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ABSTRACT:

Essentially an examination of Archaeological Theory, this study seeks to illuminate four of the various theoretical approaches to archaeology: Processual, Behavioral, Structuralism, and Marxism. These approaches are evaluated for practical application through student participation in the Sicilian Archaeological Research Project in Salemi Sicily. Students were asked to complete questionnaires to determine the faults and merits of each theory. The students' perspectives and understanding on Archaeological theory change with the incorporation of hands-on research techniques, resulting in a measured transitional period that can be used to aide in theory understanding for students that may not have the opportunity to study abroad. This study examines the ideologies of each perspective before presenting the results of the student questionnaires. Conclusions provide a detailed examination of each theory's merits through excavations in Salemi and classroom application suggestions to aide in student understanding of Archaeological theory.

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Capstone Approval Page

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Introduction

Since the development of New Archaeology in the 1960's, the manner and techniques in site research have expanded into countless branches and sub branches of theoretical approaches. These approaches are hotly debated among researchers and some argue that archaeology now lacks cohesion in the field and standardization of research techniques. This lack of a cohesive voice among experts in the field can be a challenge for students to decide which theory is more useful or beneficial for actual field work. This issue is alleviated by field work experience when students have an actual case study and can evaluate the resiliency of each theory in real life situations. This project uses the site of Salemi, Sicily as a case study for evaluating the various theoretical approaches and studies the effectiveness of each as they are taught. By using the site as a constant, I use the theoretical approaches of Processual, Behavioral, Structuralist and Marxist as my variables.[1]

The Northern Illinois University Archaeological Field School in Sicily is aimed at teaching students the basis for archaeological method and theory. The site is ideal for this instruction as it is a proto-urban hilltop community that has deposits including the Bronze, Early Iron, Elymian, and Hellenistic periods. The valley surrounding the site contains numerous additional Neolithic, Hellenistic, and Roman sites. The rich deposits found in the region provide an opportunity for students to study both classical and prehistoric archaeology. The site itself has an occupation history of nearly 1200 years and is ideal for the training of undergraduate and

[1] Bawden, Garth. Readings in Archaeological Theory: Selections from American Antiquity 1962-2002. Society for American Archaeology, Washington, D.C. 2003

graduate archaeologists. It is precisely this diversity and richness in deposits that provided the ideal basis for my theory analysis on the region.[2]

The field school occurred from May 22 to June 17, 2006 in Salemi, Sicily. The focus of the season's excavations was the Castle Garden Site which consisted of 13 units in which students worked and learned methodology. Consenting students, 13 in all, were asked to anonymously complete two questionnaires, one to be taken as an initial gage of opinion and knowledge on theory, and a second to discern the change in opinion that occurred as a result of field experience. The data from this research is presented here, but first it is important to take a closer look at the each of the theories being tested. A short description of Processual, Behavioral, Structuralist and Marxist is described including professional case studies on each theory. This is followed by my own research data and conclusions drawn.

Processual Archaeology

Processual archaeology grew in the 1960's as a new way of "doing" archaeology. Spurred largely by the efforts of Lewis R. Binford, archaeology began to be looked at in an entirely new way and as a result new methodologies developed. An understanding of the history of this change, the details of what processual theory brought to archaeology and the details of two case studies will be discussed.

Archaeology as a discipline was largely homogenous prior to the arrival of Binford and his colleagues. Prior to this, archaeologists took a "dig and let's see" approach and were largely basing their theories on the artifacts discovered. When Binford entered the scene he questioned

[2] "The Sicilian Archaeological Field School." (Dekalb, Illinois: Northern Illinois University, 2003) <http://dig.anthro.niu.edu/fldschl/program.html> [8 November 2005]

this methodology and advocated a new way doing archaeology. Binford based processual theory on the idea that human behavior is patterned, or processual, and can be predicted. This meant that archaeologists should first theorize the pattern, and then attempt to prove it. Before Binford the consensus among archaeologists was that each individual culture and site was unique and therefore independent of all others. They believed that comparing them could be likened to a comparison of apples and oranges. Binford stepped in and challenged this by extending his discussion on patterns. He believed that universal patterns in human activity could be found and that theories could be developed for archaeology that could be used for any culture in any time period. This was a large step for Binford to take and he sparked numerous debates but through his tenacity he was able to hold his ground on processual theory and as a result it became the new wave in archaeology during the 1960's and 1970's.

There are several major structural elements that came about with the development of processual archaeology. Perhaps the most influential of these is the incorporation of the scientific method. Binford argues that archaeology must incorporate the investigation techniques of the natural sciences. By creating a hypothesis and then testing it in the field, the results from the dig site will be not be based on the researcher's inferences but rather on unbiased data collection. This method gave archaeologists a purpose; they were no longer just digging up whatever they could find, they were creating theories and attempting to prove them by investigating sites.

Another major addition to archaeology brought about by the development of processual theory is the incorporation of experimental archaeology and ethnoarchaeology. Binford makes the argument that artifacts belong to the present and that inferences about past activity must be drawn from them.[3] This challenge can be overcome by studying the present, in order to infer data

[3] Bawden, Garth. *Readings in Archaeological Theory: Selections from American Antiquity 1962-2002.* (Society for American Archaeology, Washington, D.C. 2003), 19-30

about the past. For example, a researcher might replicate a bow and arrow points found at an occupation site in order to understand the hunting abilities of that group. The researcher can put his replicate through a myriad of tests without destroying the original artifacts. Another example of using the present to infer the past is when a researcher studies the habits of modern cultures. A researcher may study the migration patterns of modern hunter gatherer groups in order to understand the patterns of ancient groups with the same lifestyle. Many of the information we now know about past behaviors has been a direct result of the study of present day objects or peoples.

Processual theory also stresses the idea the importance of context in an archaeological site. Looking at the artifacts that come out of the ground and not the situation in which they were found is an ideology that Processual theory attempts to dissolve. Processual theory brings a wealth of detailed methodology to site analysis and researchers now take detailed accounts of where an object is found in the stratigraphy and its relation to the other objects found. Researchers are also paying closer attention to other elements at a site beyond the obvious artifacts. Researchers are collecting pollen and phytolith samples. They are analyzing seeds and charcoal from hearths, all in an attempt to extract more information about past behavior.

One example of Processual archaeology at work is described by Binford in his book, In Pursuit of the Past. He explains the challenges archaeologists were having when determining where early man ate and slept. He focuses on East Africa where researchers insist that man must have eaten and slept in the same place. They base this on the large number of stone tools and animal bones found in close proximity to each other. Binford challenges this by offering an alternative explanation; the waterhole.

Binford studies the dynamics of a modern day waterhole in order to draw conclusions about the tool assemblages found in East Africa. He explains that modern waterholes have a schedule of order for usage, each animal will use the waterhole at a different time based on its general category, i.e. predator, prey or scavenger. He explains that there are always animals to be scavenged and that hyenas are the first to arrive, gnawing on carcasses and scattering the bones about. He stresses the fact that waterholes are not safe places and that if early hominids slept at them, they would be eaten.

