

5-1989

The Age of Silver and the Age of Bronze: A Comparison of Classical and Anthropological Archaeology

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Honors Theses. Paper 305.

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The Age of Silver and the Age of Bronze: A Comparison of
Classical and Anthropological Archaeology

by
Steve Emmel

Honors Thesis Project

May 4, 1989

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Introduction

Zeus the father made a third race of mortals,
This time of bronze, not at all like the silver
One, fashioned from ash trees, they were dreadful
And mighty and bent on the harsh deeds of war
And violence; they ate no bread and their hearts
Were strong as steel. No one could come near
Them, for their strength was great and mighty
Arms grew from the shoulders of their sturdy
Bodies. Bronze were their weapons, bronze their
Homes and bronze was what they worked - there
was no black iron then (Athanasakis 1983:70).

In this passage from The Works and Days, Hesiod goes through the ages of mankind. It seems that ever since the earliest of times, man has had an overwhelming curiosity and special interest in the past. For thousands of years, cultures have been producing myths about the past. Whether it is The Iliad of Homer or the trickster myths of the Winnebago, each myth relates important facts about the past of a culture. In addition to literature and oral traditions, there are also the material remains that a culture leaves behind which can give us insights into their culture. It is through these material remains that the modern archaeologist studies past cultures.

Brian Fagan defines modern archaeology as a discipline that is concerned with the study of both the technologies and cultures of the past through the use of specially designed scientific methods and theoretical concepts (Fagan 1981:3). Of course, this complex definition of archaeology did not come about overnight. Since the time of the Italian Renaissance, the science of archaeology has been developing. The purpose of this thesis is to examine two types of archaeology: Classical and Anthropological. Classical archaeology, also known as the Great Tradition, has its roots in the study of Classical

art and architecture during the 18th century, while anthropological archaeology has its origins with the beginnings of the field of cultural anthropology during the 19th century.

The main goal of this paper will be to compare these two types of archaeology; especially focusing on the history and development, goals, and preferred field and laboratory techniques of the two fields. The first part of this paper will look at the historical background of the two fields. It will examine how differing historical backgrounds contributed to affiliations with different departments and an emphasis on different goals. The second part of the paper will be concerned with the goals of the two types of archaeology. In anthropological archaeology, the goals of the development of cultural chronologies, the reconstruction of past lifeways, and the study of cultural processes will be discussed. In classical archaeology, the importance of the study of art, the study of history, and the verification of traditional history will be discussed. The last section of the paper will explore the types of laboratory and field techniques which are used by the two different fields of archaeology in order to fulfill their goals. Useful laboratory techniques such as chronometric dating techniques and characterization will be examined and field techniques such as random sampling and archaeological surveys will be explored. These techniques will also be examined to see if they really adequately fulfill the intended goals of the two fields.

History and Development

Before examining the differing goals of classical and anthropological archaeology, I will first take a brief look at the history and development of the two fields. After all, it is because of their very unique and independent histories that these two fields now have such different ideas about what the goals of modern archaeology should be. Classical archaeology came from a tradition that wanted to use archaeology to add to historical knowledge; the scholars of the time wanted to understand the Classical world through its art and architecture. On the other hand, anthropological archaeology came from a tradition that wanted to be able to put human prehistory into a time framework and it also wanted to understand the meaning of the objects of the past. So one tradition became affiliated with cultural anthropology, which formed a bridge between the past and the present, and the other tradition became affiliated with Classics and Art history, which focused on the art and literature of the ancient Greeks and Romans.

The origins of the science of archaeology can be found in Renaissance Italy. During this time, people became interested in the art, architecture, and literature of the ancient Greeks and Romans. This renewed interest in the past would mark the start of humanistic antiquarianism which was the forerunner of the modern disciplines of archaeology and anthropology (Willey and Sabloff 1974:2). But by the mid-nineteenth century, the science of archaeology had split into two separate fields; Classical and Anthropological. The archaeology of the Classical civilizations would continue to be connected with the

disciplines of Classics, History, and Art history, while the archaeology of other regions, especially the New World, would be absorbed by the discipline of cultural anthropology (Taylor 1983:17).

The story of modern classical archaeology begins in Italy during the 18th century. During this time Maria Amilia Christine, queen of the Kingdom of the two Sicilies, was especially interested in collecting Classical works of art. So her husband, King Charles of Bourbon, consulted Rocco Gioacchino de Alcubierre of the Royal engineers and it was decided that the area around mount Vesuvius should be searched since several exquisite statues and carved works had recently been found there (Ceram 1970:3). After several weeks of painstakingly digging through rock-hard lava with blasting powder and picks, one of the most important discoveries for the understanding of Roman culture would be made. This great discovery was made on December 11, 1738, when workers found an inscription that said that that Rufus had built, with money of his own, the "Theatrum Herculanense"; the ancient city of Herculaneum had been found (Ceram 1970:4).

By the year 1754, the rediscovered Roman cities of Herculaneum and Pompeii were the scene of intensive excavations that are still being carried on today (Ceram 1970:6). But the early excavations of these sites lacked the highly specialized field techniques and rigid goals that we have today; they would seem to us to have been very haphazard and without direction. The purpose of these early excavations was to discover additional works of Classical art, not to study the past lifeways of an ancient civilization. Worse than this, the politics of the day denied many scholars the invaluable information that was being discovered at these sites. The self-seeking rulers of the area had created an atmosphere of exclusiveness around the

cities of Herculaneum and Pompeii by denying foreign students and travellers entrance to these ancient cities which would deny the academic world to learn more about them (Ceram 1970:11). It would take the writings of a German librarian to bring into being a framework for classical archaeology.

J.J. Winckelmann, the German librarian, would bring scientific methods into classical archaeology through a number of letters and books. In these works, Winckelmann wrote about the discoveries of Herculaneum, models for interpreting the meaning of sculpture, and criticized the rulers of his time for prohibiting scholars to study the new discoveries. The end result of Winckelmann's writings was the development of a systematic approach to the study of classical civilization (Ceram 1970:14). The haphazard excavations of the previous decades would be replaced by a more scientific approach that would give a clearer picture of the ancient world. Winckelmann would even lay down some of the groundwork for interpreting the archaeological record. In his main work History of the Art of Antiquity, Winckelmann emphasized the fact that an ancient culture could be understood by its artifacts (Ceram 1970:14).

Even today, classical archaeology still follows many of the original goals of Winckelmann. Classical archaeologists still tend to focus much of their research and teaching toward the study of the history of Greek and Roman art (Snobgrass 1987:1). Because of this emphasis on art, classical archaeology is usually affiliated with the department of Classics or the department of Art history. Since classical archaeology has been affiliated with Classics and Art history, it has failed to adopt many of the new trends that have occurred in anthropological archaeology in the last 40 years.

