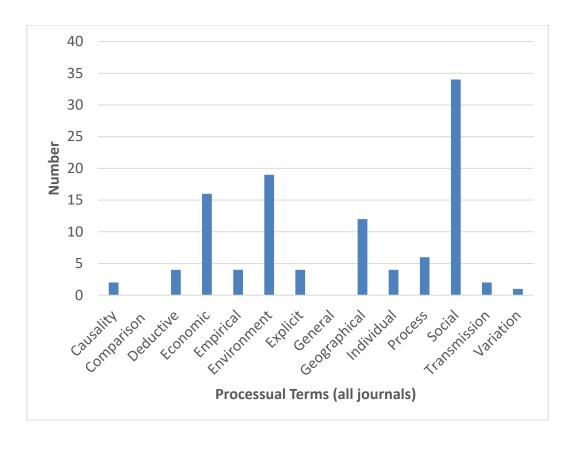


Figure (3) Number of processual terms (all journals)

Of the processual terms, 'social' appears the most frequently, followed by environment, 'economic' and 'geographical'. The least frequently appearing terms are 'variation' and 'causality'. The terms 'comparison' and 'general' do not appear at all in the results, even though these are used in everyday explanations of research. It has been suggested by Plets et. al. (2021:7) that processual terms began to appear more frequently in the mid 1980s and increased into the 1990s. The appearance of new concepts indicates new ideas and frameworks being used to describe archaeological data (Plets et al. 2021:7).

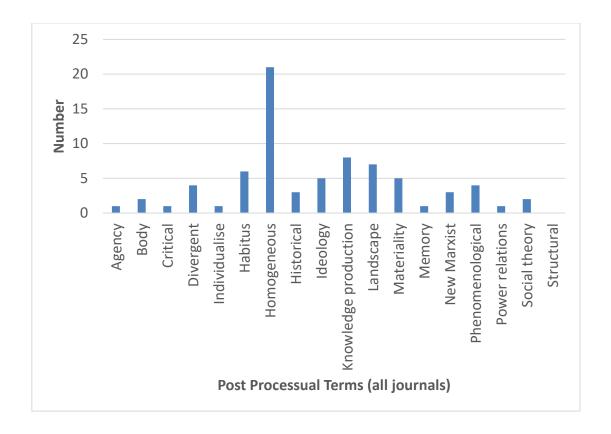


Figure (4) Number of post-processual terms (all journals)

Across the three journals, the most frequent postprocessual terms to appear are 'homogenous', followed by 'knowledge production', and 'landscape'. Using the contemporary research by Plets et. al. (2021:4), the term 'agency' appears in the literature as part of a relationship between individuals and social structure (Abercrombie et al. 1984:9). As such it is an important part of contemporary research, although it only appears once in this study, as do terms such as power relations, critical, individualise and memory. The term 'structural' did not appear in the literature sampled.

Terms by Journal

The journal *Antiquity* shows a greater number of culture historical terms overall than either processual or post processual terms. These peak in 2017, where there was a number of articles about human ancestry and habitation, with lesser peaks in 2012, 2015 and 2016. There are never more than five processual terms in any volume of the journal in this time period studied by this thesis, with 2019 having none. Postprocessual terms are even less frequent, never rising to more than four (in 2013) and often remaining at one, apart from 2018, which had none.