Binford uses this modern analysis to present his argument about the tool assemblages of early hominids in East Africa. He points out that most of the stone tools have very little wear on them, therefore making it unclear why early man would continue to create new tools when there were nearly new tools within arms reach. Binford postulates that hominids traveled from sheltered sleeping places, made tools along the way or carried tools made earlier to water sources to scavenge. Once meat was removed using the tools, the food was either eaten there or carried off to a safer place. The tools, once used, were discarded alongside the carcass. Binford concede that the assemblages may well be indicative of habitation sites; he merely seeks to pose an alternative possibility. Binford simply wants researchers in East Africa to look more critically at their data and use "more robust methods for inference"[4] before making conclusions about the activities occurring at a specific site.[5]

A second case study in processual archaeology is one done by Richard Gould on the stone tool materials used by Australian Aborigines. In his book, Living Archaeology, Gould begins by describing an anomaly found in modern aboriginal societies. Stone tools produced by individuals living in the Kimberly District of Northwestern Australia are made of European-

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[4] Binford, Lewis. *In Pursuit of the Past, "Life and Death at the Waterhole."* (University of California Press: London, 1983), 76

[5] Binford, *In Pursuit of the Past*, 60-76

derived glass. They are common utility items for the makers but they are also a trade item for aborigines living farther inland. Gould explains that "the farther these implements traveled form their place of origin, the more exalted their status became."[6] The Kimberly tools found hundreds of miles from their production site were no longer being used for their original purpose; instead they became sacred objects, used only in sacred rituals or not at all. The people of these areas used local sources of stone for the everyday uses that the Kimberly points were originally intended for.

Gould uses this observation to explain the stone tool assemblages in Puntutjarpa Rockshelter. Stone tools found were largely made from local rock sources: quartz, white chert, red chert, agate, opaline, and quartzite. A small percent, 2.6%, were made from the same types of stone but were from distant rock sources, sometimes more than 100 miles. Gould postulates that if utility were the only motivator for these populations, then there would not be these so called exotic stones. The tool assemblages show evidence against the theory that all human activity is based upon the most efficient option. Gould concludes then that these people, like their modern counterparts, must have exalted the value of these stones and used them for social purposes, not utility.[7]

These two case studies exemplify the value of processual theory to the field of archaeology. Binford uses modern observations of environment and detailed wear analysis to provide new incite onto a supposed "fact" about East African habitation sites. Gould, on the other hand, uses modern ethnographic data to draw incite into past stone tool anomalies. He essentially extracts evidence for religion from stones, a daunting task to be sure.

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[6] Gould, Richard. *Living Archaeology*. Cambridge University Press: Cambridge, 1980), 142
[7] Gould, *Living Archaeology*, 141-159

Processual archaeology effectively changed the fundamental principles of archaeology in its time, opening the door for continuously evolving theories on interpretation and methodology. It has added essential aspects such as the scientific method, ethnoarchaeology and experimental archaeology. Perhaps most importantly though, is its call for change, resulting in the fractionalization and specialization that is modern archaeology, and without which the other theories discussed in this project would not have developed.

Behavioral Archaeology

Behavioral archaeology emerged in the early 1970's as a new branch of processual archaeology. Founded largely by the writings of Michael B. Schiffer, behavioral archaeology seeks to separate itself from other divisions by redefining the aim and process of archaeological research. According to Schiffer, "archaeology is the study of the relationships between human behavior and material culture in all times and all places."[8] This simple definition sparked the behavioralist movement and paved the way for its use in modern archaeological studies. Schiffer outlines this new method of archaeological inference and terms it the synthetic model. In addition to the synthetic model, Schiffer provides a detailed outline of the principle applications or strategies of the behavioralist approach to archaeology. The analysis of ceramics at Broken K Pueblo serves as a case study to the discipline and illuminates the usefulness of the approach. Behavioral archaeology is fairly new in its development but holds endless possibilities for application in current and future archaeology studies.

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[8] Schiffer, Michael Brian. *Behavioral Archaeology: First Principles.* (Salt Lake City: University of Utah Press, 1995), 13

Schiffer's writings on the importance of human behavior in the archaeological record brought about the development of a new school of thought, behavioral archaeology. A unique blend of method and theory, the discipline seeks to outline archaeological inference into three main categories described collectively as the synthetic model.[9] This model is broken down into the main components of correlates, c-transforms, and n-transforms. Correlates are "statements that relate behavioral variables to variables of material objects or spatial relations" and are "operationally definable and therefore testable in an ongoing cultural system."[10] C-transforms are defines as "laws that relate variables describing the cultural deposition or nondeposition of its elements" and where "application of these laws is necessary to relate the past qualitative, quantitative, spatial, and associational attributes of materials in systemic context to materials deposited by the cultural system."[11] The importance in the use of c-transforms is still being developed but it is only through their use that one can begin to predict which materials will be deposited by a system. N-transforms are defined as "non-cultural formation processes" and can be, for example, wind, water, chemical action, or rodent activity.[12] In each of these categories certain stipulations, or assumptions, might occur, forcing the researcher to include them in the final interpretation. The model is set up so that there is a base of archaeological observations that is then refined by the use of n-transforms, then c-transforms, and finally correlates to result in inferences about the behavior of people being studied.[13]

The synthetic model highlights one of the main divergences of behavioral archaeology from other similar theoretical forms, i.e. processual. Behavioral archaeology's focus on formation processes is crucial to understanding the discipline and Schiffer outlines this systemic

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[9] Schiffer, *Behavioral Archaeology*, 35
[10] Schiffer, *Behavioral Archaeology*, 36
[11] Schiffer, *Behavioral Archaeology*, 37
[12] Schiffer, *Behavioral Archaeology*, 38
[13] Schiffer, *Behavioral Archaeology*, 35-45

context by dividing it into five main processes: procurement, manufacture, use, maintenance, and discard. Each process consists of a series of stages and each stage in turn is made up of activities. The careful charting of these processes can provide insight into behavioral activities. The study of the discard process in particular is of interest to Schiffer where each artifact can be labeled as primary refuse (the location of discard is the same as of use), secondary refuse, (the location of discard is not the same as of use) and de facto refuse (no discard activities i.e. abandonment of useful material). The charting of refuse patterns can help to ascertain site usage as will be discussed in the Broken K Pueblo case study.

Now that a basic outline of the theoretical approach to behavioral archaeology has been examined, a review of the four strategies in the behavioral framework provides the basis for understanding how the theory can be applied and for what purposes. Outlined by Schiffer, Reid and Rathje, the four strategies of behavioral archaeology seek ultimately to reconfigure the disciple of archaeology into one distinct unit. The first of the strategies is "concerned with using material culture that was made in the past to answer specific questions about past human behavior."[14] This strategy is reliant upon laws borrowed from other disciplines and calls for the formation of laws specific to archaeology. The second strategy is born from this need and "pursues general questions in present material culture in order to acquire laws useful for the study if the past."[15] Strategy three "is the pursuit of general questions in the study of past material remains to derive behavioral laws of wide applicability that illuminate past as well as present behavior."[16] Finally, the last strategy is "the study of present material objects in ongoing

[14] Reid, J. Jefferson. "Behavioral Archaeology: Four Strategies." *American Anthropologist*, New Series, Vol. 77, No. 4 (Dec., 1975), 864
[15] Reid. "Four Strategies," 865
[16] Reid. "Four Strategies," 865

cultural systems to describe and explain present human behavior."[17] Each of these strategies is interdependent and opens up the study of archaeology into new fields where "the study of urbanization at Teotihuacán, stone chipping in the Outback, human adjustments to environmental stress, and meat consumption in Tucson, Arizona, are all legitimate and productive archaeological research activities."[18]

Research undertaken at Broken K Pueblo in Arizona is among the many examples of the application of behavioral archaeology on a field site. Behavioral archaeology is used by Schiffer as a means of reanalysis of pottery sherds at Broken K to fill in some holes in the original work done by James Hill in 1970. Hill's original analysis of the site divided the rooms by size and pottery content into one of three categories: habitational, storerooms, kivas (ceremonial rooms). He also made some inferences about a possible matrilocal residence pattern but it is the habitation rooms that Schiffer focuses on in his reanalysis. Hill suggests that the habitational rooms contain a large amount of primary and secondary refuse. He explains the large amount of secondary refuse found as evidence of "trash" filled rooms or garbage dumps. This conclusion is further expanded onto residence behavior. Hill suggests that the depopulation of the site happened gradually, with families abandoning habitation rooms, populating new ones, and using the old rooms as trash dumps. This coincides nicely with Hill's secondary refuse findings and seems to provide an excellent incite into the behavior of this past society.

