

Can archaeology's "ritualistic and symbolic artefacts" be interpreted semiotically?

By Andrea Vianello (Intute, University of Oxford)

DRAFT FOR PRE-CIRCULATION

Abstract

Archaeologists are often content to leave an interpretation of material culture at the point of recognising symbolic behaviours. However, new archaeological researches are expanding our knowledge of the past towards the non-material and what is not immediately visible in the archaeological record. Phenomenological studies in particular are expanding our knowledge to the perceived human environment. Computer reconstructions expand the architectural and artificial environment while archaeobotanical and archaeozoological researches reveal ancient natural environments. The focus of archaeological research is moving from the study of the materials retrieved during excavations to past landscapes that are being filled with plants, animals, objects and ultimately people in addition to the monuments and geographical features. Linking specific objects to particular functions is a way to reconstruct past activities as well as gestures. The final consumption of an object can also reveal quite specific actions. For instance, the deposition of objects in a grave might be better defined than an offering. Artefacts connected to power or religion will embed symbolic meanings that might be revealed by analysing them as part of semiotically interpretable behaviours. I shall present some examples where semiotics can help archaeologists go beyond explanations regarding ritual and symbolic meanings, in particular taking the Minoan palace of Knossos as case-study.

The idea of archaeology, what it is, and what is not

Since "New Archaeology" was proposed by Lewis Binford in the 1960s, many archaeological theories have been produced and discussed to a point that it might appear that our knowledge of the past depends upon the latest theory. Post-processual archaeologists criticised the positivist position of processual scholars that thought archaeological interpretation could reach an understanding of the past. The result is that "most archaeologists today would agree that archaeological knowledge is theory dependent and has political implications in the world" (Preucel 2006: 146); in other words it is limited and relevant only to the present time. This perspective has directed many archaeologists to "plunder" other disciplines for theories, and rediscover, complement, or reinterpret past philosophical ideas. Semiotics was one of the disciplines considered and the linguistic theories by de Saussure have been both proposed and criticised. Equating material culture to a language and artefacts to words has been simple enough, but the results have had limited relevance.

Cognitive archaeology is one of the most recent sub-fields in archaeology that unlike others it has the possibility to aim at becoming some general theory for archaeology. Inspired by evolutionary theory, the "only viable unitary theory in the human sciences" (Preucel 2006: 152), its aims are still not fully defined among archaeologists, but there is agreement on its focal areas: intelligence, language, tool use, and art. This delimitation is already important because archaeologists have been

tempted by holistic approaches, typical of anthropology, which after abandoning the possibility of understanding the past would also let the archaeological focus on material culture out of sight, effectively transforming archaeology in an anthropological approach, blending archaeology and anthropology. The focus on “intelligence” however could appear far too generic if not defined: it is usually perceived as symbolic behaviour, especially in the case of consciousness (and human intelligence) being recognised by symbolic behaviours.

Before continuing, it is necessary for me to spell out my own understanding of archaeology: it is a science that attempts to reconstruct and understand the past from the physicalness of material evidence. When substantial written records are available, archaeology can test the validity of the information that they provide because the reality of facts might be different from what people wanted to record. This is the same case as when history is recorded only from the side of the victor, as in many cases of Roman historiography: the reality of facts might have been altered, deliberately or accidentally. It is the task of archaeology to clarify what actually happened. When written records are unavailable or too specific for any broader understanding of the past reality, it is the task of archaeology to find out the reality as it was by using a full array of scientific methods and analyses to collect the most precise data possible. Only after this stage the interpretation of data should concern archaeologists, and the theoretical model chosen for interpretation should be based on the context. For instance, if an economic exchange took place, a trading model might be the most suitable; instead, if social developments are suspected, some social theory should be applied. According to Alison Wylie’s “tacking process”, archaeological truths are interpretive statements constructed of multiple strands of evidence and different lines of argument; they are not the product of a single interpretation. In addition to the philosophical foundations of attempting to reach archaeological truths, our own experience also dictates such an approach. For instance, most people have different sets of friends or different habits while working and in their private life; the same people can have different interests at different moments, even on the same day: one can have a hobby, work-related interest or be prompted by a relative or acquaintance. There can be therefore no single perspective in interpreting human beings, but a collection of perspectives and related models mirroring as close as possible the complexity of the individuals and societies concerned.

