'Position paper' submitted on 10 August 2009 to Paul Bouissac for *Archaeology of semiotic behavior*, La Coruña, Spain September 22-26, 2009

The relevance of archaeological propositions to semiotics

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In an effort to consider what archaeology may be able to contribute to semiotics (or vice versa) there are certain qualifications to be made initially. For instance, the definition of 'archaeology' has changed over time as it passed through various phases, from cultural history through processual, postprocessual and postmodernist versions (each of which had numerous subsidiary models). Today the majority of archaeologists of many countries deal with some form of historical archaeology (industrial, Classical, medieval, even most recent and present times) and not with the period Eurocentrically labelled "prehistory". In other words, the discipline is largely not about a specific subject, but rather it is a method (mostly related to excavation) of history, as an alternative to other methods of interpreting history. To illustrate with an example: the excavation of recent mass graves in the former Yugoslav republic, a major project of archaeology as it is understood today, is clearly not concerned with the distant human past, but with a method of investigation in the service of historical inquiry. Can it serve semiotics?

Archaeological excavation is a method that establishes spatial contexts of objects considered to be archaeological objects (since every object used, or in some way affected, by a human individual, at any time up to the present, is potentially an archaeological object it seems that the term means an object an archaeologist is interested in, i.e. the term is simply self-referential to practice), at sites considered to be archaeological sites (it is unclear what this term means precisely, because every locality on the land surface of this planet is probably an "archaeological site"), and then endeavours to interpret these objects and their spatial relationships. In this method, all contents of the sediment deposit that are not considered archaeologically relevant are ignored and discarded. It is important to note that the academic disposition of the excavating archaeologist decides what is and what is not archaeologically relevant (just as the stamp collector collects the stamps but discards the envelopes). The method is fundamentally unscientific in the sense that many of its findings are untestable: the sediment has to be destroyed in the process of excavation, and what survives are the records made and the samples taken. The principal surviving record is the published section drawing, which is not a falsifiable document, but one that we have to accept on the basis of authority alone — which in science is unacceptable. On the other hand, there are many forms of archaeological work that involve no excavation: numismatics, aerial archaeology, much of nautical archaeology, rock art research and so on. Therefore excavation as such is not the uniting factor, nor, obviously, is antiquity. Similarly, postprocessual and especially postmodernist archaeology accept that an unlimited number of different archaeologies are possible, there is no proof of the finite validity of any of them; and those of academics compete with alternative explanations of the human past. And that past may be a few years old, or three million years. To this one may add that the archaeologies practised in various parts of the world can also differ very considerably, in their priorities and interpretations of meanings.

At this point it becomes evident that archaeology is not a clearly definable universal discipline addressing a sharply definable topic, but can be whatever the individual archaeologist decides. Although it does have a dominant method, this is neither a scientific method nor is it universally used. Most archaeological activity serves to illuminate historical interpretation, the rest deals with periods of human history "before the introduction of writing", but this division is fraught with contradictions. The proposition that written history is more reliable than oral is unfalsifiable, hence unscientific, and the division may be offensive to most humans who ever lived. Nor is it universally applied: the divisions of these "disciplines" differ significantly between, say, China and the United States or France. In fact in many countries archaeology is not even recognized as a professional discipline (e.g. Brazil), while certain forms of archaeology are designed to underpin ("prove" the teachings of) specific religions, and are thus hardly of academic relevance. It also needs to be appreciated that archaeology is generally a political pursuit (facilitating academic appropriation of the human past, especially of "The Other", by the modern state, often against the wishes of indigenous peoples that survived colonization).

How relevant is the academic endeavour of archaeology to semiotics? On the basis of the above it seems apparent that there is no such thing as an agreed story of the human past. Moreover, the earlier the time being considered, the coarser the relevant record, until, in the earliest period of hominin history, the available interpretation has very limited credibility. Most of the pronouncements archaeology has made about this history pertaining to the Pliocene and Pleistocene are either surely or very probably false. Indeed, the history of Pleistocene archaeology, especially, is a history of archaeological bungles, beginning with the rejection of Boucher de Perthes for several decades, up to the present blunders, such as the debacles of the African Eve hypothesis or the Flores "hobbit". The former was a distracting fad championed primarily by the Anglo-American school, the latter demonstrates that the world's experts are incapable of agreeing whether some skeletal remains from Liang Bua are those of a modern human, a dwarf *Homo erectus*, a Dmanisi-type hominin, a *Homo habilis*, an australopithecine or an ape. Anyone can see that these are the bones of a primate; if palaeoanthropologists cannot provide better resolution than that, their discipline must be flawed. Just as the world's Pleistocene archaeologists cannot find agreement whether the robust Europeans they call "Neanderthals" (or "Neandertals", which is even worse) had essentially modern speech abilities, or the language ability of apes, or anything in-between; their incredible range of opinions is a measure of the credibility of the discipline. What is the value of discussing the Kebara hyoid bone in this context, in view of the hyoid from Dikika? Some archaeologists may argue that the latter was not known at the time of these language origins discussions, but this is precisely the point:

there is no value in forming dogmas and defending them at any point in the development of archaeological knowledge, which will always remain incomplete and defective. On the incredible ranges of opinions: we would not value the pronouncement of a scientist who tells us that the pH of a given liquid he has tested with an electrometer is somewhere between 0 and 14. The pronouncements of archaeologists covering the entire range of possibilities need to be regarded with the same disapproval.