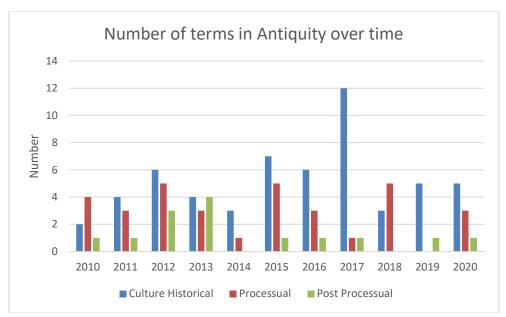


Figure (5) Number of terms in *Antiquity* over time

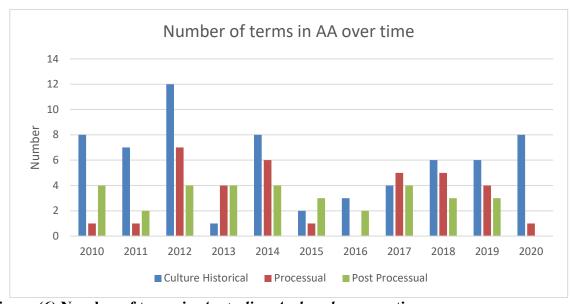


Figure (6) Number of terms in Australian Archaeology over time

The journal *Australian Archaeology* shows a greater number of culture history terms overall than processual or postprocessual, particularly in 2012. Culture history is well represented in 2010, 2014 and 2020. There is no clear trend toward culture history in the results, although culture history terms do predominate across all years from 2010 to 2012, 2014, and 2018 to 2020. Even though not a global publication, this journal is important for Australasian archaeology.

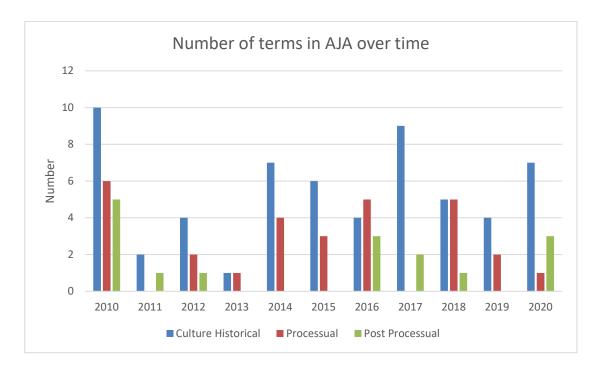


Figure (7) Number of terms in American Journal of Archaeology over time

Culture history terms used in the *American Journal of Archaeology* peaked in 2010, and 2017, with frequent use in 2014 and 2020. The use of culture history terms spans the entire decade from 2010-2020, being well represented in 2010, and then occurring regularly across the years 2014-2020.

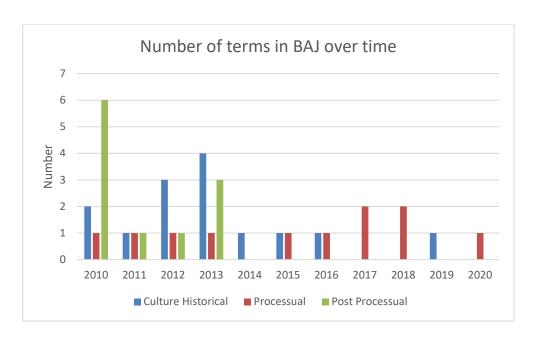


Figure (8) Number of terms in the *Journal of the British Archaeological Association* over time

There are fewer culture history terms used in the *Journal of the British Archaeological Association* than the other journals sampled and after 2013-2020 culture history terms did not appear at all. In contrast, post processual archaeology was the most frequently appearing approach in 2010 and 2013.

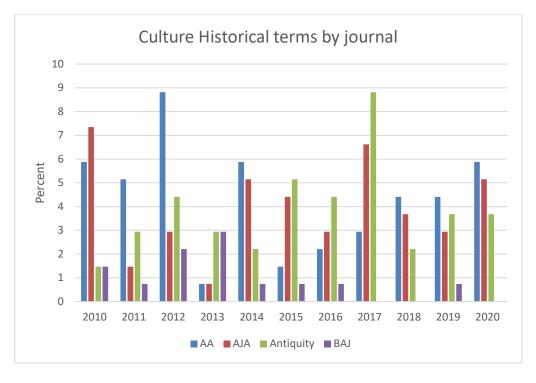


Figure (9) Culture historical terms across all journals

Australian Archaeology contains a relatively high frequency of culture history terms from 2010-2012, then 2014, 2018, 2019 and 2020. Antiquity contains a regular number of terms across the years and reaches its maximum in 2017. The years 2012, 2015, 2016, 2019 and 2020 contain a number of culture history terms.