Schiffer, although agreeing with portions of Hill's analysis, seeks to point out disparities in the data collection methods. His reanalysis focuses on the use of behavior archaeology to create new incite into past behavior. Schiffer focuses on a detailed analysis of pottery sherds and graphs them by pattern and density of distribution. Schiffer seeks to use statistical or empirical

[17] Reid. "Four Strategies," 866
[18] Reid. "Four Strategies," 867

data sets to discover patterns in the sherd deposits. He results in the discovery of data collection errors in Hills cataloguing and explains that a good number of sherds that Hill classifies as secondary refuse are in fact de facto refuse, or that which still has restorable value. This de facto refuse contradicts with Hill's theory on occupation behavior and points to a more rapid evacuation of the Broken K site.[19]

Schiffer provides five possible reasons for the deposition of the de facto refuse. First, sherds from floor vessels might have been wrongly recorded as fill sherds. Second, some pots could have been abandoned on the roof then later become a part of the fill deposits after the roof collapsed. Third, some abandoned vessels could have been left on shelves or other supports instead of the floor. Fourth, vandals or children could have removed vessels and redeposited them on the roof and finally, vessels could have gone unrecognized on second story floors and later become a part of the fill.[20] These are just a few of the explanations Schiffer gives for Hill's assumption that no de facto refuse was present in the fill levels. Schiffer points out that it is this assumption that spoils Hill's assessment of occupation behavior and a new conclusion must be reached. While not suggesting that all of the secondary refuse Hill found is in fact de facto refuse, Schiffer simply suggests that more de facto refuse occurs and less "trash" is present. The implications of this in the behavioral context do not point to an abrupt abandonment of the city as seen in other sites like Pompeii. Schiffer merely cautions against assumptions of inference and that by looking at the possible formation processes of artifact remains, a researcher can avoid mistakes like that of Hill and his researchers.[21]

As Broughton and O'Connell point out, although behavioral archaeology seeks to reconstruct and explain variation in past human behavior, more emphasis and work has gone into

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[19] Schiffer, *Behavioral Archaeology*, 219-229
[20] Schiffer, *Behavioral Archaeology*, 224
[21] Schiffer, *Behavioral Archaeology*, 219-229

the reconstruction aspect and very little work has gone into the explanation. They do point out that this weakness is being remedied by Schiffer and his associates with recent works. Broughton and O'Connell also point out that behavioral archaeology lacks a "big picture" aspect and has trouble formulating a logical theoretical framework for analysis of larger issues.[22] They use the example of hominid hunting site research where earlier assumptions about hominid activities were reviewed and replaced with the conclusion that hominids ate meat of large game animals near the kill sites, instead of dragging it back to an occupation site. Broughton and O'Connell point out the "now what" factor in this conclusion. Although behavioral archaeology was able to provide new incite into hominid activity, it lacks the application to larger cultural features of economy and social organization.[23] Broughton and O'Connell are not the only scholars to discuss behavioral archaeologies lack of theoretical application.

Stephen Plog points out in a review of Schiffer's book, *Behavioral Archeology* (1976), that although the theory provides a strong foundation for the progress of archaeological methodology, it lacks a well integrated theoretical framework. Plog points out that Schiffer's arguments are strong when dealing with formation processes and data collection but the arguments become weak and unfounded when dealing with theoretical applications on general behavioral explanations.[24]

Other theorists seem to point out the similarities of behavioral archaeology to processual archaeology. Schiffer himself admits to his close ties to Binford and New Archaeology.[25] Trigger addresses this issue by pointing out that although the research and methodology are largely compatible, it is in the broader outlooks that these two approaches diverge. Both theories

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[22] Broughton, Jack M. and James F. O'Connell. "On Evolutionary Ecology, Selectionist Archaeology, and Behavioral Archaeology." *American Antiquity*, Vol. 64, No. 1 (Jan., 1999), 160
[23] Broughton and O'Connell. *American Antiquity,* 161
[24] Plog, Stephan. "Behavioral Archaeology." *American Anthropologist*, New Series, Vol. 79, No. 2 (Jun., 1977), 493
[25] Schiffer, *Behavioral Archaeology*, 1-24

agree that archaeology must provide explanations for variability in human behavior but Schiffer advocates the relations of human behavior and material culture with a strong emphasis on formation processes. Taking a different approach, Binford argues that archaeology must seek to explain evolutionary transformations, such as the progression from food gathering to food producing economies. Trigger points out that although the theories certainly share commonalities in methodology, they do differ in their large scale application.[26]

It is clear that behavioral theory has undoubtedly provided advancements in the methodology of archaeology. Although the large scale application of the theory is under debate, researchers agree on the value of Schiffer's focus on formation processes and his emphasis on viewing the archeological record as having a dynamic nature, not just a static, or fossilized, representation of past human culture and behavior.[27] With the extension of the theory into new applications and new generations of researchers, there is no telling how the theory will expand and grow.

Structuralism in Archaeology

Structuralism is yet another theory spawned from the new archaeology wave in the 1960's. It developed in response to a growing popularity in studies of the brain and its various functions. The theory is also referred to as Cognitive Archaeology but for these purposes the term Structuralism will be used. The nature and history of the theory will be discussed as well as a case study of the theory in modern practice.

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[26]Trigger, Bruce G. "Behavioral Archaeology: First Principles." *The Journal of the Royal Anthropological Institute*, Vol. 2, No 4 (Dec., 1996), 725-726

[27] Gould, Richard A. "Formation Processes of the Archaeological Record." *The Journal of the Royal Anthropological Institute*, Vol. 3, No 4 (Dec., 1997), pg 782

Structuralism is used by many different researchers in various ways, some incorporating only part of the theory, while others use it as the basic premise for an entire site analysis. Though not uniformly used, all researchers that utilize the structuralism framework agree on its basic premises: "the mind works in orderly ways that are not self evident, using logic like arithmetic or grammar."[28] [29]They assume that the mind forms dualisms to understand its surroundings, therefore distinguishing the difference between culture and nature, male and female, or inside and outside. The ways in which the mind organizes these dualisms is set by the structures of the brain. This concept is used widely in linguistic studies but has also gained the attention of historians and anthropologists in recent years.