Archaeological interpretation is a search for the meaning of what are perceived to be archaeological objects and their relationships (i.e. a flawed record). This is where semiotics enters the picture, because semioticians "seek answers to the *what*, the *how*, and the *why* of meaning", as Marcel Danesi states in his influential *Messages, signs, and meanings*. But Danesi also demonstrates that — the word "meaning" itself having twenty-three recorded meanings — it is best to leave the notion of meaning undefined. The distinction he makes between *meaning* and *signification* prompts the question, can the meanings archaeologists concoct be termed significations?

Archaeological hermeneutics involves a search for patterning in the way the "record" presents itself, its contextualization. However, there are two problems here. First, patterning can simply be the result of a pattern in the preconceived search system: we tend to find what we look for; we tend to discard what we are not looking for. What is it that determines what we are looking for? Certainly archaeologists look for signs, but only signs that fit patterns they are attuned to, as Alexander A. Bauer has pointed out, while those they are not open to seeing are likely to be ignored. This issue has had significant debilitating effects on various areas of archaeology. For instance most of the world's archaeologists are incapable of recognizing the kinds of stone-hammers used to create petroglyphs. Many have excavated around petroglyphs in the hope of finding evidence minimum-dating the rock art, almost invariably without success. The stone-hammers would have provided proper dating (through their stratified positions), but they were discarded out of ignorance, so the exercise of the excavation was self-defeating and vandalistic. There are many other such examples of the evidence forensic rock art science depends on that archaeologists are simply not familiar with, because of their inadequate training, and which they habitually destroy.

The second problem with archaeological hermeneutics is quite different, although also attributable to inadequate training. Patterning of the kind the archaeologist looks for to find "interpretable signs" can also occur in natural processes. These include patterns in geological effects (e.g. erosional), patterns in deposition (e.g. fluvial, aeolian), non-anthropic rock markings resembling rock art, but most especially patterning produced by a great variety of taphonomic processes, the results of which may mimic human intentionality. Although taphonomic logic was introduced fifteen years ago, most archaeologists have apparently not noticed its profound consequences on the archaeological interpretation of empirical data. Consequently, there are countless instances where archaeologists have interpreted non-anthropic phenomena as having archaeological meaning, while many anthropic features have been explained as natural, or not relevant to archaeology.

From a semiotic perspective, archaeology is the endeavour of recognizing and deciphering "signs" from the human past, which implies that its results could tell us how archaeologists interpret what they interpret as being archaeological data — but only if we could check its commensurability with what really happened in the human past (a Catch-22 situation). This would only be of interest if the objective were to explore the cognition of archaeologists. It is therefore not at all immediately obvious how useful archaeological pronouncements may be to semiotics, because there is no independent verification available to test them. Archaeological propositions are typically not falsifiable, not testable, and hence not scientific. There is little independent evidence for commensurability between these interpretations and what really happened in the past, which probably explains the ongoing discrepancies between competing interpretations and the endless controversies they entail. On the basis the system operates and its inadequate epistemology it is to be expected that the probability of securing valid meanings is much lower than in better based disciplines, especially the hard sciences. And this is a condition operating as a function of time: the older the finds, the more unreliable the explanation.

There appear to be especially two areas where the two disciplines intersect: through the notion of using archaeological interpretations as the basis of semiotic contemplation, and in the semiotic critique of archaeological paradigms. The utility of the first interaction depends entirely on the veracity of archaeological paradigms and knowledge claims. Fertile areas of semiotic examination would be all aspects of the symbolic material of the distant human past, culturally standardized systems of visual representation, or any evidence of cognitive evolution and of cultural development generally.

Unfortunately, Pleistocene archaeology has chosen largely to ignore these aspects, and has instead focused on the physical evolution of hominins (or, more precisely, changes in their skeletal architecture) and on tools and their perceived evolution, most especially stone tools. These are the principal variables or measures employed in deciding level of humanness or relative human modernity. But the physiology of an organism tells us very little about cognitive, intellectual or symbolling abilities, and tools and artefacts obviously are not definers of culture; they are cross-cultural phenomena. Instead of creating a cultural sequence of Pleistocene societies, archaeology has therefore provided us with a series of purported technocomplexes (note that they are not assumed to be factual, they merely reflect taxonomizing but unfalsifiable models of archaeologists) through time, i.e. an assumed but untestable technological sequence. Nobody seriously believes that these named temporal entities ("cultures") actually correspond to real tribes, nations, language groups or ethnic groups, as cultural features probably would. Nobody assumes that there was a discrete people identifiable as "the Aurignacians" (we cannot even credibly determine whether they would have been robust or gracile)

and yet Pleistocene archaeologists write of "Aurignacians, Mousterians, Magdalenians" and so forth as if they were groups definable by more than broad similarities in their tool kits (to the extent archaeologists believe in these tool definitions being valid).