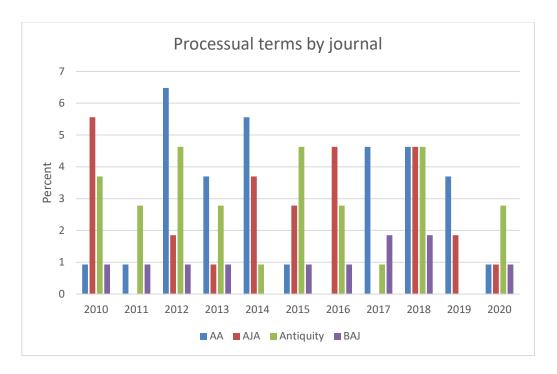


Figure (10) Processual terms by journal

Processual terms indicate no really obvious pattern, other than that this language is represented in all three journals most of the time, but not all of the time. *Australian Archaeology* contains more processual terms from 2012, 2013 and 2014, with more terms evident in 2017 to 2019.

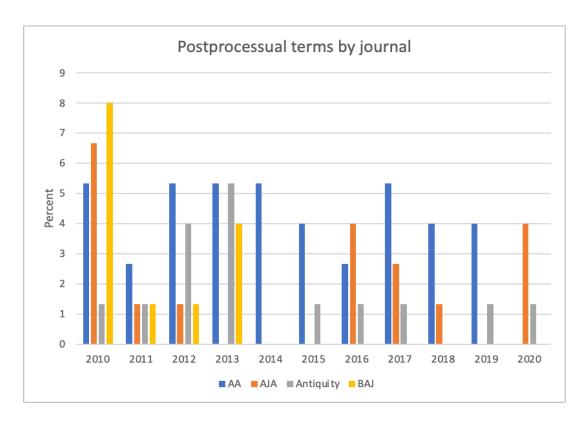


Figure (11) Postprocessual terms across all journals

The use of post processual terms indicates more 'gaps' in this language after 2013, with at least one journal, if not more, omitting this language. This language is less frequently used overall, and more patchily used when it does appear.

CHAPTER 7-DISCUSSION

This research thesis represents a stage in an analysis of the language and literature in use in archaeology in the present. The perceived trends in the analysis incorporate subtle shifts and changes in the use and meaning of language over time. Using the ABS random sampling approach provided two levels of investigation, with an upper and lower level of data collection from the available literature. In this study I chose the lower level and scrutinised more than 124 separate articles for the research.

Archaeology is, in its most basic sense, a discipline founded on hypotheses. Our field interpretations often present hypothetical explanations of the material record that are established through our understanding and synthesis of the data available to us (Foulds 2013:2). Archaeology is also unique in that it can be classified as both a science and a humanities discipline, although the relative contributions of both fields are still fodder for contemporary debate (Wallis 2020), just as they have been in the past (e.g. Bayard 1969; Hogarth 1972; Wissler 2017). Such a position may allow for a more subtle approach to interpreting data, as archaeological literature explores the cultural and political dimensions of archaeological knowledge production (Plets et al. 2021:1).

An appreciation of human nature is essential to archaeology, but there is also a reliance on scientific analysis of the raw data extracted from the material record in order to comprehend the past (Foulds 2013:2). Centring on the debate between processual and post-processual archaeological theory has resulted in extended discourse over the past two decades as to the validity of each approach (see Shanks 2008; Watson 2020): one overarching outcome was the argument for archaeologists to move beyond this stalemate in order to produce more integrated methodologies (Foulds 2013:3).

Theoretical traditions can be traced using specialist vocabularies structured around different concepts (Plets et al. 2021:4). For example, historically significant terms such as 'prehistory' indicate a particular period in human evolution, as well as the language used to describe a period. This is also the case with the Three Age system constructed by Christian Jurgensen Thomsen (1788-1865) in the early 1830s (Renfrew and Bahn 1991:23). Many of these terms from the past do not readily apply to the contexts of the present. This is particularly visible in certain culture historical terms that do not appear as frequently in the literature now, because they have become outmoded and outdated.

There is a perceived problem with defining culture that links the past to the present. The link is through terminology and the philosophical basis of archaeology and how the meaning of terms change. There is a conflation of theoretical approaches and researchers' practice, a combination of theories that influence their work. From the literature, at times, the past seems forgotten.