For example, in the case of Bronze Age trade within the Italic area, the reckless application of theoretical models is posing sometimes questions and surprises that only reveal the weakness of the models applied. Scientific analyses state that many Sardinian copper oxhide ingots were imported from Cyprus; Aegean-type pottery is often locally produced; and copper in the Po Valley was sourced initially from nearby Trentino and then also from Tuscany due to its higher contents of tin. Models of trade based on traditional archaeology interpret anything in an “exotic” style as imported, but even if the ancient people manufactured some “exotic” products to suggest a faraway provenance, archaeology has to reveal what was going on in reality, and to do so it needs reliable data and flexible theories. Furthermore, data provided by scientific observations and analyses can provide more than mere facts on specific, narrow questions that scientific analyses can usually answer. For instance, observations of the presence of Aegean-type or luxury pottery in individual huts and buildings can reveal something more about the societies involved: was pottery concentrated in single buildings, equally distributed or unequally present across households? More advanced analyses such as residue analyses on pottery used for cooking or food consumption “could be a way to reveal ethnic, social and economic distinctions among households whose material culture (including basic ingredients) might otherwise be very similar” (Barrett 2008). Archaeobotanical and

archaeozoological analyses can reveal the paleoenvironment, and especially the environment that people living at individual households were often in contact with. Osteological analyses can show the illnesses that afflicted individuals and eventual attempts to remedy, even if the ancient individuals had a poor knowledge themselves of their own health. By knowing the context of the artefacts, each analysis can write stories of individual lives and their societies whereas general theoretical models cannot do the same.

The problem of reaching absolute truths in interpretations cannot be ignored: Wylie's tacking process requires the testing of multiple concepts and analogies one after another to reach a truth that can be objective, different from any assumption and is perhaps the best method to tackle the problem. Archaeologists should aim at "archaeological truths" however, which should not be intended as absolute: they can only be truths valid from the perspectives of the individuals that produced the material record that survived to us. These can be very partial truths, of particular and few individuals within large societies, or truths only valid at the moment of deposition and not throughout the history of an artefact or within any length of time. The scientific process, helped by the tacking process, can only reach such partial truths that are however fully valid in spite of their limits. Archaeologists can then interpret the evidence in more general terms using their own values, provided that they separate their inferences from data, and this part of the interpretation will be anchored to the present and ever changing values and may be subject to continue revisions. This is however the perceptive part of the interpretation, i.e. how modern people perceives and understands ancient societies, it is not a truth valid in the past. For instance, in a simple society, the availability of food and other staples of life will simply demonstrate that such society was winning the "struggle for life", however, the modern perception might add considerations about wealth, deciding that the absence of luxury items affected the life (and perhaps happiness) of those people. It is simply unrealistic to suggest that modern people should not relate with ancient societies, even if in the process they alter our knowledge. A postprocessual view denying that any truths can be reached in archaeology in fact transforms the archaeological debate into a modern political arena, where models of ancient societies become testing cases of future societies. Positivist perspectives on the other hand fail to determine the validity of the conclusions in archaeology, casting doubts on the viability of archaeology as science and suggesting that collecting data and artefacts is all what can be done. We should never forget that archaeologists are humans studying their ancestors, using the archaeological record that is what survived time, partial and fragmented: archaeological interpretation must be true to be scientific, but it must be also relevant to us to be worth pursuing. The duality of aims, be scientific and true as well as be relevant to modern humans, must be preserved in archaeological interpretation, and if this is done no part of the interpretation will be untrue, even if the interpretation itself will be as partial and limited as the archaeological record and as modern and changing as present people and ideas. It is within this framework of a dual interpretation that modern phenomenological approaches acquire the greatest significance: they are founded on the idea that modern people can relive some feelings and emotions experiences by our ancestors because past and present people are both human and similar. If we only accept that the living can understand the past as far as they experienced it, we are in fact re-enacting that distinction between world of the living and world of the dead that so much characterised our ancestors.