This neglect of a cultural or cognitive dimension in Pleistocene archaeology, and to a perhaps somewhat lesser extent in Holocene archaeology, renders semiotic review difficult. There is limited scope for such treatment and, more importantly, what there is must be viewed sceptically because most such information in the literature is unreliable. It derives from a notoriously imprudent discipline.

This leaves the second major area of interface between the two disciplines, critical semiotic review of archaeological paradigms, explanations, interpretations of meaning, and methods of knowledge acquisition. This, in stark contrast, is an exceedingly fertile direction of semiotic investigation, for two reasons. First, the subject has not been treated in much detail or by many authors; and second, the scope for such work is enormous, simply by virtue of the fact that there is such a multitude of mistakes and controversies to be addressed. Just as there is a great potential for epistemological analysis of archaeological practice and knowledge claims, much the same can be said about their potential and susceptibility to careful and rigorous semiotic treatment.

Some commentators examining the interface between archaeology and semiotics, such as Robert W. Preucel, have contended that a Peircean semiotic anthropology has compelling advantages over its language-based Saussurian rival. This contrasts with Deetz's "factemes" and "formemes" of yesteryear, long replaced by the more relevant concepts of etic versus emic information. After all, it is an object's fact of survival that makes it unique and separable from linguistic signs. Archaeological objects are never representative samples, but randomly selected examples derived from populations that had been subjected to systematic taphonomic processes long before they came to the selective attentions of archaeology. Today's languages, by contrast, are complete and knowable systems.

There is certainly a nexus between the disciplines of archaeology and semiotics, and whether archaeological propositions are of adequate relevance to semiotics is not the issue here. Whether there is an adequate body of such propositions that is adequately reliable should be the first concern. Until archaeology abandons its 19th century epistemology and adopts a universal theory of scientific operation, all of its claims of knowledge need to be regarded sceptically. Most of those ever made are false, as are many of those still maintained, and the inherent conservatism the discipline has developed as a defence mechanism against frivolous claims also preserves false dogma. It resembles in fact an inverted form of falsificationism. But therein lies the problem: the dogma is itself likely to be false. To see this, we need to appreciate how the discipline is entirely dependent upon a random historical sequence of discoveries: if that sequence had been different, our received knowledge would be so also. Archaeology is largely at the mercy of the historical sequence in which key discoveries are made — those that guide the dominant paradigms. In contrast to the systems of data gathering in most other disciplines, there can be little design in the knowledge acquisition strategies of Pleistocene archaeology. Most key finds are made fortuitously, yet they may decide how other aspects are interpreted. For instance when the period's first rock art was reported, from Altamira in Spain, it was completely rejected for decades. Its sophistication was considered entirely incompatible with the perceived primitiveness of Upper Palaeolithic people, as deduced from their earlier found tools (which, incidentally, had also been categorically rejected earlier). Yet it is obvious that if Palaeolithic cave art had been discovered and reported first, it would have been the tools that would have been rejected as being contemporary, because *they* would have been regarded as incompatible with the sophistication of the art. In either case the perceptions and expectations of scholars will be significantly distorted, yet we have no control over the order in which discoveries are *made* and *accepted*. Similarly, their acceptance depends on perfectly subjective factors at any time, and that certainly has been the case since the 19th century and has continued right to the present.

If the archaeology we subscribe to at any point in time would be different had the sequence and availability of discoveries been different, the dogma is clearly a reflection of random factors and contingent prejudices. To defend a randomly acquired model on no basis other than its historical precedence is demonstrably fallacious, otherwise we would have to prefer astrology to astronomy, phrenology to the cognitive sciences. Moreover, the practice of retreating as reluctantly as possible from such an incomplete model is logically unsupportable. It argues for a regression from a contingent state of limited validity, instead of one constructed on falsifiable propositions. This is epistemologically obvious, and yet it is this very practice that determines archaeological dogma, which then has to be preserved at the cost of discarding or discrediting valid evidence. It is this inverted falsificationism that is the very reason why only one thing is certain about any archaeological model: it *must* be inherently false and it *will* be replaced by another in due course. The only workable solution to this endless succession of contingent speculations is to replace them with the null hypothesis that sampling errors are inherent in all archaeological work. Then one can step back, look at the whole picture and understand the severe limitations and fragility of our knowledge base. We can then perhaps even replace archaeology's false taxonomies, the circular reasoning and the authority-based pronouncements with a science.