In this thesis a historiographic method was adopted. The elements of the study include a focus on the principal exponents of culture history in Europe and the USA (such as Vere Gordon Childe and Franz Boas) and their stance as archaeologists-anthropologists. The research looked at how culture history was used (and written into the literature) by its proponents, then how this approach has changed over time with the advent of new approaches like processual archaeology.

To help determine if and how culture-history remains in use a series of words and phrases were developed from key literature that are indicative of this approach (see Results). Many, although not all, of these descriptors appeared in the texts analysed, some in a more structured fashion than others. From the readings and research for this thesis it became evident that culture history has been co-opted into a number of areas of archaeology, and that the language of culture history is still in use today, alongside processual and postprocessual language (Table 4).

From the findings there are a number of interesting points to consider. This includes the combination of theoretical approaches that researchers practice in their work in the field and reporting and the way in which the contemporary mutual language of archaeology has been structured historically by changing theoretical schools of thought (see Figure 12 below).

Table (4) Number of terms characteristic of each approach by journal (total column at end is total number of each set of terms)

						YEAR						Total terms
AA	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Culture Historical	8	7	12	1	8	2	3	4	6	6	8	136
Processual	1	1	7	4	6	1	0	5	5	4	1	108
Post Processual	4	2	4	4	4	3	2	4	3	3	0	75
AJA	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Culture Historical	10	2	4	1	7	6	4	9	5	4	7	136
Processual	6	0	2	1	4	3	5	0	5	2	1	108
Post Processual	5	1	1	0	0	0	3	2	1	0	3	75
Antiquity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Culture Historical	2	4	6	4	3	7	6	12	3	5	5	136
Processual	4	3	5	3	1	5	3	1	5	0	3	108
Post Processual	1	1	3	4	0	1	1	1	0	1	1	75
Journal of the												
British												
Archaeological												
Association	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Culture Historical	2	1	3	4	1	1	1	0	0	1	0	136
Processual	1	1	1	1	0	1	1	2	2	0	1	108
Post Processual	6	1	1	3	0	0	0	0	0	0	0	75

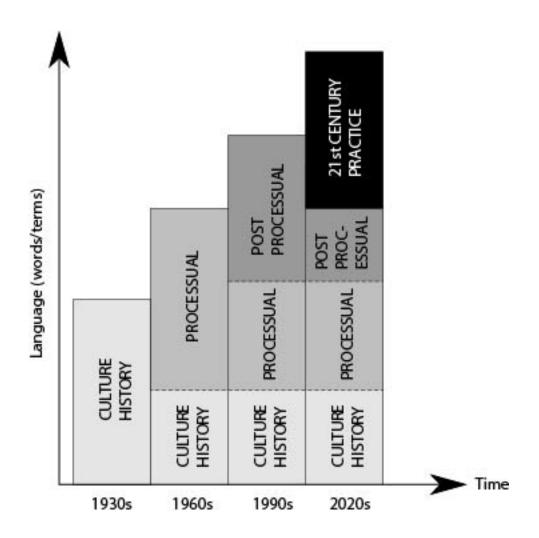


Figure (12) Construction of contemporary archaeological language and theory

It is evident from the results that culture history words/terms occur across all of the decades from the 1930s to the 2020s, although their overall frequency has declined over time and only a specific sub-set of culture history terms are now used in contemporary published archaeological research. This means that elements of culture history form the basis for contemporary articulations of archaeological theory and method, upon which has been built successive foundations of key terms derived from succeeding schools of thought. The initial aim was to try and assess the visibility and viability of 'culture history' practice in contemporary archaeology. The outcome was not what it was imagined to be.

Instead of uncovering a regular pattern of use of aspects of culture history in archaeological practice, it was found that there are systemic issues in the reporting

methodology of contemporary archaeology, such that phrases like 'culture process' become the more common jargon (Watson 2020:1). Nevertheless, and even though it appears that there is no one theoretical approach being used by contemporary archaeologists, it is clear that many of the core elements of culture history remain in both the language and practice of contemporary archaeology.

