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Review Article



# A Phenomenological Turn in Archaeological Explanation: is it Possible?

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## Abstract

Archaeology borrows some ideas from semiotics which, in its reductionist variant, tends to see symbolic features as passive signs that only through the acts of human mind can acquire social value. As a consequence this confines research to strictly regional and time defined cultural entities characterized by linear evolution. My understanding of how to improve archaeological explanation, relative to the outlined above conceptual limitations, is that there is certain logic of how individuals and communities get to know human and natural worlds (establish epistemic relations) and on this base how past communities were able to create their own ontologies through which they symbolically represent and exchange their accumulated bodies of knowledge. This study reveals the intricate ways of interaction of modernist views on social evolution and points to the means through which the dichotomies raised by traditional archaeological knowledge can be deconstructed.

**Keywords:** 3rd person account of experiences of archaeologists; 1st person account of experiences of archaeologists, separation of archaeologists from their subject-matter, sense and sensibility in archaeological research

## Introduction

Archaeology may be defined as a discipline that is pre-occupied by a discourse that can best be described as a 'quest for objective' reconstruction of the past which borrows its approaches from natural sciences. The objective stance of archaeological discourse grounds its existence in persistent description and formalization of 'epi-phenomena' from the past which take the form of strict classifications of various categories of material objects. Their epi-phenomenal (secondary-quality model of human perception) (Brewer 2004) character becomes revealed by the continual process of abstracting types out of assemblages of material tokens left in diverse contexts by past societies. A question arises whether this approach can be truly objective and where is the place of archaeologist in the constructed in this way archaeological discourse.Traditional approaches are based on 3rd person account of experiences with archaeological phenomena and understand this process as exact correspondence between the established types of artefacts, structures, settlements and typical features of past human behavior understood as unchangeable social structures of universal character such as band, tribe, chiefdom and state. It is assumed that such an exact correspondence can exist only through similarity established between the uncovered by excavations passive signs (types) and their respective traits of human behavior where analogies with modern societies are made. These similarities form the basis of classificatory systems that enable archaeologists by staying outside these contexts to reconstruct sufficiently well past human behavior through (re-)arrangement of various archaeological "types" and "cultures". The key characteristic of this process of acquiring knowledge is that unlike the scholars from the most of the other disciplines of humanities and social sciences archaeologists stay outside their subject-matter. It appeared at

the beginning of the establishment of the studies of past material cultures when this approach was shaped by the common practice in the 19th century. According to it archaeologists would stay outside excavation trenches or caves and would wait their workers to bring them artefacts detached from their archaeological contexts. The latter were considered as data having sufficient social meaning that would enable them to reconstruct in full dimension past societies. Later it took the form of a popular conviction that contemporary knowledge had the potential for total reconstruction of the evolutionary process from "primitive" to "complex" societies. This reconstruction can be done only by combining the modern conceptualizations of the past with easily recognizable materials from the past without applying any critical inquiry or detailed scientifically informed evidence.The 'quest for knowledge of the past' was satisfied by an authoritative process of looking for the origin of the 'civilized world' in the primacy of place, singularity of progressive technology (stone, copper, metals) that drives forward social evolution by involving "pure" ethnically/racially defined populations. This way of depiction of the development of past societies inevitably leads to involvement of conceptual dichotomies such as advanced-disadvanced, rich – poor, fertile-non-fertile, male-female, etc. A question arises as to whether these dichotomies can describe objectively human and social behavior in the past? The answer is negative because so far it is not known the existence of any particular technology from the past that may claim single origin, smooth evolution towards social progress, nor it was possessed by only one hominin or ethnic group. For example, the Levallois technique of core reduction strategy appears early. A micro-Levallois facies is known from the Kozarnika cave sequence dated to about 300 KY (Ivo Krumov, personal communication). The above mentioned dichotomies seem irrelevant to such an early appearance but they provide an easy evolutionary explanation. Whenever Levallois technique appears in Middle Palaeolithic contexts it is always termed as "progressive". In Upper Palaeolithic contexts it is considered as a regressive element (Bachokirian transitional industry, for example). These questions require further precision in how Levallois technique is identified relative to the other existing techniques of core reduction. My own observations on transitional industries in the eastern Balkans show that in technologically mixed Middle/Upper Palaeolithic assemblages about 30% of the flakes can be ascribed unambiguously to the Levallois technique. The rest are indistinguishable from the flakes coming from single-platform core reduction strategies. Thus in the case of the Bachokirian the presence of Levallois-Mousterian technique is interpreted as a disadvantaged trait that classifies it as proto-Aurigniacian (disadvantaged culture) that cannot be compared with "pure" Aurigniacian cultures [1] despite the fact of the presence of numerous typical Aurignician artefacts in its assemblages. On the other hand the 'pure' Levallois technique with some modification of core preparation and flaking platform of prismatic nucleuses has a strong resemblance with the well-known 'Kaletepe' technique in Central Anatolia in Pre-pottery Neolithic. Its efficiency is so well improved that it overpasses the exploitation of single platform cores for long blades. These simple examples show that it is very difficult to overcome the subjectivity of the conceptual dichotomies that appear from the otherwise objectively set criteria for classification of archaeological types. Could this situation be due to the permanency of the state of alienation of archaeologists from their practices of data collection, management and analyses?