Cognitive archaeology

Returning to cognitive archaeology or the “archaeology of mind” in Renfrew’s (1982) words and its potential to affect all future archaeological research, it has to be stressed that so far it remains a sub-field of archaeology. Two main areas of research concern cognitive archaeology: “evolutionary studies” and “cognitive processual studies” (Nowell 2001; Renfrew 1994). The first focuses on the Palaeolithic period and the emergence of cognitive abilities through the development of increasingly sophisticated tools and symbolic behaviours, especially art. The second area focuses on cognitive processes that can be inferred from material culture and especially its symbolic role in processing, storing and communicating information. The principal criticism is in the artificial temporal division of the two areas of focus: is there really a point of time when human consciousness stopped evolving, as it is assumed? Although the difference between contemporary people and people that lived just a few thousands of years ago might be negligible in evolutionary terms, enough to suggest that our biological brains work similarly to those of our ancestors, the culture and ultimately the mind of people has changed much, or there would not even be the need of accepting archaeological interpretations as continuously changing due to our changing relationship and understanding of the past, which is fast enough to be measured along within the time span of individuals. Renfrew (2001; 2004) has attempted to address the issue by proposing the “material engagement theory”.

Renfrew (2001) concludes that the emergence of key cultural aspects of modern humans such as language did not provoke sudden changes in the archaeological record. Some materials acquired symbolic power and only then “the process of engagement became a powerful driving force for social and economic change” (Renfrew 2001: 127). Both material culture and ideas affect the cultural development of humans; one is not necessarily the by-product of the other.

Symbolism becomes critical for cognitive archaeology and with it the role of semiotics plays a major role in constructing and testing valid methodologies. Due to the temporal separation between the foci, however, symbolism is often reduced to signify language, art, consciousness or stone tools. The Palaeolithic material culture is seen through semiotic lenses that transform any evidence of human intelligence into a symbol, which is directly mapped onto a virtual map of cognitive development. More complex semiotic analyses are only attempted for rock and cave art or more rarely some specific religious beliefs that can be recognised in the archaeological record. Overall this represents the bulk of semiotic analyses used in archaeology. For the “cognitive processual studies” of cognitive archaeology material culture is recognised as such, often stripped of any understandable symbolic behaviour and is analysed differently, as progressive cultural development detached from the evolutionary studies of the Palaeolithic that are so closely linked to biological developments. Renfrew correctly confirms the evolutionary basis of cognitive development and the fact that biological and cultural advances share the same general evolutionary model even if with different timings, but he does not bridge the temporal divide, at least in methodological terms. This is largely due to the refusal by most archaeologists of accepting material culture as symbolic expression as it would be the case for the whole Palaeolithic material evidence. Renfrew quite rightly goes one step further and proposes that material culture is not always the passive materialisation of ideas (“substantialization” in Renfrew words), and instead sometimes it becomes a cultural agency similar to consciousness affecting the processes of the mind as much as ideas can do. The only conclusion that can be reached from the current state of research is that the research on the origins of consciousness fails to detect the emergence of material culture as an alternative “cultural mind”

working in parallel with the abstract ideas and memories in the “biological mind”. In addition, it remains unclear how symbolic behaviours suitable for revealing the cultural developments through semiotic analysis can be found in the post-Palaeolithic record or if they can be found at all. The one thing that has become clear after all is that material culture does not translate easily into symbols, and when attempts are made, such as by Preucel (2006) in his “archaeological semiotics”, material culture becomes “materiality”, a philosophical variant that regrettably tries to avoid confrontation with the hard material evidence, the very core of any archaeological study, the one evidence that is not dependent upon any theory.

The role of semiotics in archaeology

Semiotics is currently little more than the last escapade of archaeologists in the domain of some other discipline to enrich the rich theoretical debate, but semioticians can establish a solid interdisciplinary partnership with archaeologists and others if semiotics is found to provide the best methods to study some evidence or provide answers to some questions. Identifying symbols in material culture through some coherent and reliable methodology is the primary problem for archaeologists to accept a meaningful role of semiotics in archaeology. Bouissac (2003) has attempted to address this specific problem by recognising internal and external properties of artefacts. The division of properties is based on context: internal properties describe the artefact in general terms, classifying it; external properties describe the context in which the artefact is inserted and identify it univocally. He correctly recognises that the symbolic meaning of an object would be given by one of the external properties (the context in archaeological terms), but he fails to propose a method to recognise when an artefact is a symbol. Bouissac’s analysis however demonstrates in semiotic terms the indefinite character of the context and how any artefact may be a symbol depending on it.