Interpreting the results was complicated by the fact that many modern researchers do not set out their articles in a structured format, following an abstract, introduction, background, methods, results and discussion section. Further there is a change in language between the words used by researchers now and those used by researchers from the early to middle twentieth century in archaeology (such as 'diffusion' as a word and theory of culture spread). This makes it difficult to place the appearance of specific terms in a particular place in published articles.

Plets et al. (2021:6) suggest that in Belgium culture historical concepts are still used frequently, an example of the continued use of this approach to archaeology. There was a decrease in use in the mid 2000s, however, for which Plets et al. could find no clear reason. Despite this, there is a claim that culture historical research has a strong residual presence in Belgium (Plets et al. 2021:7), as well as within other national settings in Europe (Johnson 2011:764). Culture historical frameworks continue to structure archaeological discourse (Johnson 2011 in Plets et al. 2021:6) with a more implicit and latent engagement with this tradition.

Culture history (called at times 'Old Archaeology') is, and was, characterised by a particularist approach, where the focus rests upon chronology and comparative typology (Watson in Bentley et al. 2008:2). This is often called time-space systematics (see Hermon and Niccolucci 2017). From the 1960s onwards, this type of approach was replaced by a 'New Archaeology' which had, and has, more of a focus upon culture process in an ecological and economic sense (Watson et al. 2008:2). In this respect new archaeology became more of a materialist functionalist approach to palaeoeconomy, palaeoenvironment and palaeoecology, with subsistence systems occupying centre stage (Binford 1962, 1965).

Previous research has demonstrated that archaeology, particularly in North America, is still processualist in orientation (Watson 2008:7), although the form of processual archaeology that is present now has changed from its earlier configuration (Watson 2008:9). As an example, Binford (1968b) changed his views about ethnographic parallels to meet current field research with groups such as the Nunamiut, instead of using older negative views that looked at specific ethnographic groups like the Nunamiut (Watson 2020:3), as analogues for specific components of the archaeological record, he thought observations made by archaeologists within living societies, carefully chosen to be relevant to past societies and could be designed to produce middle-range theory (Watson 2020:3). This is evident in a concern for culture process. Further to this, Sabloff and Willey (1967) have commented that an understanding of historical events can lead to placement of processual factors in proper perspective (Binford 1968:267). This is the case with culture history as well. Some researchers and their positions have been retitled. The current configuration of culture history, according to Burke (1997), suggests that scholars who would previously have been called literary critics are now being called 'culture historians' and that 'culture history is part of a wider trend that includes sociologists and anthropologists' (Burke 2021:864). This is part of the new approach to research. Further it is part of the evolution of modern archaeological study.

CHAPTER 8-CONCLUSION

Archaeology sees the past—or at least parts of it—as inherently knowable provided that rigorous research methods and designs are used and that field methods are impeccable (Fagan 1988:34). Early attempts at archaeology were enhanced by such innovative practitioners as General Pitt-Rivers and John Evans (Renfrew and Bahn 1991:23), who helped design structured field methods that led to the typological examination of items. Such practices further enhanced archaeological investigation and led researchers such as Gordon Childe (1892-1957) to develop studies in prehistory and link their work to anthropological research in the USA through such noted persons as Frans Boas (1858-1942), who worked to pay greater attention to the collection and classification of information in the field (Renfrew and Bahn 1991:32).

In this thesis I have discussed three approaches to doing archaeology: culture history, processual and postprocessual approaches. I made a comparison with the research of Plets et al. (2021) and their findings, which indicated that culture historical archaeology is still frequently used and has a 'strong residual presence' at least in Belgium (Plets et al. 2021:7). From the results of this research it is evident that a core suite of culture history terms are still in use today, although many others have been trimmed from the contemporary archaeological vocabulary. There are subtle changes in language over time, however, and the meanings of words and phrases may change as a result. Today, such historical terms as culture history are subject to a level of hybrid use and there is a less obvious partisan use with an organic element at play. Language evolves over time.