The two basic assumptions of the theory are that all objects in a culture are of equal significance regardless of function and that, although the particulars of the culture may be lost, the principles of organization of cultural artifacts can be determined by the material remains. These assumptions are reliant upon the basic principle that the past is knowable "because the structure of the human mind has been constitutive of that past since reaching its modern condition tens of millennia ago." This has important universal application to researchers in that while particulars of culture may be lost, the brain structures that formed them cannot be.

According to Structural theory, the brain shapes the three-dimensional objects created by a society, therefore allowing researchers to interrelate all of the material remains found. There are also some researchers, though not all, who take this a step farther by stating that a set of rules, or grammar, for governing these decisions can be created. This grammar defines what goes with what, live with what, etc. By developing a grammar, researcher hope to eventually be able to make predictions about artifact placements within a site.

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[28] Bawden, *Readings in Archaeological Theory,* 101
[29] Bawden, *Readings in Archaeological Theory,* 102

In his1967 study of Upper-Paleolithic cave art, Leroi-Gourhan provides Structural theory with a compelling case study. Leroi-Gourhan suggests that there is a unity in cave art creating patterns regardless of date, place, and variance of items painted. He explains that it is the mental processes that create relationships between paintings that reflect the principles of inside/outside, nature/culture, male/female, and life/death.

This study of cave art was fundamentally different from all other types of archaeological research at that time. He excludes time, place, ecology and all other artifacts other than the paintings and ignores all contexts except the relationship of the paintings to each other. He focused his analysis on the idea that the mind was primary and that this dictated where the paintings were placed and what they depicted. In other words, be examining the relationship of the painting to each other only, patterns of the mind result that can be related to the concept of grammar in language studies.

His results focused on the dualities mentioned above but he focuses them into two categories where males, weapons, and death-dealing animals are opposed to females, animals traditionally hunted, a wounded or dying animals or people. The distinction between inflicting pain and death and suffering pain and death is fundamental to his discussion. These are viewed as the basic paradigm for which life is viewed and understood. Leroi-Gourhan takes this single category and uses it to understand Upper-Paleolithic peoples regardless of time and location, drawing conclusions about the way they view their world on the basis of their brain structure.[30]

Structuralist archaeology although not widely accepted, has nonetheless provides the discipline of archaeology with a valuable new perspective on site interpretation. The research has tested the boundaries of research methods and opened up the field to the possibilities that human minds possess and the possible implications of understanding the codes imbedded within them.

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[30] Bawden, *Readings in Archaeological Theory*, 102-103

Marxist Archaeology

Marxist Archaeology developed in the 1970's in response to the "New Archaeology" movement. Based on the philosophies brought forth by Carl Marx, Marxist archaeology seeks to study cultures on the basis of historical materialism and social structure. There are several sub-branches of Marxist Archaeology but for summarizing purposes they will be grouped together under "Marxist Theory." The main points in the theory as well as two case studies will be discussed.

A key issue in Marxist theory deals with the idea of ideology. Ideology is defined as "a structure of misrecognition, where the members of different classes share the same notions of truth, notions that hide the actual antagonistic or exploitative relationships between those classes."[31] The suppression of conflict is the goal of ideology. Societies that are in a period of change due to technology, means of production etc., will experience conflict as a result, thus providing a need for social control. This is the role of ideologies in a society, to mask reality so that social order can be maintained. Archaeologists use this concept when studying past societies by looking for differences in class and social position. Ideologies are common tools of high ranked individuals or groups to suppress the lower ranking members of a society, often the producers necessary for economic stability. It is assumed by archaeologists that any ranked groups will have conflict to be masked by ideologies, thus any materials found in association with ranked classes can be classified as artifacts of ideologies. All complex societies with unequal distribution of wealth can be assumed ranked societies and thus studied under Marxist

[31] Bawden, *Readings in Archaeological Theory*, 107

theory. This extension on ideologies is only relevant to archaeology dealing with sites dating from the Neolithic onward.

Another key point in Marxist theory is the idea of consciousness. The extent to which individuals are aware of the ideologies in place within a society is a reflection of their understanding of the true nature of that society. This extension of Marxist theory holds more value in the examination of the archaeologist, rather than the society being studied. History and archaeology are not unbiased disciplines but are instead reflection of the ideologies of the researcher's society. The idea of consciousness is a general call for critical self-reflection among researchers and has two goals in mind. First, "it acts to make conscious the position of oneself and of one's work in the context of one's own society."[32] This can mean understanding the potential economic and political gain to be had by one's research. Secondly, it "places the cultural position of the scholar in his or her own political context to create awareness." This enables a researcher to understand the extent to which he or she is imposing modern notions about social structure on the past. For example, modern ideas on kinship patterns or adaptive functioning may distort a researcher's findings if imposed upon a past society. This critical evaluation of the archaeologist is important to the ideals of Marxist theory, forcing one to look not only at the ideology of the past, but also those in place in the present.

Marxist archaeology is incorporated into the research of many archaeologists. One of these researchers is Michael Pearson, who conducted an investigation of social change in early Iron Age Denmark. Pearson analyses over 600 years of change in Iron Age Jutland (Denmark). Farmstead groups are found at the site of Grøntoft where individual hearths and animal pens can be seen. Each farmstead appears to be occupied by only one family and there is no significant difference in farm size or productive capacity. In this same time period (c.400-200BC)

[32] Bawden, *Readings in Archaeological Theory*, 112

cemeteries have been excavated. Researchers found crematory remains in clay pots covered by small mounds. There seems to be no differentiation in pot decoration, crematory remains, or mound types, indicating a society with high conformity and little social differentiation. The votive depositions at this time have similar results. The items found are classified as "gifts to gods" and include wooden ploughs, human sacrifices, dress fittings, neck rings, wagons and cauldrons. The human corpses found are thought to be individuals that lived off of the surplus of others, not laborers, due to the fine quality of their skin. According to Pearson, the bodies may have been overthrown rising elite or some types of religious figures.

This general trend of egalitarian living in the early Iron Age began to change around the first century BC. A settlement found at Hodde clearly shows one farmstead with 50% more cattle space than the others and numerous small outbuildings. In addition to size differences, rare burnished pottery was found mainly on the large farmstead, with few occurrences in the other farmsteads. The burials from this time period showed significant change as well. Some graves were found separate from the older, larger cemeteries and contained burnished pottery vessels. Some contained burnt wagons or cauldrons, and some had large weapon assemblages including finely made Celtic swords. The votive deposits show the same changes. Rather than being classified as "gifts, to gods," the new materials found are regarded as "gifts to ancestors." This is due to the increase in elaborate findings, materials that required a great deal of accumulated surplus. The offerings are thought to be given by whatever individual farmstead could raise enough to afford them, taking away the community aspect found in earlier votives.

By the first century AD, inhumation graves began to appear. The graves lacked elaborate material goods found in the earlier cremation graves. Pearson concludes that this is further evidence for a rising elite that strove to keep their wealth on the farmstead, those who did not

need to compete with others, just prove that they are separate. This analytical look at the Iron Age sites in Demark is a clear representation of Marxist Archaeology in practice. Pearson uses the material findings to draw conclusions about class structure and social hierarchies. He also focuses on the transition stage from generally egalitarian societies to those with social stratification. He feels that by understanding the social stratification at the time, archaeologists can construct a clearer picture of the culture of the society at that time.[33]

Another researcher that incorporates Marxist Theory is Maurizio Tosi in his study of craft specialization in the Turanian Basin. Craft specialization is good indication of stratified social structures in that labor allocation must occur and differences in craft production create differences in the society's economics. By have craft specialization a society is removing a homogeneous production atmosphere and creating different types and classes of workers. Tosi defines four types of activity areas found in the Turanian Basin: Atelier, Workshop, Factory, and Craft Quarter, each type increasing in size and productivity. The types of artifacts examined at the site are facilities (furnaces, kilns, etc.), tools for manufacture, residues, semi-finished products, stocked and unworn products, and materials for recycling.