I propose a few stages to interpret material evidence. First, it should always be analysed as “material” and all internal properties be found by observation and applying methods of material science. The second stage requires the collecting the external properties of artefacts, their context, and attributing the evidence to the general category that it is best suited for. Precise categories do not need to be defined before the analysis; this is only a step that helps in defining the context. For most archaeological evidence it will be clear if the given context represents a household and the satisfaction of all basic needs such as the procurement of food, the cooking, clothing or household production; or elements of a society with its hierarchical, social or power relationships among people represented, including religion; or if the context represents parts of the economy, with workshops, production, consumption and trade being included. More categories can be defined, and one artefact does not need to be interpretable according to just one category.

For example, a single representation of a hunting scene or animal in cave or rock art should be interpreted as evidence of the importance of the procurement of food, or the perils and difficulties associated with it; an exotic pot should be interpreted in terms of trade and exchange if indeed it travelled; and peculiar objects typical of a religion or ritual, regardless of their practical use, should be interpreted in social terms: they distinguish a group of people, whether they are priests or believers from others. This type of analysis is routinely done for post-Palaeolithic material evidence and therefore it is the particular case of artistic representations that needs clarification. In many cases assemblages of rock and cave art are automatically translated into symbols, but this may not always be the case: an artistic representation might just be an attempt to represent something

existing in nature, and we should be able to distinguish among early attempts to use symbols and tools, such as ochre stained and incised stones, more mature and natural representations, and even more advanced representations that depart from the natural world and attribute to each element meanings beyond what is being represented. Thus, a ochre-stained stone may represent a rough, and very early, attempt to store in the material record an idea by using symbolism, while a later representation will only demonstrate a refined capability and in fact primarily be functional, of practical use. Maps in particular need to be taken in consideration. These are faithful representations of the natural world, again of functional use, and although symbols are being used, they represent the natural world rather than what is in the mind. In fact, maps are probably collaborative efforts and not produced by single individuals. It is critical to be able to distinguish between symbols, which have a different meaning from what they are or represent, and pictograms as well as other representations of the natural world.

The third stage addresses all cases in which a representation or artefact cannot be categorised or when a secondary meaning is suspected. In such occurrences, it is likely that the primary meaning of an artefact cannot be deduced by looking into the natural world or using a theoretical perspective founded on the context. Artefacts and representations significantly departing from the natural world, or the most probable human context are probably symbols that are best interpreted using methods proper of semiotics. The context of surrounding artefacts can provide clues about how to decipher or interpret the symbols. The third stage should also be applied for artefacts and representations for which secondary meanings are suspected. The purpose of leaving the interpretation of symbols to the third stage does not wish to underestimate their importance. It is critical that symbols are properly recognised to avoid that the personal imagination of those interpreting the symbols produce fantastic interpretations or that the mind of the ancient people is probed through uncertain data. All material evidence is to some degree a representation of concepts in the mind, but the problem is that some concepts in the mind originate in the natural world and only transit through the mind, while other concepts and ideas originate in the mind. Stating that any artefact is symbolic because it is a representation of something in the mind fails to distinguish its true origin and therefore fails to reveal its primary meaning. Most attempts of describing semiotically archaeological artefacts such as Bouissac's have in fact proven that the whole material evidence can be translated into semiotic terms, but this is an unnecessary distraction for archaeologists and of no value for the purposes of archaeology, which is the science studying and interpreting the material evidence surviving from the past.

An important category of materials that semiotics can help decipher are tablets, like those recording quantities, probably commodities in complex exchange systems. Such tablets are best known in the ancient Near East and Europe, but similar recording systems can be recognised in most cultures that eventually will develop or adopt a writing system. The tablets themselves might be exceedingly boring to study as they only represent quantities, but semiotic methods can reveal the complexity of such symbolic systems and that information could mirror the complexity of the society. Such pre-literate recordings have probably led to proper writing systems according to Schmandt-Besserat (1996).

A more frequent category of materials that might benefit from semiotic analyses is the one frequently labelled as "ritual" materials. The term "ritual" is very generic in its meaning and includes anything poorly understood and very probably symbolic and not necessarily connected with religion.

Of course, the three stages analysis should be applied for any assemblage or artefact that has to be interpreted or re-interpreted, and archaeologists should not rely on pre-existing categorisations.