For example, classical archaeology still has a primarily urban bias; for the most part, only the towns and cities of the Classical world are excavated. Classical archaeologists have only recently begun extensive surface surveys in order to better understand the settlement patterns and subsistence strategies used in the Classical world. Another current trend in anthropological archaeology that classical archaeology has been slow to pick-up on is the study of cultural processes. Many classical archaeologists are still content to merely study and describe ancient works of art. Yet, anthropological archaeology now works on the idea that an understandable picture of the entire system of an extinct culture can be made through the analysis of the formal structure of artifact assemblages together with between element contextual relationships (Leone 1972:95).

According to David Thomas, one of the main principles of anthropological archaeology is an understanding of time. The archaeologist needs to establish a highly specific chronology for the area to be studied before he can begin complicated objectives such as the study of culture change (Thomas 1979:139). So I will start the story of modern anthropological archaeology in Europe during the early 18th century. During this time explorers and antiquarians were finding large amounts of primitive human implements; stone tools were being found in ancient geologic beds and metal tools and ornaments were being found in ancient burial mounds. So many material remains were coming in at this time, that it was difficult for scholars to put them in any kind of relation to one another. What was needed was a good chronology. It would be the national museum of Denmark that would provide the scholars of the time with the chronology that was needed.

In 1819, J.C. Thomsen of the national museum of Denmark finished a project that involved organizing all the prehistoric artifacts at the museum into three broad age sets which was called the Three Age System (Willey and Sabloff 1974:3). These different age sets were called the stone age, the bronze age, and the iron age and were differentiated by the level of technology involved. This simplistic system finally gave scholars what they needed; a way of putting the material remains of human prehistory into a basic chronology or time frame. But scholars still needed a way of discovering the behaviors of past human cultures through these material remains.

It would be the newly formed discipline of cultural anthropology, that would provide a way of understanding past human cultures through their material remains. Ethnographic analogy would be the tool that provided an understanding of the past. Ethnographic analogy is a way of understanding the archaeological record by studying modern cultures with similar technologies and lifeways. By studying contemporary cultures with a technology and culture similar to those found in the archaeological record, the archaeologist can form arguments that form a bridge between the present and the past and allow him to assign meaning to the objects of the past (Thomas 1979:99). Now archaeologists had the basic tools they needed to understand the objects of the past and put them in some type of order.

From the time that Thomsen developed the Three Age System until the post WWII era, archaeologists worked on putting the artifacts of past human cultures into chronologies. The methods of collecting and classifying data for these chronologies became increasingly more precise as both archaeologists and anthropologists, such as Franz Boas, began to develop methods that were more scientific (Fagan 1981:58).

So the archaeologists of the time concentrated on describing sites and used large chronologies to attempt to date their finds. This led to a concentration on the description of archaeological sites and the artifacts found at these sites. Another result of this emphasis on classification was an interest in the precise dating of archaeological sites and finds. But the archaeologists of this time had totally ignored one of the most valuable contributions that archaeology has to offer, how and why did ancient cultures change? (Fagan 1981:55).

But the post WWII era would bring yet another development in anthropological archaeology. In 1948, W.W. Taylor wrote a book entitled A Study of Archaeology which called for archaeologists to develop a master plan or conceptual scheme for their research. He stressed that the basic goals and methodologies of the archaeology of the time were confusing and also that archaeology's relations with other disciplines, such as Classics and Art history, were in need of clarification (Taylor 1983:3). Taylor wanted the archaeologists of his time to stop working on putting artifacts into chronologies for their own sake and start using artifacts to study everyday life within ancient cultures. Taylor believed that chronology was only the initial stage in archaeology; it must be followed by the study of human behavior and cultural dynamics (Thomas 1979:47).

In his book, Taylor called for a conjunctive approach to archaeology. This approach would emphasize the fact that artifacts shared a unique relationship with the cultural context in which they were found (Thomas 1979:47). When studied in their original context, artifacts can tell the archaeologist a great deal about the daily life of people in the past. So rather than compare artifacts from dif-

ferent sites, Taylor wanted archaeologists to look more closely at a single site and understand the inner workings of that particular site. To implement this approach, he suggested a number of improved excavation techniques; such as more meticulous excavations, more detailed excavation notes, and more of an emphasis on the analysis of common artifacts such as food remains.

In the 1960's, anthropological archaeology went through yet another change. The archaeologists of this time, especially Lewis Binford, argued that artifacts could be used to understand the reasons for cultural change in the past:

In addition to maintaining the position that we should strive to isolate the archaeological structure of extinct cultural systems, it is argued that changes in cultural systems must be investigated with regard to the adaptive or coping situations which are presented to human populations (Binford 1964:426).

In order to investigate the changes which occurred in extinct cultural systems, Binford would call for the use of more scientific methods by archaeologists. Binford believed that the archaeological research designs, field methods, and reporting procedures of the time were inadequate for the task of studying change in cultural systems (Binford 1964:427). He stressed that in order to retrieve the relevant data concerning past sociocultural systems, the archaeologist must change his methods to those involving a deductive philosophy with an emphasis on the verification of propositions through hypothesis testing (Binford 1972:18).

This is only a brief examination of the history and development of anthropological archaeology. But I think it shows that anthropological archaeology is a discipline that has gone through many changes in the course of its history. It has progressed from a purely

descriptive science to one that seeks to question the reasons for past cultural change. Not only has the methodology of anthropological archaeology changed, but also many of its field and laboratory techniques have changed as technology becomes more advanced. It has a very dynamic history, while classical archaeology has a more static history. The next section deals with the goals of these two fields.

A Comparison of Goals

Through its rather stormy history and development, the modern science of anthropological archaeology has come up with three major goals. These goals include the construction of an initial cultural chronology, the reconstruction of past lifeways, and the study of cultural processes (Thomas 1979:138). These goals go far beyond those of earlier archaeologists in that they build upon one another so that the end product provides a very complete picture of the culture being studied. Through these goals, archaeologists gain insights into the ways in which a culture evolved through time, how it adapted or failed to adapt to the local environment, and the reasons and events that caused change within the culture. No longer are archaeologists content to randomly dig up "valuable" artifacts for museum display cases. Artifacts are more than just art treasures, they are the tools by which modern archaeologists come to understand the cultural chronology, past lifeways, and cultural processes of cultures which no longer exist.