The Turanian territory underwent substantial economic growth between 3200 BC and 2500 BC with craft specialization appearing in earnest during the third millennium BC. Tosi points out that the craft specialization was a central aspect of the elite's ability to control the production system. The steady centralization of the population of this region at this time is seen in each of the four prehistoric sites that Tosi is examining. Regional and long distance travel was difficult as human travel was the only means available for trading. As a result, there are very few introduced materials found at the sites, thought to be exclusively prestige goods. In contrast,

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[33] Pearson, Michael Parker. "Social Change, ideology, and the archaeological record." Marxist Perspectives in Archaeology. Ed. Matthew Spriggs. Cambridge: Cambridge University Press, 1984. 59-71

materials for tool production are abundant in the region. The four sites Tosi examines are towns that are densely populated enough that farmland was not available for every household, thus providing direct evidence for craft specialization in these towns.

The variability of economic management at these sites can best be described by looking at the distribution of record-keeping devices. In an egalitarian society, individual household are responsible for managing finances. In an elite society, only a few individuals will control the means of production. With an increase in craft specialization, the material record should reveal a decrease in the amount and distribution of record-keeping devices. This is shown at the site of Shahr-Sokhta and is clear evidence for the rise of elite control over the population.

The theory that Tosi emphasizes is that "craft specialization can be seen as a powerful means to promote economic inequality, by differentiating forms of labor and relative income or by developing dependence of rural populations on central services." Tosi's study fits well within the Marxist framework as it focuses on the development of various social classes and the introduction of an elite class to a society. By looking for clues to craft specialization, Tosi concludes that the nature of craft specialization naturally brings along a degree of inequality, forcing people to be differentiated according to their job and skill.[34] Both case studies mentioned are examples of how archaeologists look at material remains to draw conclusions about past social stratification. Whether by looking at graves sites or by examining craft production, both seek to develop a more realistic picture of the social organization in those time periods.

Marxist archaeology is a growing field and has taken on many subfields and branches from neo-Marxist perspective to materialist Marxist perspective. Although the application of Marxist theory to archaeology is very different from the originally intended modern socialist

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[34] Tosi, Maurizio. "The notion of craft specialization and its representation in the archaeological record of early states in the Turanian Basin." Marxist Perspectives in Archaeology. Ed. Matthew Spriggs. Cambridge: Cambridge University Press, 1984. 59-71

movement, the value of the theory to archaeology is undeniable. Researchers now look at the unequal distributions of wealth at archaeological sites and are able to draw conclusions about social and cultural practices. Researchers are also inclined to look at their own biases in judgment when reviewing the material remains at a site. Although practical in many ways, Marxist theory is not without its faults. Its application towards sites is generally confined to those of settlements and so does not have any practical application to sites older than the Neolithic time period. It also is hard to apply to sites that show no real degrees of wealth distribution or differences in material goods among households. Marxist theory is also strongly tied to political ideals and so some researchers do not use this approach simply for its connection to Carl Marx and socialism. This has especially been the case for American Archaeology, where most of the Marxist research is conducted in European sites with few North American examples.

Marxist theory, although not without its faults, is a useful theory in the development of archaeology. It has proven to be useful in field research and has few limits on its application to the development of pre-historic societies. It calls for a critical analysis of the researcher, working towards removing harmful biases, resulting only in an improvement of analysis quality. These factors work towards the growing popularity of Marxist study and add to the growing understanding of social development.

Research in Salemi Sicily: Summer 2006

The goal this project is to use the NIU Archaeological Field School as a test case for examining how archaeological theory is taught and learned in the field. Archaeological theory is normally taught in the classroom and is usually a difficult concept for students to grasp. I

postulated that the students' perspectives and understanding on Archaeological theory would change with the incorporation of hands-on research techniques, resulting in a measured transitional period that can be used to aide in theory understanding for students that may not have the opportunity to study abroad. I participated in NIU's field excavations as a participant/observer and, after gaining IRB consent,[35] conducted student questionnaires in order to study the effectiveness of student theoretical learning in a hands-on situation. The 13 volunteers were asked to complete two questionnaires, one before the field school began and a follow up questionnaire after excavations were completed.[36] Some highlights of the results are discussed in this section while the application to the four theories is discussed in the conclusion.

The first two questions were identical on each questionnaire and were used to gage participant's background in field work and formal experience with archaeological theory. The results can be seen in Table 1. The majority of student participants, 54%, had no prior field experience while 62% of students had some background in archaeological theory. In question 21 of questionnaire 2, despite this relatively high percentage of students with theory background, only one student was able to describe all four theoretical approaches, while six others were able to describe at least one. In addition, these numbers only account for answers submitted and have no real bearing on correctness of the description. Again, this disparity between experience and

Table1: Student Background Information

Previous Course in Arch.Theory	Number of Previous Field Schools					
		None	One	Two	Three	Four +
	Yes	2	2	1	2	1
	No	5	0	0	0	0

[35] See Appendix D

[36] To view the questionnaires in their entirety refer to Appendix C

sustained knowledge points to the problem stated above. Students are not understanding or retaining information about theories from classroom activities alone.

In addition to the disparity between experience and sustained knowledge, another interesting finding emerged from the questionnaires. The students were asked in the first survey whether the researcher should create a hypothesis before excavations or whether researchers should examine the site material first before creating a hypothesis. These questions were used to gage the student's opinions on a fundamental dichotomy in the discipline of archaeology. The two questions, see Table 2, were initially created to be opposites of each other and so opposite but even results were expected. This was not the case however, as 100% of students agreed that researchers should create hypothesis before excavations but the results for the question 4 were split almost even. Six students believed that both Question 3 and 4 were true, so essentially, six students believed that you should create a hypothesis before and during excavations. This same question is addressed in the second questionnaire with question 12. The responses were written but it is clear that the majority of students, in practice, did not create hypothesis until after

Table 2: Opinions on Hypothesis

Questionnaire 1 Questions 3 and 4 Results

3. Hypothesis before Excavations?		4. Hypothesis After Excavations Begin?	
Yes	No	Yes	No
12	0	6	7

Questionnaire 2 Question 12 Results

	When did you create your hypothesis each week?	
	Beginning	End
Week 1	2	8
Week 2	2	6
Week 3	2	6

Note: Not all students responded to written answers, see Appendix B

excavations had begun. Only two students said that they created a hypothesis before excavations began. The fact is that before experience, all students were responding in favor of a proccesual archaeology mind frame with its emphasis on the scientific method. This changed once they gained experience in the field and only two were able to practice this aspect of the processual ideology.

The final portion of the data that showed a significant difference are number 20 on questionnaire 1 and number 10 on questionnaire 2. The two questions are identical and ask what the students thought was the most important goal for the research at Salemi. The results are displayed in Table 3.