Case-study: Knossos

A new type of Minoan vessels from an assemblage found in the “Kafeneion” area of the palace of Knossos, Crete provides a good example of the application of semiotics outside the restricted domain of the study of the emergence of consciousness. The vessels can be described as circular ceramic tripods with a variable number of holes in which small conical cups and jars, also found within the same assemblage, could be inserted. The vessels can be dated to the Late Minoan I period, a moment of transition in Knossos from the Minoan rulers to Mycenaean ones. Parts of a single stone tripod have also been found as part of the same assemblage. A few vessels associated to religious practices probably from a neighbouring region have been recognised. A brazier seems also to be part of the same assemblage. The ceramic tripods were smashed and deposited in a pit, but several fragments were removed probably at the time of deposition; these vessels come from old excavations and the original context has been poorly preserved. The area of the Kafeneion was used for shrines and religious purposes, and therefore the vessels have been interpreted as “ritual” and soon forgotten.

The detailed study and attempts to reconstruct the partial vessels (as much as possible, minus the missing potsherds) has revealed that the tripods are in fact a type of *kernoi*, vessels that survived until the Greek period and that were used for religious or cultic purposes. The Kafeneion tripods however are composed by a set of mobile vessels whereas the *kernoi* are a single vessel manufactured by merging at the time of cooking the vessels various elements, a ring-shaped base on which fixed plastic appliqué in the form of small vessels, and sometimes decorative or symbolic elements; the result being a single vessel. The *kernoi* were used to pour liquids and perhaps to drink liquids. There are no written or pictorial documents illustrating the use of *kernoi*, and because they were widespread across the ancient Mediterranean for a long period, it is likely that their function and meaning changed several times. It is no surprise therefore that several interpretations have been put forward. One of the most recent and intriguing interpretation has suggested that the *kernos* may represent the cosmos (Bignasca 2000).

Interest for natural circles such as those of life and death, fertility, and seasons are frequently recognised in Minoan religious contexts. Full representations of the cosmos are unknown, but it is probable that existed. A rare type of vessel such as the Kafeneion tripod, which was probably used once by a restricted group and then destroyed, cannot be easily explained by rituals, cults and formal religion, all of which normally use the fixed symbolic repetition of gestures, acts and words. The cryptic vessel is also not a functional one, because it is composed by ordinary vessels, perhaps only slightly adapted, but designed to form a single composite vessel. This vessel is therefore a good candidate for a semiotic analysis because it probably embodies symbolic meanings in addition to the functional ones carried by the individual vessels composing it. The religious context of deposition and the use of the conical cups in representations of natural cycles provide the key for decoding its hidden meanings.

The circular base of the tripod may be a representation of land, particularly considering that Crete is an island and therefore limited. Not all holes would have been filled by vessels, and therefore anything contained in the small vessels that might have been spilled onto the base would fall

underneath, perhaps a representation of the underworld. Certainly the base would hardly function as a tray. The brazier and other vessels suggest the presence of fire as part of the ceremony. It is not possible to know for sure what was contained in the small vessels, but their dimensions suggest that only tiny, symbolic quantities were contained. In case of a single vessel it could be suggested that the tripod contained some sort of condiments or accompaniments, but not in the case of an assemblage of many and all similar vessels. Blood, oil, wine, and water are possible candidates for the contents; red wine might have substituted blood. The mobility of vessels suggests that they contained symbolic elements representing cycles of the natural world; probably multiples cycles were represented. Each content was probably consumed, an act perhaps accompanied by reciting some formulaic text. Some contents might have been deliberately spilled on the base (representing the land) and from there underneath (the underworld) and the whole ceremony would have represented several natural cycles at once, and more importantly, symbolically linked those consuming the contents with the land and the underworld. The significance would be dual: natural cycles affect humans, who experience them, and humans are also part of a larger cycle with a more important role than other living beings, which may have been represented in the contents: humans would have had the same importance as the land and the underworld. This is not the place to review in details the symbolic significance of such ritual, or the implications of it being performed by a restricted group within a major Minoan palace, but clearly the Kafeneion vessel might have been a representation of the cosmos in a way not too different from what is inferred in similar contexts from more limited evidence. The semiotic analysis of the gestures (movements of small vessels, acts such as pouring and drinking) and symbolisms can present a more detailed and consistent understanding of the Minoan conception of the cosmos. An artefact not very far in time and space from this one and also thought to represent the cosmos, albeit centred on the sky rather than land is the Nebra disc, which confirms that in the Mediterranean and European Bronze Age there were portable representations of what was perceived to be the cosmos, and these sophisticated tools carried a type of knowledge that is usually difficult to recognise in the material culture.