Some authors, such as Clive Gamble, have asked 'how many archaeologies are there?', arguing that there are at least two: anthropological archaeology and culture history (Gamble 2015:28). Gamble in fact suggests that culture history has revealed broad patterns in the material evidence that have stood the test of time. We still use terms like 'Neolithic' and 'Basket weaver' to denote different periods or phases, and there is broad agreement on their contexts. From the mid 1960s to the 1990s major works that can be described as culture history continued to appear (see Lumley 1976 for France; Bellwood 1978 for the Pacific; da Laet 1994 for the world; Piggott 1965 for Europe; Willey 1966 for North America).

Culture history is seen as an adaptable approach (Gamble 2015:28). Further, culture historical archaeology utilises the inductive scientific approach, combined with a rich historical component. It is closely tied to history and rich detail for describing the material culture found. There may be a separation of history and archaeology here, as both disciplines went their separate ways. We know culture historical archaeology was introduced in the late nineteenth century and was also prominent until the 1960s. Ian Hodder (1989:1) has suggested that, despite the independent existence of archaeology, its closest ties were with history.

By the end of the 19th century many of the features of contemporary archaeology had been established (Renfrew and Bahn 1991:32). Professional archaeologists such as Childe were proponents of the culture history approach to doing archaeology. It was Gordon Willey and Jeremy Sabloff in their work, *A History of American Archaeology* (Willey and Sabloff 1993), who described a classificatory historical period. Much of the practice of archaeologists at the time went into establishing regional chronological sequences and systems, and the description of the current development of culture in each area (Renfrew and Bahn 1991:32). In the areas where early civilisations flourished new research and discoveries filled out chronological sequences (Renfrew and Bahn 1991:32).

In the United States of America it was Frans Boas who called for greater attention to the collection and classification of information (Renfrew and Bahn 1991:32). Huge inventories of traits were built up and this approach tied in to the 'direct historical approach' to archaeology being used then (Renfrew and Bahn 1991:32). By the 1930s a large number of regional sequences had been established, which led to the formulation of the 'Mid Western Taxonomic system' that correlated sequences by identifying the similarities between artefact collections. It was, however, the scholars studying primarily the preliterate societies in Europe and North America who made some of the most significant contributions during the first half of the 20th century. Vere Gordon Childe (1892-1957), an Australian archaeologist based for much of his career in Britain, was one of the leading thinkers and writers on European prehistory and Old World history in general (Renfrew and Bahn 1991:32). Childe had been making comparisons between prehistoric sequences in Europe (Renfrew and Bahn 1991:32). He helped to develop a direct historical approach, tracing material back into prehistory.

In concluding this research, it is interesting to note that the results from this thesis suggest there may be an overall lack of concern with archaeological theory in Australian archaeology, which tends to privilege the 'doing' of archaeology, i.e. conducting fieldwork, collecting data and dates, over developing an interpretation and deeper understanding (Matthews and Frieman 2020:1) of the material record. Scholars in Australia have stressed that archaeologists have been adverse to discuss the epistemological, theoretical and methodological issues evident in Australian archaeology, and that there is a need for further study in these areas (Huchet 2016:44-51). This lack of theoretical concern runs counter to the vibrancy of the archaeological records studied in this region, as well as the significant methodological developments and wealth of knowledge that archaeology in Australia contributes globally (Mathews 2020:1).

Rice (1985:2) notes that archaeology as a scientific discipline has undergone a series of radical changes during the past 30 years in both its intellectual orientation and its methods—giving us the 'New Archaeology' as a rejection of 'normative archaeology' (Hodder 1989:1). The new archaeology is not, really, a coherent intellectual movement, but at its heart lies the desire of archaeologists to contribute to the general body of social-science theory regarding the nature of human behaviour and the processes of cultural evolution. When and how did humans evolve and become 'human'? What led to the development of agriculture and sedentary settlements? How do social inequality and social complexity come about? What accounts for civilsation? Above all, 'New' archaeologists wish to explain why past events occurred using current theory.