The first goal of modern anthropological archaeology is the development of a highly specific cultural chronology. As has been stated earlier in the paper, an understanding of time is one of the main principles in anthropological archaeology and a cultural chronology must be established for an area before any other studies of a culture can begin. The purpose of this initial cultural chronology is to place the many cultures within a particular region into a time sequence. So basically, the archaeologist examines the archaeological record in order to isolate cultures that differ in time and space

(Thomas 1979:163). In other words, the different cultures represented within the archaeological record need to be separated into the periods of time in which they flourished. Once the initial chronology has been established, the archaeologist can go on to study more complex issues, such as subsistence patterns or the factors that caused cultural change.

The initial cultural chronology for a region is constructed by looking for time-markers within the archaeological record. Time-markers are artifacts which have features that show change within a culture and can thus be used to partition the archaeological record into segments of time (Thomas 1979:161). Artifacts such as pottery and projectile points are often used as time-markers. These artifacts are good time-markers because they change gradually over time and can be used to refer to a very specific period of time. Such time-markers are a form of relative dating. That is, they are a type of dating concerned with placing the archaeological record into the correct order of events, but they cannot assign calendar dates to these events (Michels 1973:12).

The development of such chronologies has been used extensively in the study of early North American cultures. The unique pottery wares of these early groups have helped archaeologists put these cultures into a relative time frame. The pottery of these early groups is an excellent time-marker because its temper, the materials that keep the clay from cracking during the firing process, was made of plant fibers (Thomas 1979:161). Whenever this type of pottery is found within a site, archaeologists can recognize the site as belonging to these early cultures and thus place the site into a relative time frame.

Once the initial cultural chronology has been prepared, the archaeologist can determine if various sites within an area are contemporary with one another. Through the examination of contemporary sites within a region, the archaeologist can begin to develop a sequence of time for the cultures represented in the archaeological record on both the local and regional level that can extend for thousands of years (Fagan 1981:28). The reconstruction of these regional and even larger sequences for cultures within a region is one of the key components in the development of a good cultural chronology and also in the study of anthropology archaeology. It gives the archaeologist a good overview of the ways in which a given culture evolved and changed over time. Thus, the initial cultural chronology is an essential building block for any future archaeological work involving past lifeways or cultural processes.

The next goal of anthropological archaeology involves the study of past lifeways. Past lifeways refers to the ways in which an ancient culture adapted to the environment that surrounded it. This is the second building block of anthropological archaeology. Past lifeways rests on the foundation of the initial cultural chronology; a precise cultural chronology must be established before a study of past lifeways can begin. The study of past lifeways is concerned with how the dimensions of time and space are related to the complex relationship of changing human settlement patterns, subsistence strategies, and prehistoric environments (Fagan 1981:29). In order to understand this complex interplay, anthropological archaeologists must often work with a team of specialists from many different disciplines. This allows for a better understanding of the many non-archaeological aspects of a site such as the types of plants and animals that were found in the prehistoric environment.

The study of past lifeways is important because it gives archaeologists a very complete view of the everyday life of the common people at a site. So rather than focusing primarily on "valuable" grave goods, such as imported pottery or metal artifacts, archaeologists now emphasize the analysis of common artifacts such as food remains and household utensils. This reorientation in thinking has provided archaeologists with a better understanding of how human groups adapted to their environments. Earlier studies had concentrated more on artifacts and structures and often gave a rather one-sided view (Fagan 1981:29). In the last half century, many archaeologists have used the study of past lifeways to add a new dimension to the study of culture history. A good example of the use of the study of past lifeways is the research that was done at the Reese River Valley site in central Nevada.

This project was initiated to test some of the ethnographic research done by the anthropologist Julian Steward in the 1930's. Steward had questioned older Shoshoni in the Reese River Valley area about how Shoshoni lifeways had been before the arrival of settlers (Thomas 1979:282). The purpose of the archaeological excavations in this area was to define the time period in which this area was occupied and also to reconstruct the movements of the prehistoric Indians during the different seasons of the year (Thomas 1979:290). In order to accomplish these goals, the archaeologists first divided the Reese River Valley area into four unique zones (each with a different type of environment) and then took random samples.

The results of these excavations showed that the unique cultural adaptation of the Shoshoni to their environment lasted from 5000 b.c. to the historic period. The excavations also showed what types of sites the prehistoric Shoshoni occupied during the different seasons of the

year. During the early Summer and late Spring, the Shoshoni would occupy shoreline sites where tools could be manufactured and the nearby wild grasses and root crops could be harvested (Thomas 1979: 89). During late Fall and Winter, the Shoshoni would take advantage of the ridge-top environment. This diverse environment allowed the Shoshoni to exploit both the valley floor environment and a woodland environment (Thomas 1979:89). So the ridge settlements allowed the Shoshoni to benefit from the nut crop of the woodland environment and also game animals, such as deer and mountain sheep (Thomas 1979:289).

This example shows the great potentials that the study of past lifeways can have in archaeological research. By examining the environment and then taking random samples, the archaeologists involved in the Reese River Valley project gained a large amount of valuable information about the environmental adaptations of the prehistoric Shoshoni; results that the study of a limited amount of sites, certain artifact types, and structures could never provide. Through the study of past lifeways, the archaeologists at the Reese River Valley project gained an understanding of the subsistence strategies and settlement patterns of the prehistoric Shoshoni.

The study of past lifeways in anthropological archaeology includes the examination of the subsistence and diet of a cultural group, experiments involving living archaeology, the study of a culture's settlement patterns, and the study of the social organizations, trade, and religious life of a culture. The reconstruction of the subsistence patterns and diet of a cultural group can be accomplished through the study of the natural environment in which they lived, faunal remains found at their habitation sites, human feces, the artifacts which they used for subsistence activities, and their artwork (Fagan 1981:325). The archaeological research at Reese River was accomplished

mainly through the study of environmental data and artifacts. The archaeologists in this project looked at the types of environs in the area and also at the types of artifacts found in these environs to determine the subsistence and settlement patterns of the prehistoric Shonshoni.

Another important aspect in the study of past lifeways is living archaeology. According to Brian Fagan, the main purpose of living archaeology is to look for similarities between prehistoric cultures and modern cultures at a similar technological level or controlled experiments using technology which is similar to that of the ancient culture (Fagan 1981:358). The idea behind living archaeology is that if a modern society and an ancient society have several traits in common, such as technological level or subsistence patterns, the modern society may shed light on the lifeways of the ancient culture.