Table 3: Most Important Goal for Research

	Which is the most important goal for the research at Salemi?			
	Finding Artifacts	Discovering Human Activities	Creating a Chronology of Cultural Processes	Find/Describe Patterns of Behavior
Questionnaire 1-20*	0	2	3	6
Questionnaire 2-10	0	3	1	9

*Not all students responded

The difference in results can be seen in the decrease in student's advocating a chronology of cultural processes and an increase in students believing that discovering activity or finding patterns of human behavior were most important. The increase in the two categories varied more in the opinions on patterns of human behavior. This question answer is linked to the idea of structural anthropology and when compared to a more direct representation of structuralist theory, questions 6 and 7 questionnaire, the results are surprising. 80% of students did not believe in the foundation of Structuralist theory, that the human activity can be understood by means of patterns based on human brain structure. 92% of the students did not believe that

human activity could be understood in terms of patterns to determine where an archaeologist should dig. This same issue is addressed in question 6 on the second questionnaire were all students believed that the seasons excavations resulted in patterns of human behavior that could be used to plan a new site. The difference here is that prior to excavations, the majority of students did not believe in human activity patterns while after excavations, all students said that they recognized patterns that could be used in the future. Clearly, there is a distinct difference between theory and practice when it comes to opinions on structuralist theory.

Conclusions

The changes in student opinions are in some cases slight but are clearly marked in others. The application of some theoretical processes seemed difficult for students and opinions on theories were not always consistent. This may have to do with student confusion on theory, despite their previous experience. Students may have just been unsure about the definitions and applications of theory and just did whatever was easiest for them. This precisely the data I was hoping to receive as it showcases the theoretical perspectives that students had difficulty with and will aide in providing solutions to theoretical classroom work. An examination of the four theoretical perspectives and the difficulty or lack thereof that the students had in implementing them is discussed and followed by some suggestions on classroom implementation.

The theoretical perspectives of Processual archaeology were met with mixed reviews when implemented into practice. The students did not have difficulty in utilizing a multidiscipline approach. They largely adopted the processual process of borrowing from other disciplines like geology, history, mathematics, psychology, etc. The site research itself included

many aspects of geology and history to help understand the materials and structures found at the castle site. For example, the soil description Munsell book developed by geologists was used frequently to describe the changes in soil level and historical records of a third Elymian city are the reason for excavations in Salemi. The students recognized this importance both before and after excavations. The students also all agreed on the importance of studying modern day cultures to draw conclusions about the past and in being able to discover information about culture, religion, and human relationships from archaeological remains. Their opinion on universal application of site interpretations was less popular. Students were largely opposed to the notion that universal patterns of human behavior can be discovered and thus applied to all archaeological sites. All students believed that individual sites were unique and thus not universally applicable. In all of these aspects, whether positively or negatively, the students agreed on the various Processual approaches to archaeology. It is in the application of hypothesis and the scientific method the students had the most difficulty as highlighted in the previous section. This disparity between theory and practice and the adoption of only some of the aspects of Processual ideology is similar to the historical response of professional researchers. They found Processual theory lacking and so sought to develop their own theories that would work more for their individual research. Although the students may not have realized it, they were doing the same thing while conducting excavations as highlighted in the written responses to question 12 on questionnaire 2.

The students responded to Behavioral archaeology was largely positive. The majority of students believed that discovering past human activity and behavior was important (85%). Similarly, the students largely believed that studying the effects that the environment has on a site is important in that 92% of students agreed before excavations and all students agreed after

excavations ceased. This was highlighted specifically in the Salemi excavations by large tree roots in several site units and the history of earthquakes in the region. There seemed to be no real contradictions in Behavioral Theory and most students favored its ideologies.

The results on Structuralist theory are quite the opposite and have more stark contradictions. As mentioned in the previous section, students largely reacted negatively to the ideologies of Structuralist theory. 80% of students did not believe in the fundamental basis for Structuralism, that the uniform human brain creates patterns that can be deciphered by researchers. In addition, 94% of the students did not believe in the use of these patterns for new site applications. The contractions occur in the second questionnaire where students change their opinion on this and all of them believe that the excavations resulted in human activity patterns that could be used to create new sites and site units. The negative reaction of students to Structuralist theory prior to excavations and the result of a positive reaction after excavations points to the fact that students have difficulty in understanding the usefulness of this theory before experience in excavations.

The last theory under discussion is Marxist Theory were students had equally mixed reviews. Before excavations students largely rejected the Marxist emphasis on stages of development where 85% reacted negatively. On the other hand all of the students agreed that discovering information on class structure was an important aspect of understanding the dynamics of the past. In the second survey the students again agreed that social class structure was at least somewhat a part of the excavation results at Salemi (78%). This result is similar to the opinions on Processual Archaeology where only portions of the ideology are found useful.

Another issue that affects all if the theories equally is the lack of student recognition for the individual theories. Again, over half of the students had prior experience in archaeological

theory but why is it that so few are able to remember them formally? The students could easily form opinions on them in the questionnaires but when asked to describe them many students couldn't respond, responded vaguely or responded incorrectly. Clearly the postulation that students have difficulty understanding archaeological theory is correct, but this study was not intended to simply prove this, but instead aide in the development of solutions to this problem. Thus, the following solutions are presented for instructors of theory:

1. Processual theory stands as the foundation for change in archaeology and is the reason for such a diversity of opinions on the subject. It is not without its faults however, especially when considering the use of hypotheses. The use of the scientific method of reasoning is clearly not applicable for all researchers and many students find this aspect in particular hard to implement. Students should be given classroom tasks associated with hypothesis development so that they can begin to discover these difficulties and solutions to them.
2. Structuralism was proven to be more effective in practice than in theory. Classroom emphasis should be placed on the effective nature this theory has when expanding on previous research sites. A discussion on the links between widely accepted research on human language patterning and spatial patterning of humans may be helpful for students.
3. The favor the students showed for using multiple perspectives, utilizing the merits of several theories rather than just one is an important point to be made. Students in theory classes should be encouraged to seek out the useful aspects of each theory, rather than simple memorization of ideologies and cases studies.

4. Theories should be outlined and discussed by students. Participants in the Salemi field school found it very difficult to link ideologies with the four theories tested for. Students should be able to describe the fundamental ideologies of the theories by the completion of the course. Assignments should not be simply memorization but rather practical application. Students should be asked to evaluate site materials via the various theories and be asked to draw conclusions. Hypothetical situations are easy to pull from various research projects and this mock experience would benefit all students, especially those that will not have the opportunity to go onto actual field sites.
5. Lastly, and perhaps most importantly, emphasis should be placed on the internalization and relevance of theory. I believe that students do not fully comprehend the importance of theoretical perspective. It decides where a researcher digs and how they interpret there findings, fundamental aspects of archaeology that cannot be ignored.