Future Research

Language is a universal cultural communication method that is essential to modern life. It is essential to science and science communication. We do not need any confusion about the meaning and application of words and phrases as we try to determine the meaning of archaeological evidence. For this reason, it may be prudent to further investigate changes to the meanings of words and phrases in the practice of archaeology in a variety of global contexts. Archaeological theory and practice changes over time, as well as according to specific historical trajectories in different parts of the world. Determining archaeological practice through the literature is a challenging proposition.

Historians use the phrase 'culture history' today, but apply it in a different way. For example, culture history language in archaeology has changed over time in subtle and organic ways as meaning, orientation and intent has changed. The early language of the late 19th century and early 20th century does not have the same meaning or intent now as it had then. This does not mean culture history becomes confined to the history books, rather that its signifiers have changed in subtle ways that need further investigation. Historian of archaeology Bruce Trigger (2006:394) suggested that processual archaeology was adopted by American archaeologists as a 'result of the predisposing work' of the 1950s' (Lyman 2010:505). And this New archaeology became the general direction of American archaeology, and became everybody's archaeology (Lyman 2010:505). It was the culture historians however who argued that it was prudent to wait 'until all the data are in to offer interpretations' and perspective (Lyman 2010:505).

This is an area that could be investigated with further research to locate changes and similarities in words and phrases over time. How this is done is open to further speculation, but the current research has begun the process.

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APPENDIX 1: INTERNATIONAL CONFERENCES

Asser S. Abdelwahab, Nabil H. Abbasy, Ragi A. Hamdy 2021 Energy Management System with Temperature Rise Prevention on Hybrid Ships. World Academy of Science, Engineering and Technology International Journal of Electrical and Computer Engineering.

Azazy, S.A. 2021 The Impact of Political Events on National Archaeological Heritage and Tourism Industry: Study Case of Egypt after January. International Conference on Archaeological Science and Bioarchaeology, March 4-5, in Barcelona, Spain.

Abdulrahman A. Bahaddad, Mohammed Beshir 2022 Future of Electric Power Generation Technologies: Environmental and Economic Comparison. International Conference on Archaeological Anthropology, Excavation and Analysis (ICAAEA)-Rome, Italy.

Balaceanu, C.M., G. Suciu, C. S. Bosoc, O. Orza, C. Fernandez, Z. Viniczay 2021 Development of an Intelligent Decision Support System for Smart Viticulture. The International Research Conference, Bankok 2021 World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:15, No:1, 2021

<u>Doaa, El-Shereef.</u> 2021 The Canaanite Trade Network between the Shores of the Mediterranean Sea. October 04-05, 2021 in Baku, Azerbaijan.

Sean Freeman and Antoinette Hennessy. 2021 Case Studies in Collaboration: Prioritising Indigenous Interests in Cultural Heritage Consulting Session. Australian Archaeology Association.

Rajkishore Nayak, Tarun Panwar, Majo George, Irfan Ulhaq, Soumik Parida. 2021. Role of Global Fashion System in Turbo-Charging Growth of Apparel Industry in Sub-Saharan Africa. World Academy of Science, Engineering and Technology International Journal of Materials and Textile Engineering Vol:15, No:9, 2021.

Rodrigo, K. & Kelum Manamendra-Arachchi. 2021. Reconsidering the Palaeo-Environmental Reconstruction of the Wet Zone of Sri-Lanka: A Zooarchaeological Perspective. International Conference on Archaeological Science and Bioarchaeology, March 4-5, 2021, Barcelona, Spain.

Rodrigo Pacheco-Ruiz, Jonathan Adams & Felix Pedrotti. 2021. 4D Modelling of Low Visibility Underwater Archaeological Excavations using Multi-Source Photogrammetry in the Bulgarian Black Sea. International Archaeology Conference in Barcelona, Spain March, 2021.

Ahmad Zubairi, N. A., Ahmad Zubairi, H. Takaijudin, K. W. Yusof H. Takaijudin, K. W. Yusof. January 28-29, 2022 in Sydney, Australia, Landscape and Ecology. A Review on the Mechanism Removal of Pesticides and Heavy Metal from Agricultural Runoff in Treatment Train. International Conference on Archaeological Anthropology.