One of the more important types of living archaeology used in anthropological archaeology today is ethnoarchaeology. Ethnoarchaeology involves the study of contemporary societies in order to gain useful insights into the lifeways of ancient cultures (Kramer 1979:266). One such study was done by Susan Lees in the Valley of Oaxaca, Mexico. The purpose of her study was to gain information on the relationship between canal irrigation technology and political organization during the Late Formative period (Kramer 1979:266). Lees started her investigation by studying modern villages in the Valley of Oaxaca. This was done because it was found that there was a great deal of similarity between the settlement patterns of communities from the Late Formative period and the present (Kramer 1979:267). From her research, Lees found that change cannot be understood at the local level; but rather, the archaeologist must look at the entire cultural area

for an understanding of cultural change (Kramer 1979:273). While not part of her original study, Lees' findings are very important for future archaeological work in the area. She showed that change in the archaeological record should be interpreted at the regional level rather than the local level for this particular culture. Such studies greatly help archaeologists interpret the archaeological record.

The next aspect of the study of past lifeways is settlement archaeology which involves the study of changing human settlement patterns. According to Brian Fagan, the purpose of settlement archaeology is to go beyond the description of the actual settlement patterns; it must be used to understand the reasons for developing certain types of settlement patterns in a given area (Fagan 1981:401). So archaeologists look at the environment for insights into the possible factors that might determine the use of a particular type of settlement pattern. For example, archaeologists may examine the types of resources that were within walking distance of a site which can often explain the reasons for the development of a particular type of settlement pattern.

Of course, settlement archaeology also involves understanding how settlement patterns reflect the organization of a society. So the study of settlement patterns can be viewed as a way of recreating an aspect of the total picture of a society (Fagan 1981:382). Archaeologists study settlement patterns by looking at three basic levels of settlements, which are determined by size. These levels include single buildings or structures, the community, and the distribution of several communities over an area (Fagan 1981:382). The study of

settlement patterns is especially important because it can give the archaeologist an idea of a society's social structure and also its relations with other societies.

Lastly, archaeologists study past lifeways through the trade, social organization, and religious beliefs of a society. Each of these institutions can tell the archaeologist a great deal about the culture in question. The study of trade can be an especially good source of information on the organization of a society and also the way in which the society became more complex (Fagan 1981:420). Such studies can provide a great deal of information on how an ancient culture organized their trading networks and also the types of social organizations which were used to regulate these trading networks (Fagan 1981:413). Studying social organization can also give the archaeologist good insights into the lifeways of a society. Usually archaeologists will look at the structures and burials of a society to try to understand their social organization. For example, the contents of a grave can often provide useful insights into the social organization of a society (Fagan 1981:425).

Religious beliefs can also give the archaeologist unique insights into the past lifeways of a society. Religious beliefs are especially important to study because they usually effect every aspect of life within a society. Also, religious beliefs can be thought of as the glue that holds a society together. Religious beliefs can provide a stable framework for complex societies that need to please a variety of specialized subgroups within their society (Fagan 1981:432). Even though the study of these institutions can reveal a great deal about the past lifeways of a society, they are also very complex to research. Only through the use of very specific research methods can

the study of these institutions have any real value or significance. The methods used to fulfill these goals will be discussed later in the paper.

With this brief outline of the techniques and goals of the study of past lifeways, the foundations for anthropological archaeology are complete. The first building block, the development of an initial cultural chronology, gave the archaeologist a firm foundation to start the research of an ancient culture. The development of an initial cultural chronology allows the archaeologist to place the archaeological record into a sequence of events. Now the study of past lifeways has been laid upon the firm foundation of the initial cultural chronology. Through the study of past lifeways, the archaeologist can better understand the climate (both political and environmental) in which the people of a culture lived. This can be achieved through the study of subsistence and diet, living archaeology, settlement patterns, and the social organizations, trade, and religious life of a culture. With these goals extensively researched, the archaeologist can understand the world these people lived in; he can understand their relationship with other cultures, their beliefs and values, and the mechanisms that controlled their society. Once the archaeologist has done extensive research in the development of a precise cultural chronology and past lifeways, he is ready for the final step in modern anthropological archaeology - the study of cultural processes.

According to Brian Fagan, processual archaeology involves research concerning the relationships between variables that could lead to change within a culture (Fagan 1981:84). This is the final building block in my discussion of anthropological archaeology; pro-

cessual archaeology is the ultimate goal of modern anthropological archaeology. All the previously stated goals have been building to this one goal. Research involving processual archaeology is based on the information that has come from the cultural chronology and the study of past lifeways. This information then has deductive methods applied to it. These deductive methods are based on the development of a research design and the creation of several hypotheses which are then tested against the information accumulated from the cultural chronology and the study of past lifeways (Fagan 1981:457).

Basically there are two broad approaches that can be used in processual archaeology. The first works much closer with scientific methodology and works on the principle that there are universal laws which effect human behavior. This approach is based on the idea that by studying the archaeological record, the archaeologist can develop and test hypotheses which will provide information on certain laws that govern how human societies will change (Fagan 1981:458). The weak point of this approach is that it fails to take into account that human decisions often play a vital role in the variables that lead to cultural change. The more common approach to the study of processual archaeology takes into account that human decisions play an important role in cultural change. So this approach focuses more on the ways in which a cultural system functions in relation to internal and external factors (Fagan 1981:458). This approach is called the Systems-Ecological approach and studies cultural change through general systems theory, cultural ecology, and multilinear cultural evolution (Fagan 1981:458).

General systems theory is a way of studying culture change through the different components of an organization. The basic idea behind

this theory is that a system, no matter how complex, can be broken down into components which are interrelated (Fagan 1981:459). By studying the components of an organization, the archaeologist can observe how the different components effect each other, and how this in turn causes change within the organization. But in order for this theory to work, it must be assumed that the interrelated elements of the system work together in order to maintain the entire system (Watson, LeBlanc, and Redman 1971:66).

Obviously, the major idea behind general systems theory involves the study of systems. According to Brian Fagan, an important factor in the study of cultural change is that human cultures are open systems. By using the term open system, Fagan is referring to the fact that all human cultures are effected by external stimuli (Fagan 1981:459). Examples of external stimuli would include contact with other cultures and the natural enviroment. For example, the amount of food in the area would be a type of external stimuli that would greatly effect a group of hunter-gatherers. The continued success of a system greatly depends on how it can successfully adjust to and exploit its surrounding enviroment (Watson, LeBlanc, and Redman 1971:71).

Overall, the study of systems takes the form of a holistic approach which involves the entire system. The archaeologist who uses this approach to processual archaeology should not merely focus on artifacts or the activities of a culture, but rather, he should use this information to better understand how the system behaved in its enviroment (Watson, LeBlanc, and Redman 1971:69). Also the archaeologist using the general systems approach needs to look beyond single events in his study of culture change. He should explain cultural change by looking at the causes and developments which made particular

events into significant changes (Watson, LeBlanc, and Redman 1971: 83).