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Appendix A: Raw Data Tables

Raw Data Questionnaire 1

	Answers			
Question #	A	B	C	D
1	7	2	2	1
2	8	5		
3	12	0	1°	
4	6	7		
5	13	0		
6	2	10	1°	
7	1	12		
8	1	12		
9	0	13		
10	11	2		
11	12	1		
12	13	0		
13	13	0		
14	2	11		
15	13	0		
16	0	13		
17	13	0		
18	13	0		
19	4	9		
20*	0	2	3	6

*Not all students answered
°Write in answer of 'Maybe'

Raw Data Questionnaire 2

	Answers			
Question #	A	B	C	D
3	13	0		
4	11	2		
5	0	0	2	11
6	13	0		
7	13	0		
8	1	12		
9*	3	8		
10	0	3	1	9
11	3	9	1	

*Not all students answered

Appendix B: Written Student Responses

Questionnaire 1 Question 21:

Structuralism: Patterns of human activity; society is composed of different cultural structures that interact with one another and can be reflected in the archaeological record; looking at economic and ecological structural restrictants/parameters to discern behavior; what ever you study can be analyzed in an almost mathematical way, very structural, building blocks etc.; unconscious structures of the mind are reflected in human culture

Marxist: Society is driven by class struggle and a materialist ideology plays the dominant role in shaping the culture and its material representation; focus on class conflict and material wealth, view relations between economic groups in a dialectical framework.

Processual: Western-centric view, idea that societies advance from more primitive to more advanced state in a linear manner, i.e. band to tribe, chiefdom to civilization etc.; scientific evaluation based on hypothesis testing, can determine the logical interpretation of the archaeological record; a more scientific approach to things, don't contemplate culture as much and is very structured

Behavioral: You can compare human behavior now with the past, etc, to understand both present and modern day behavior; Goal is to understand human activity and behavior; the archaeological record is reflective of the innate behaviors that are consistent between human populations and the archaeological record

Questionnaire 2 Question 12:

Week One: end, I created my hypothesis at the end of every week rather than the beginning both out of sheer laziness and out of a desire to incorporate the relevant inferences into an intelligible whole; cheated strait away, rather difficult; after the couple of days, difficult because this is my first field experience; wasted a few days to see what was happening at the site; I created an overall hypothesis right away and more specific ones as I gained more information, it was easy to create short time range hypothesis; I wanted a few ideas to get a feel for the site, I looked at the site itself and artifacts found and based my hypothesis on my interpretations, it was difficult at first but got easier; beginning= very difficult; I took the first couple of days to form a hypothesis and yes it was more difficult than I thought it would be; created it at the end of the week when writing journal, more difficult because I did not feel that I had enough background or knowledge of the site to create a plausible hypothesis; I created it at the end of the week, not much happened so it was hard to have one at the beginning; I did my hypothesis day to day

Week Two: Developed my hypothesis during and after Wednesday's excavations; I waited a few days for data to amount before I created one; still felt like I didn't know enough about what was going on; middle, easiest and most rewarding; I created short hypothesis throughout the week , I continued to mention my long range hypothesis, it was easy to create and

discuss the short time hypothesis; Again waited, but continued thesis from week 1; before the week began, easier after week 1; waited a day but was thinking about it all through the week

Week Three: Waited a while so it was easier once again I got a clearer picture of what was going on; after the week began, out of laziness, but it got easier as the weeks progressed; Had [crap] for a thesis, waited till the way end of the week; I created short hypothesis throughout the week, I continued to mention my long range hypothesis, it was easy to create a discuss the short time range hypothesis; Each week I developed a hypothesis a day or two into the weeks excavation and based my hypothesis on the developments of the excavation that week; end, difficult because of confusing situation on site development; was more difficult because I had wanted to use previous hypothesis because I felt I could support them better; I knew from the beginning what I was going to write about since I knew what we were excavating and should find; developed my hypothesis Friday

Appendix C: Questionnaire

Questionnaire 1

1. How many times have you participated at a field research site?
   a. none b. one c. two d. three e. four or more
2. Have you ever taken a course or done readings in Archaeological theory?
   a. yes b. no
3. Do you think that researchers should create hypothesis about a site before doing excavations?
   A. Yes B. No
4. Do you think that researchers should examine the materials at a site first, and then draw together ideas about the materials they find?
   A. Yes B. No
5. Do you think that the study of modern day cultures can be related to past cultures and therefore used as a research tool for archaeologists?
   A. Yes B. No
6. Do you agree with this statement? Since human brain structure has not changed since the development of anatomically modern humans roughly 30,000 years ago, human activity, past and present, can be predicted by understanding the patterns of behavior determined by our brain structures.
   A. Yes B. No
7. Do you believe that human activity can be broken down into patterns and thus researchers need not do random sampling to find out where to dig, they just need to decipher the behavior patterns of that particular group.
   A. Yes B. No
8. Do you believe that there is a universal pattern of human behavior that, if discovered and analyzed, could be applied to all archaeological sites, regardless of time and location?
   A. Yes B. No
9. Do you believe that each archaeological site is unique therefore cannot be compared to others in different parts of the world and in different time periods?
   A. Yes B. No
10. Do you believe that the ultimate goal of archaeology is to determine past human activity and behavior?
   A. Yes B. No
11. Do you think researchers should study the specific effects the environment has had on the site throughout time?
   A. Yes B. No
12. Do you believe that archaeologists can discover information about culture, human relationships and religion from archaeological remains?
   A. Yes B. No
13. Do you believe that research methods and theories from other disciplines such as mathematics, physics, history, psychology, and geology can be made applicable for archaeology?
   A. Yes B. No
14. Do you believe that human events can be categorized into stages, always moving from primitive to more advanced, and that each culture can be evaluated based on their progress through each stage?
   A. Yes B. No

15. Do you believe that archaeologists should try and determine the class structure of past societies in order to better understand the dynamics of past society?
A. Yes B. No
16. Do you believe that archaeologists should have one theoretical approach to their research that they always incorporate in their sites?
A. Yes B. No
17. Do you believe that researchers should use multiple theoretical approaches within the same site?
A. Yes B. No
18. Do you believe that the development of archaeological theory is an important aspect of archaeology?
A. Yes B. No
19. Do you agree with this statement? Archaeologists should spend less time contemplating theories and more time out in the field collecting research on cultures.
A. Yes B. No
20. Which of the following do you believe is the most important goal for our research at Salemi?
A. finding artifacts B. discovering what activities occurred at the site C. creating a chronology of the cultural processes and stages D. to find and describe patterns of human behavior
21. Please do your best to describe (in a few short sentences) the following theoretical approaches.
Structuralism/Marxist/Processual/Behavioral

Questionnaire 2

1. How many times have you participated at a field research site?
a. none b. one c. two d. three e. four or more
2. Have you ever taken a course or done readings in Archaeological theory?
a. yes b. no
3. Do you believe that it is important to look at the environmental factors that contribute to a site's condition? (This can mean trees, earthquakes, fires, rodents, etc)
A. Yes B. No
4. Do you believe that we have discovered any information on cultural beliefs and values, human relationships, or religion from our excavation?
A. Yes B. No
5. To what extent do you feel that this project borrowed research methods and techniques from other disciplines like mathematics, physics, history, geology, and psychology?
A. None B. Rarely C. Sometimes D. Often
6. Do you believe that this field season has resulted in patterns of human occupation that could be followed to determine the best location for a new site or unit extension?
A. Yes B. No
7. Do you think that there could be multiple interpretations for our findings at this year's site or are the results clear and largely homogeneous among researchers?
A. Various interpretations dependent upon the researcher B. Largely similar interpretations among researchers

8. Do you believe that researchers should have one theoretical approach that they always incorporate into their sites or do you think that researchers should use multiple theories within the same site?

A. Should use one perspective B. Should use multiple perspectives

9. Do you believe that Dr. Kolb has used multiple theoretical perspectives at this site or has he used one throughout the excavations?