Another way in which the Systems-Ecological approach examines culture change is through the study of cultural ecology. This approach to processual archaeology is unique in that it looks at internal factors, rather than external factors, in order to explain cultural change within a community. The idea behind this approach is that human culture is one subsystem in the total ecosystem which also includes the biotic community and the physical environment (Fagan 1981:461). This approach to the factors causing culture change differs greatly from many earlier theories which stressed the importance of outside influences, such as war, as the main causes of culture change. Many archaeologists today, such as Colin Renfrew, focus on economic systems, such as trading systems, in order to understand the reasons for cultural change (Watson, LeBlanc, and Redman 1971:97). So archaeologists now focus more on the internal workings of a culture in order to understand cultural change (Watson, LeBlanc, and Redman 1971:97).

The last way in which the Systems-Ecological approach examines cultural change is through the study of multilineal evolution. This approach brings together both general systems theory and cultural ecology. It works on the idea that cultures faced with similar hardships often use similar techniques to adapt. So the archaeologist can put different cultures with similar ways of adapting to their environments into broad evolutionary stages that reflect their similarities. For example, Elman Service has categorized human societies into four broad stages which include: bands, tribes, chiefdoms, and state-organized societies (Fagan 1981:463). But this type of model

for the evolutionary stages of human cultures differs greatly from earlier models. It focuses on the social complexity, subsistence strategy, and population size of a society and uses these factors to place many diverse cultures into broad categories which reflect their similarities in adapting to the environment (Fagan 1981:463). It does not attempt to distinguish certain societies as very primitive or more advanced as earlier models did. The theory of multi-linear evolution understands that each culture is very unique. Cultural adaptations to the environment are a very complex process; they are fine-tuned to adapt to local conditions and should not be viewed as merely a stage in the progression to an ultimate cultural system (Fagan 1981:463).

If this short description of the goals of archaeology shows anything, it shows the great complexity of the goals of modern anthropological archaeology. In many respects, each of these goals can easily stand on its own. In fact, many archaeologists spend their careers working on just one aspect of one of these goals. Yet, it is the combination of these three goals that makes modern anthropological archaeology so unique. By combining these goals, the archaeologist can develop a very realistic picture of an ancient culture. Not only can he understand the everyday life of the people, the archaeologist can also understand what made their society tick. He can understand what environmental concerns they had, how they got along with neighboring societies, and he can even gain insights into their most intimate beliefs and values. In many ways, anthropological archaeology can bring an extinct culture back to life.

As in all types of archaeology, the classical archaeologist seeks to understand the cultures of the past through their material

remains. Yet, the goals of classical archaeology differ in many ways from those of the anthropological archaeologist. In part, this is because of the great wealth of literature that the ancient Greeks and Romans produced. Institutions, such as social organization and religion, which are so difficult to reconstruct in many of the societies studied by anthropological archaeologists, are often known before the classical archaeologist even begins to excavate a site. Such information greatly aids in the interpretation of the archaeological record.

Because they know so much about the past lifeways of the region, classical archaeologists are more inclined to focus on subjects such as the topography and terrain of the Classical world. Such studies are valuable in understanding the background in which the classical period was set. Also, classical archaeologists are interested in studying the art work of the ancient world. These studies can give them an idea of what many of the values and beliefs of the ancients included. In order to understand more about the Classical world, classical archaeologists have developed a group of very broad goals. These goals include the study of ancient works of art, the study of the topography and history of the Classical world, and the process of confirming, supplementing, or contradicting traditional history.

Greek archaeology may be defined as the scientific study of the arts of construction and design as they were developed by the Greeks; but since much important information concerning art is derived from inscriptions, and the identification of works of art, especially of architecture, is often affected by topographical considerations, epigraphy and topography are frequently included in the definition of archaeology (Fowler 1909:11).

Even though Harold Fowler wrote The Handbook of Greek Archaeology in 1906, it still has a great deal of relevance to the field of clas-

sical archaeology. The field has always placed a great emphasis on the works of art of the Greeks and Romans. . Even today, the classical archaeologist spends a great deal of time on research and teaching that is connected with the history of Greek and Roman art (Snobgrass 1987:1). Even though classical archaeologists have done extensive research in many areas of study, such as the history of the Classical world, many still feel that the study of art is among their greatest contributions. Because of this great emphasis on art within the field of classical archaeology, I will start out by examining the goal of the study of Classical works of art.

The study of works of art has taken a rather unique form in classical archaeology. Rather than focusing on the meaning of art work, classical archaeologists have focused on developing a huge chronology for works of art. According to Rhys Carpenter, the remaining works of Classical art should be used to construct a chronology of art that focuses on sculptural style and its periods of developmental change (Ackerman and Carpenter 1963:116). Carpenter believes that the development of such a chronology will allow future archaeologists to place newly discovered works of Classical art into their proper time and place according to their sculptural style (Ackerman and Carpenter 1963:116).

William Biers has also pointed out that the study of works of art can often aid in the dating of Classical sites. Dates for many buildings and objects that are found on Classical sites have often been dated by means of the stylistic development of certain types of artifacts, especially ceramics (Biers 1987:16). In fact, some well-known pottery types have been studied so carefully that they can be used to date a site within a fairly accurate time range (Biers 1987:16).

The Kylix, a drinking cup used by the ancient Greeks, is a good example of an artifact that has been used to date sites. By studying the development of the shape and decoration of the Kylix, classical archaeologists have developed an excellent time-marker for the precise dating of Classical sites (Biers 1987:16).

Another goal that has received a great amount of emphasis from classical archaeologists is the study of the topography and history of the Classical world. In fact, William Biers believes that the most important contribution that classical archaeology has to offer is research involved in filling in the missing details of the history of the Mediterranean area (Biers 1987:20). Such research can give classical archaeologists a greater understanding of the relationship between the Classical world and other areas such as eastern Europe and Africa and also the relationship between the cities and the rural areas of the Classical world.

One of the areas of the history of the Classical world that needs to be researched further is the importance of the rural areas. There is especially little information concerning the rural areas of ancient Greece. It would seem from the writings of ancient authors that the ancient Greeks were mainly interested in the major towns and famous sanctuaries of their civilization; the rural areas are rarely mentioned and never specifically described (van Andel 1987:3). But this focus upon the towns of the ancient world has raised many questions for modern historians and archaeologists. These scholars would like to have more information on the rural areas of the Mediterranean and how these areas were set-up.