A. Yes B. No

10. Which of the following do you believe is the most important goal of our research at Salemi?

A. Finding artifacts B. Discovering what activities occurred at the site C. Creating a chronology of the cultural processes and stages D. To find and describe patterns of human behavior

11. To what extent do you believe that we have discovered information on class structure through our excavations in Salemi?

A. None B. somewhat C. Extensively

12. How did you create your weekly hypothesis? i.e. did you create it at the very beginning of the week or did you wait a few days for excavation information and site data before creating one, was it more difficult/easy than you thought, etc (please briefly explain)

Week One/Week Two/ Week Three

Appendix D: IRB Consent

Consent Form for Participants

I agree to participate in the research project titled Theory in Archaeology: Sicily Field School 2006 being conducted by Julie Edmunds, an undergraduate student at Northern Illinois University. I have been informed that the purpose of the study is to use the NIU Archaeological Field School as a test case for examining how archaeological theory is taught and learned in the field.

I understand that if I agree to participate in this study, I will be asked to do the following: Complete two questionnaires (10-15 minutes each), one before the field school begins and a follow up questionnaire, and agree to allow participant observation while at the site, i.e. allow the researcher to observe and write down any actions or conversations that occur relating to the scope of the project during field excavations, lab work, and any scheduled group meetings.

I am aware that my participation is voluntary and may be withdrawn at any time without penalty or prejudice, that any information collected will not affect any grades received for the field school, and that if I have any additional questions concerning this study, I may contact Julie Edmunds at (815) 566-2765 or Dr. Kolb at (815) 753-7037. I understand that if I wish further information regarding my rights as a research subject, I may contact the Office of Research Compliance at Northern Illinois University at (815) 753-8588.

I understand that the intended benefits of this study include developing examples of problems in application for four specific theories (Processual, Behavioral, Structuralist, and Marxist) that can be incorporated into classroom teaching methods. This is a particular benefit for students that may not have the opportunity to study abroad and can aide in the understanding of these complex theories.

I have been informed that potential risks and/or discomforts I could experience during this study could include embarrassment about personal opinions on theory. I understand that all information gathered during this study will be kept confidential by having all participants assigned a number and all research is only to be viewed by Julie Edmunds and Professor Kolb. Data will be stored at Julie Edmunds' personal residence and no names will be used in the write up of the final report, only the assigned numbers.

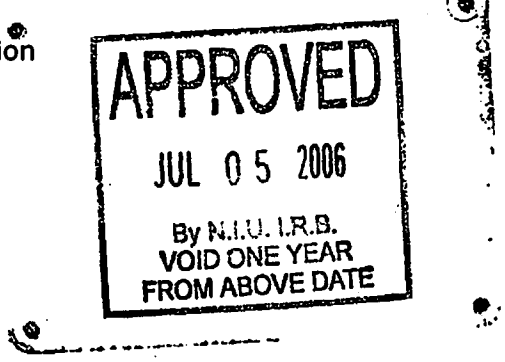
I understand that my consent to participate in this project does not constitute a waiver of any legal rights or redress I might have as a result of my participation, and I acknowledge that I have received a copy of this consent form.

_____

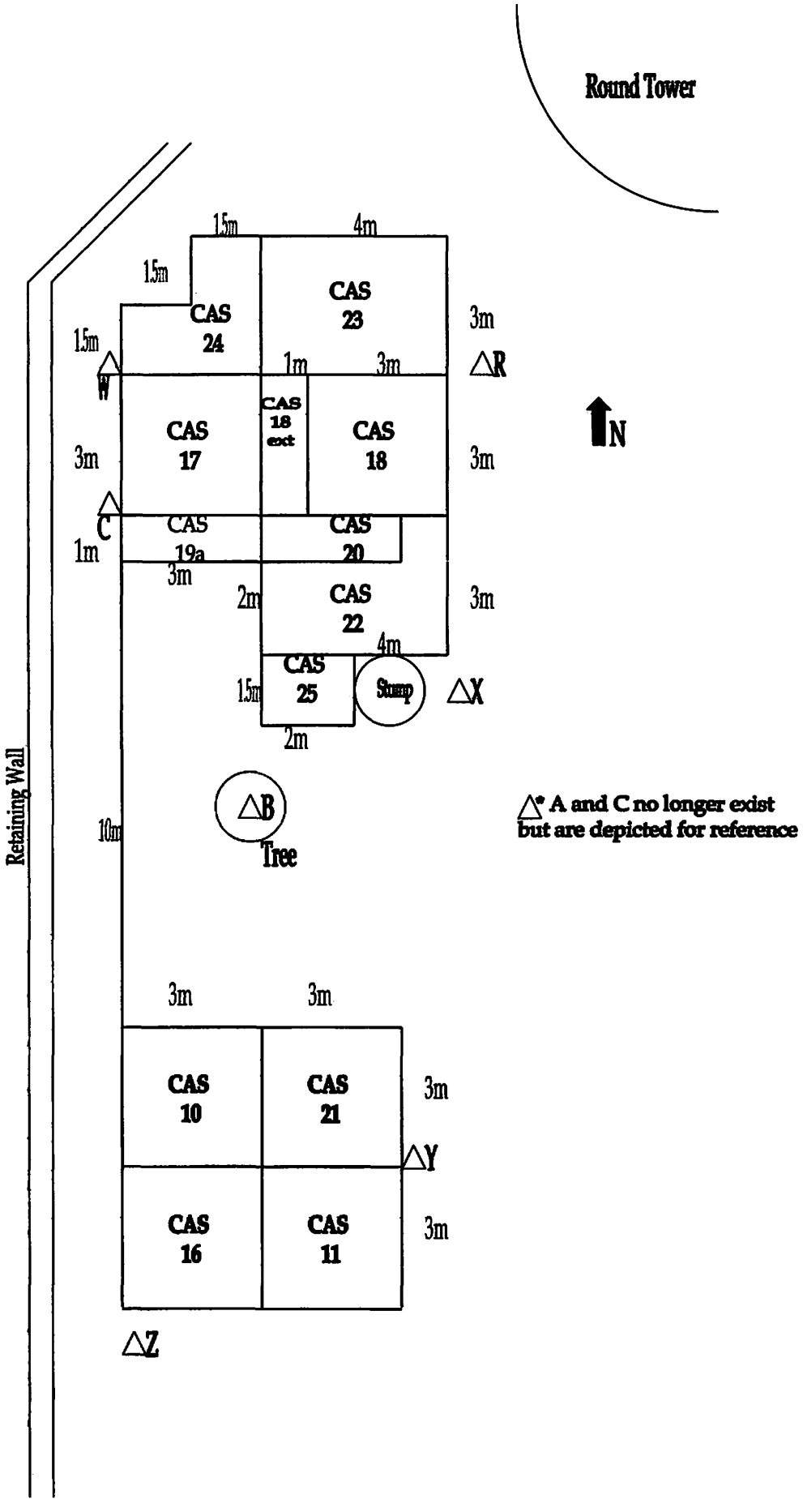
Signature of Subject/Date for consent of Questionnaire

_____

Signature of Subject/Date for consent of Participant Observation



Appendix E: Map of Entire Castle Site



Appendix F: Photo Gallery

Above: North portion of Castle Units with Student Workers
Below: South Portion of Castle Units With Student Workers

Above: The Castle Tower
Below: Photo of 2006 Field School Participants

Below: Images from the town of Salemi