Such questions have been the focus of many archaeological investigations in the Mediterranean area within the last 20 years. One

such investigation is currently being done by Tjeerd van Andel and Curtis Runnels in the southern Argolid of Greece. The main purpose of this investigation is to find sites through the use of archaeological surveys (van Andel 1987:33). But the investigation is not aimed merely at finding sites from a particular period. But rather, the point of the investigation is to find all possible sites in the southern Argolid. By finding as many sites as possible, van Andel and Runnels hope to develop a plan of human occupation for the southern Argolid from the time of the earliest hunter-gatherers right up to modern history.

Obviously this will not be accomplished by the excavation of every site which is discovered, but rather, by archaeological surveys. Archaeological surveys are performed by taking samples of artifacts on the surface. Such surveys often give excellent clues to the location of sites within the region. These surveys can also reveal evidence concerning when a site was occupied and how long it was occupied. This archaeological field technique will be discussed further in the section concerning field and laboratory techniques.

While filling in the missing historical details of the Classical world, classical archaeologists have also become increasingly concerned with the study of cultural change. But the study of cultural change in classical archaeology is slightly different than the goal of processual archaeology in anthropological archaeology. Instead of focusing on the Classical world itself, classical archaeologists are more concerned with the fringes of the Classical world. They are more interested in how contact with the Classical world effected cultures in the regions surrounding the Classical world, especially central Europe.

Recent studies of the Greek city of Massalia, near the modern city of Marseille in France, have shown the many changes which occurred in the cultures of central Europe because of contact with the Greeks. One of the main changes that occurred during this time involved settlement patterns. Before the Greeks arrived, the Europeans lived in hamlets and small villages which were self-sufficient (Wells 1980:5). But after the arrival of Greek traders, the Europeans lived in larger settlements. They now lived in town-like settlements which were centers of commerce for the production of surpluses for export to the Greek world (Wells 1980:5).

Contact with Greek traders also greatly effected social status in the central European communities. Burials from central European sites from after the arrival of the Greeks suggest that European society became more stratified (Wells 1980:6). Some graves from this period show a much greater amount of wealth than others. For example, some graves found at the larger commerical centers contain four-wheeled wagons, ornate daggers, gold ring jewellery, Greek bronze vessels, and Attic painted pottery (Wells 1980:6).

Such studies have provided many important insights into the ways in which the cultures surrounding the Classical world were changed through contact. This is once again because of the great amount of literature that the Classical Greeks and Romans produced. These works give the classical archaeologist a large amount of information on trade between the Classical world and the surrounding cultures. For example, they provide information on the types of goods which were traded, how the trading was organized, and the scale of the trade (Wells 1980:2). This type of information can greatly aid archaeologists in interpreting the archaeological record.

The last goal of modern classical archaeology is to refine the historical record for the Classical world. Anthony Snobgrass points out that even though many Greek artifacts can be accurately dated to within less than 25 years of the year in which they were produced because of literary sources, archaeologists can still add important information to the historical record through careful excavations (Snobgrass 1987:39). This is especially true for areas which were far away from the main cities and were not documented well by the ancients. So classical archaeologists seek to examine the archaeological record in order to confirm, supplement, or contradict traditional history (Snobgrass 1987:39).

This short description of the goals of classical archaeology shows that the classical archaeologist is interested in a wide range of topics. Classical archaeologists are not only concerned with the Classical world, but also with the cultures surrounding the Classical world. They are especially interested in the relationship between the Classical world and the surrounding cultures and how they influenced each other. Classical archaeologists are also interested in adding to the knowledge about life in the Classical world. There is a growing interest in the rural areas and the relationship between the cities and the rural areas.

But, even though classical archaeologists are interested in a wide range of topics, there is nothing that ties all the goals of classical archaeology together. All research in anthropological archaeology is done in order to understand the reasons for cultural change, but classical archaeology has no such ultimate goal. Because of this, the research done by classical archaeologists often seems to lack direction. A great deal of important research is done by clas-

sical archaeologists, but it is aimed at very specific events and often fails to contribute to a better understanding of the entire Classical world.

A Comparison of Field Techniques and Lab Techniques

This section of the paper will take a look at some of the different types of field techniques and laboratory techniques which the two types of archaeology use in order to fulfill their goals. Since there is such a wide range of different techniques used in both the field and the laboratory, I will only concentrate on the techniques that are used most frequently and seem to best fulfill the goals of the two fields. In the examination of field techniques, I will focus on techniques that are not concerned with excavating. With modern expenses and a rapidly diminishing amount of available sites to excavate, inexpensive techniques such as surveys and sampling have become quite popular. These types of field techniques rely more on surface collections for the reconstruction of the archaeological record.

Formerly, classical archaeologists had spent a much greater amount of time on excavations that involved a particularist approach. In other words, they would excavate a site in order to answer a limited set of questions. For example, they might excavate a site to find a particular temple or the house of a famous writer. Often these excavations were in response to questions raised from the interpretation of classical literature. Anthony Snobgrass has pointed out that classical archaeology is often involved in opening up new research on the observations of earlier archaeologists, but they rarely do research concerning new projects (Snobgrass 1987:12).

Excavations done at the Classical site of Olympia in Greece give a good idea of the use of this type of approach in classical archaeology. These excavations were started in the 1870's when a German

team had started excavations in order to find the workshop of the Classical Greek sculptor Pheidias. They were searching for a building which had been described in Pausanias' Description of Greece as the workshop in which Pheidias had worked on his famous statue of Zeus (Snobgrass 1987:24). These excavators had found several likely candidates for the workshop, but they found no definite evidence for which building had been the workshop of Pheidias (Snobgrass 1987:24). In 1954, excavations were resumed by the Germans and a mug was found with the words "I belong to Pheidias" scratched on the bottom in the same area of the original excavations (Snobgrass 1987:26).

While such an excavation can give a great amount of information on a limited topic, it fails to tell us much about the culture in question. The excavation showed the area in which Pheidias worked, but it gave little information about the techniques he used, or the way in which the workshop was organized. It failed to expand our knowledge on an important industry in Classical Athens. Also, such excavations cannot be used to expand our knowledge about the history of the region.

But recently, classical archaeologists have begun using the field technique of archaeological surveying. This type of field technique has become important in the field of classical archaeology because the large scale excavations which were previously used so extensively have been severely limited because of financial and political considerations (Dryson 1982:89). The idea behind this new technique is that surface remains, when relatively undisturbed, can be used to reconstruct the history of settlements within a region (Cherry 1988:159). Such a survey has recently been done near the site of Nemea in Greece.

The methods involved in an archaeological survey are relatively straight-forward. It works on the principle that the amount of ar-

tifacts found on the surface reflects what kinds of activities or sites existed there. The first step in an archaeological survey is to divide the region being studied into individual "tracts". These tracts can be set up through the use of either natural or arbitrary boundaries according to the type of vegetation, use of the land, or even the visibility of the area (Cherry 1988:162). Once these tracts have been set up, small teams walk the tracks, carefully recording and collecting the different types of artifacts found. For example, the teams at Nemea would walk the tracks and record the amount of artifacts, using hand-held counters, and also collect pottery and artifacts that were of interest to the survey (Cherry 1988:162).

Once the tracks have been surveyed, maps can be made showing the types of artifacts found in each track. These maps provide important information on how artifacts of certain types and periods were distributed over the surveyed area and also show the densities in which they occur (Cherry 1988:162). Once the maps have been completed, certain areas can be picked out for more intensive surveys. These areas of intense survey will then be examined in more intimate detail. Areas that show especially large concentrations of artifacts are usually selected for more intensive surveys (Cherry 1988:163). The reason for this is that such areas probably represent important habitation sites. These areas are examined for the precise size of the artifact concentration involved, the chronological range of the surface materials, and on the nature and variety of the activities done there (Cherry 1988:163).

Such intensive archaeological surveys involve the collection of all the artifacts within a given area. The Nemea team collected all

artifacts within circles of 1.5 radius, located at intervals of 5 and 10 meters along orthogonal transects which they had laid out over the areas of dense artifact distribution (Cherry 1988:163). It is reasoned that such intensive surface surveys will reflect the spatial patternings of finds at the subsurface (Cherry 1988:170). Along with the collection of artifacts, the crew also takes photographs, sketches maps, and makes measured drawings.

Anthropological archaeologists also have a number of field techniques which require little or no excavation. Like their fellow classical archaeologists, the anthropological archaeologists have found it difficult to carry out massive excavations because of financial and political reasons. So anthropological archaeologists have turned to sampling techniques. The idea behind sampling is that a small sample of individual elements, when properly collected, can give the archaeologist the exact proportion in which they existed in the original population (Leone 1972:181). It should be noted here that unlike the archaeological surveys used by classical archaeologists, the sampling techniques of anthropological archaeologists can be used for surface collections, in areas that are going to be excavated, in deposits, or when samples of soil, carbon, or pollen are to be taken (Leone 1972:190).

One of the basic principles behind sampling in anthropological archaeology is that it is truly random. It is this randomness that allows the archaeologist to reconstruct the original population from a much smaller sample. The element of randomization helps to ensure that each individual in the population has a chance of being introduced into the sample (Leone 1972:181). This randomization occurs

through the selection of certain areas within a site. Before sampling begins, the site will have been divided into several units. The size and shape of these units is determined by arbitrary factors such as the nature of the archaeological problem involved, the physical conditions of the area to be sampled, and cultural differences which make the use of certain types of units more helpful (Leone 1972:180).

The main sampling technique used by anthropological archaeologists is referred to as simple random sampling. The first step in this technique is to number all the sampling units and then randomly pick which units are to be sampled (Leone 1972:183). These procedures are both simplistic and can be applied to a large number of archaeological features on a site. For example, they can be used in hearths, buildings, pit depressions, and rooms of a large structure (Leone 1972:183).

The research done at the Reese River Valley site was accomplished through the use of random sampling techniques. This area was first divided into nearly 1400 numbered tracts and then 10 percent of the tracts were randomly picked to be studied (Thomas 1979:287). The archaeologists then carefully surveyed these tracts in order to find concentrations of artifacts that would lead to the discovery of ancient habitation sites and special-purpose sites (Thomas 1979:289). Through their research, the archaeologists at Reese River found evidence for shoreline settlements, butchering sites, and women's seed-gathering forays (Thomas 1979:289). This information gave the archaeologists a great deal of knowledge concerning the lifeways of the ancient cultures that inhabited this area.

In his book What is Archaeology?, Paul Courbin, a French archaeologist, has attacked the use of sampling techniques by anthro-

pological archaeologists. He points to the fact that a sample cannot have any true meaning unless the total universe of the population which the sample is supposed to represent is known (Courbin 1988:139). According to Courbin, even anthropological archaeologists are highly suspicious of sampling techniques. He points out that J.W. Mueller, an anthropological archaeologist, has calculated that the best sampling rates are 90 percent of the population (Courbin 1988:135). Courbin believes that closed deposits are the best source of information about a culture for the archaeologist. Closed deposits, such as tombs, intact pits, and isolated strata, are the areas in which the archaeologist can find the best assemblages and the most interpretable clusters (Courbin 1988:139).

The next part of this section will deal with types of laboratory techniques which are used in archaeology today. Though archaeologists employ a wide variety of different laboratory techniques, this section will only focus on two different types. These types of laboratory techniques are characterization techniques and dating techniques. Characterization is a type of laboratory technique which looks at the chemical composition of an artifact. Such analysis can give the archaeologist information about the location of source materials for an artifact, the type of environment in which a culture lived, the types of technology which they employed, and the type of style which was characteristic to certain groups (Leute 1987). Dating techniques are a type of laboratory technique that is concerned with determining the age of an artifact. This technique is very beneficial for archaeologists when they are developing a cultural chronology for an area.

The use of chemical characterization in archaeology has been highly beneficial in recent decades. With recent advances in tech-

nology, characterization has become both inexpensive and essentially non-destructive (Tite 1972:256). An additional benefit of this technique is that an entire specimen can be examined at one time. This is especially useful in determining the total concentration of both major and minor elements in a specimen (Tite 1972:278).

One of the best types of chemical characterization in use today is the Neutron activation analysis method. The theory behind this method is that if the elements within a specimen are bombarded with slow neutrons, the atomic nuclei of these elements will be transformed into unstable isotopes (Tite 1972:273). These unstable isotopes will then begin to decay in order to form stable isotopes (Tite 1972:274). During the decay of these isotopes there is an emission of gamma rays. These gamma rays have sharply-defined energies and can be used to distinguish different elements (Tite 1972:274). These gamma rays can also be used to determine the amount of a particular element in the sample. The amount of the element is determined by the intensity of the gamma rays (Tite 1972:274).

This method can be used very effectively by classical archaeologists in their study of trade and the economy of the rural areas during the Classical period. By using the technique of chemical characterization, the classical archaeologist can find the regions which were important sources of raw material for the Classical world. This can lead to a better understanding of the complex trade routes which must have existed during the Classical period. Anthropological archaeologists can also benefit greatly from the technique of chemical characterization. It can be used especially well to fulfill the goal of past lifeways. The archaeologist can discover much about a culture's trading relations with other groups through the use of chemical characterization.

In the early 1970's, Neutron Activation analysis was used to re-evaluate the origin of some faience artifacts which were found in Bronze Age sites in Britain. It was originally believed that these artifacts were acquired from Mycenaean traders coming from the Rhine and Danube regions or from the Mediterranean (Aspinall 1972:29). Since it was known that faience was so popular in Egypt during this period, this was believed to be the place of origin for the faience (Aspinall 1972:29).

But the Neutron activation analysis of the British faience by Aspinall and his associates would prove otherwise. These researchers discovered that the faience artifacts found in Britain contained a higher proportion of tin than faience artifacts found in other regions (Aspinall 1972:38). From this data, the researchers believe that a unique coloring agent had been used for the British faience artifacts. It seems that copper-tin bronzes or the waste material derived from bronze material was used for coloring (Aspinall 1972:38). Such evidence would seem to indicate that the British faience came from a different raw material source than faience from the Mediterranean region. It could well be that these faience artifacts were made locally in Britain (Aspinall 1972:39).

Such experiments can be quite useful in the interpretation of the archaeological record. Characterization techniques can give archaeologists the valuable knowledge of where sources of raw materials were located for many types of artifacts which are found at a site. Such knowledge can give the archaeologist a better understanding of how local resources were exploited. It can also give insights into trade relations with other regions and perhaps even the extent of these trading relations.

As has been discussed earlier in this paper, time is very important in the study of modern anthropological archaeology. In order to develop a good cultural chronology, the archaeologist must be able to place the archaeological record into the proper sequence of events (Michels 1973:12). The archaeologist also needs to be able to place the culture into a specific time period. The dating techniques used to do this are referred to as chronometric or absolute dating techniques. These dating techniques are based on a standard of measurement which can be expressed in calendar years (Michels 1973:14).

One of the most accurate forms of chronometric dating is known as dendrochronology. This is a type of dating which is based on tree rings. The underlying premise behind this technique is that a tree will produce one new ring of growth every year and that trees of the same species will have rings that are of a relative width for the same year (Michels 1973:116). Because trees of the same species have rings of a relative width for a given year, an absolute chronology that extends for thousands of years can be constructed by taking sections from older and older trees.

But there are many limitations upon this type of dating. First of all, only species of trees that show a marked variation in ring width from year to year can be used (Michels 1973:119). In other words, only species of trees that are very sensitive to climatic changes can be used. Also, wood samples taken from archaeological sites can often give inaccurate dates. According to Bryant Bannister, tree-ring dates for structures from archaeological sites can often be misinterpreted because the beams sampled were salvaged from older structures (Michels 1973:124). Bannister also points to the fact that

even samples of wood that were not used for construction can lead to an error in dating. For example, charcoal or wood found in a room fill or in trash mounds could be more recent than the architectural feature with which they have been associated with (Michels 1973:124).

But, despite the problems, dendrochronology has proved to be an excellent dating method. It has been used extensively in the southwestern United States, Alaska, northern Mexico, Germany, Norway, Great Britain, and Switzerland (Michels 1973:126). It is a technique that can benefit both classical and anthropological archaeologists. For anthropological archaeologists, it can aid in the creation of very good cultural chronologies. It can also aid classical archaeologists in their study of the history of the Classical world.

In recent years, Peter Kuniholm has started to develop an absolute chronology for Greece through the use of dendrochronology. The main objectives of Kuniholm's project are:

to extend the absolute regional tree-ring chronology backward in time, to investigate buildings and sites where tree-ring dating might solve problems of chronology, and to enlarge the understanding of regional tree-ring response to climate variation, including the determination of the geographical limits of synchronous response (Kuniholm 1987:385).

So far Kuniholm has established an absolute chronology which extends back to 1073 A.D. (Kuniholm 1987:385). But Kuniholm has also worked with material from much earlier sites. He has sampled Mycenaean, Minoan, Hittite, Lydian, and Classical Greek sites also. Eventually, Kuniholm may have an absolute chronology for a large part of the Mediterranean region which would span from the Bronze Age right up to the present. Such a chronology would greatly aid classical archaeologists in their attempts to refine the historical record of the Classical world.

Conclusion

Even though classical and anthropological archaeologists both seek to understand past human cultures through their material remains, they have very different ways of going about it. Anthropological archaeologists are more concerned with large scale changes in a culture and use field techniques which emphasize the overall settlement patterns and subsistence strategies of a culture. But, on the other hand, classical archaeologists are more concerned with very specific events or certain types of artifacts. Since there are many literary sources which explain the reasons for major changes in the Classical world, classical archaeologists concentrate more on filling in the many details that are lacking from the historical record for the Classical period.

This concentration on refining the historical record has caused classical archaeologists to focus too much on artifacts. They are often more concerned with studying artifacts than in using these artifacts in order to better understand life in the Classical world. This approach can clearly be seen in the goal of the study of classical works of art. The classical archaeologists are more interested in using art to date sites than in using it to better understand the beliefs, religions, and social organizations of the people of the Classical period.

Both types of archaeology contribute a great deal of information about extinct human cultures. But, the methods used by anthropological archaeologists seem to produce a more understandable picture of life within an ancient culture. Methods of research, such

as ethnoarchaeology, help the anthropological archaeologist to understand how and why a group used certain social organizations and subsistence strategies. The field of classical archaeology is too dependent upon ancient writers to guide their research. Instead of concentrating on filling in the missing details of the history of the Classical world, classical archaeologists need to develop more projects which concern topics that were not covered by the ancients. For example, more projects need to be done concerning the economy of the rural areas of the Classical world.

The purpose of modern archaeology is to gain a greater understanding of ancient cultures. In order to do this effectively, the archaeologist needs a very good set of goals to work with. Anthropological archaeology has produced a set of goals which can greatly aid the archaeologist in interpreting the archaeological record. These goals include the development of an initial cultural chronology, the reconstruction of past lifeways, and the study of cultural change. These goals are very structured and allow the archaeologist to build upon earlier research in order to produce a very accurate view of life in an ancient culture. These goals give the archaeologist a major goal to work towards - an understanding of how and why a culture changed. This major goal serves as a guide for archaeological research in anthropological archaeology. Such a major goal allows the anthropological archaeologist to develop research designs which will get the most information from the archaeological record. Classical archaeologists need a similar type of major goal for their research. Without a major goal to build toward, the research done by classical archaeologists will continue to lack direction and will provide less information on life in the Classical world than it could.

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