## The roots of alienation: the problematic of current practices of data collection, management and analyses of archaeological data

In order to answer the above question, it is necessary to look at the general way of production of archaeological knowledge within the popular modernist views on natural, human and social evolution [2]. Humans live in societies where they have strong individual expectations of normativity. It is a constant process of emergence of recurrent and re-invented human behavior (rules) related to what should be or what the current state-of-affairs is in the society people live in Frega[3]. These attitudes have unexpected consequences in the domain of studying the past societies as they facilitate the transfer and naturalization of present-day expectation of normative rules and practices to archaeologists' understanding how past societies should have looked like. Thus the social expectations of normativity bring into being the dominant views on human and social evolution. Their vital role appears in the process of formation of knowledge as an authoritative discourse and the associated with it practices of education and public display of exotic objects from the past that can be achieved only through rigid categorization of normative entities (archaeological cultures) that encompasses all aspects of human life. As a result it is expected that both archaeologists and their public will form the same expectations about past societies. What is in common between these expectations is that total reconstruction of the past is possible. This state of totality would be achieved through collection and proper management of the mosaic of logically irreducible entities – artefact's attributes. Considered as epiphenomena to the universal evolutionary process and studied in their totality they become understood by archaeologists and their public as the building blocks of the evolutionary edifice which can be observed in a context-free environment such as museums in large urban centers. The museum exhibitions are known for the practice of arrangement of long uni-linear evolutionary rows of artefacts that not only lack context but also sufficient explanation. Thus the notion of an artefact becomes reduced to the state of an object that has a fixed place in the uni-directional evolutionary path. This way of knowledge creating underlines the importance of time and excludes the specificity of time-spatial contexts that have the possibility to link different aspects of past human behavior. In this light a proper

question arises as to whether it is possible to achieve any proper archaeological knowledge without detailed collection of data, their subsequent archiving and establishing a range of possibilities for their management. The answer is negative but with one important particularity. The difference is in the way these data are analyzed. Traditional archaeological analyses start with data matrices (datasets) that include variables defined by the presence/absence of excavation features, artefacts, artefacts attributes and cases which represent different localities within the excavated sites or across sites in a given region. Settled in this way the subsequent analyses of these data tend to alienate archaeologists further from their subject-matter. The question that requires detailed answer is: what is the nature of these analyses that has the potential to constantly re-establish the separation of archaeologists from their data.The simple answer to the above question is that this approach fragments past human behavior into unrecognizable pieces. It does not represent the original modes of accumulation of material residues of the past behavior. Many interrelated processes (particularities of sedimentation, natural decay of various materials, different taphonomic characteristics, re-use, etc.) can be pointed out as responsible for the in-site and off-site spatial and temporal distributions. This fragmentary state of archaeological record stays in stark contrast with present-day normative expectations for uni-modal distributions of material expression of past human behavior. Although significant properties of these distributions have been recently observed which leads to two different distribution types that both depend on regionalization of habituated everyday practices (Giddens 1984), the locales of basic human knowledge and experience tend to form uni-modal spatial distributions. Thus high-order human behavior tends to accumulate in a uni-modal and scale-dependent way its material expressions, which contradicts the current practices of archaeological analyses. This is so because analytical procedures use raw data collected by excavation (survey) teams according to conventions and rules established by positivist expectations for total physical reconstruction of past material record. In most cases researchers construct initial data matrices and conduct analytical procedures (statistical analyses) based on raw data which are partial and incomplete. At this point these analyses raise two problems related to the dichotomy between the positivist expectations for 'totalizing' reconstruction of past societies and the fragmentary state of archaeological data. The first is the substantial one in the way a single archaeologist approaches a database or an initial data matrix which is a product of collective efforts of a team of excavators and which reflects the actual state of fragmented past reality. Such raw data are product of conventions designed by archaeologists for excavation practices and recording of field data, and they are not appropriate tools for correct analyses and interpretation in terms of formal criteria (in most cases fragmentary data do not allow reaching sufficient level of statistical significance) and in generating archaeological meaning that is expected to reveal typical features of past human and social behavior. This is so because the convention of field practices: excavations and surveys recommends recording of as much as possible of the information that can be gathered. If this convention is appropriate for the first level of investigation (collection of maximum data) at the higher conceptual level of analyses, interpretation and explanation of archaeological record it does not work. The basic problem with such extensive documentation is that it is archived in the form of tables, matrices and lists where missing values dominate. Thus the absence of a feature/attribute/artefact tends to influence significantly the overall variation of the analyzed data. At first glance the analyses of absent features may have positive influence on archaeological interpretation. In fact, it may happen statistically insignificant results have archaeological significance. In most cases, however, data matrices with majority of absent features blur the boundary between the interpretative significance of both present and absent features. Although such analyses may look like scientific experimentation in controlled environment the repetition of formal analyses on the same data does not lead to extraction of any new information substantially different from the previously obtained one. In fact, such an approach places the archaeologist outside its subject-matter because he/she analyzes it in the fragmented state it has been discovered. The past fragmented reality is transposed in one-to-one manner into another fragmented by the primary classificatory schemes reality which compromises the efforts put for proper reconstruction of typical features of past human and social behavior.The second problem related to the analytical approaches to archaeological materials is how archaeologists can be placed inside their subject-matter. The only way to do this is to apply the manipulation theory of establishing causal relationships [4] by using different sets of archaeological variables. It requires application of conceptual design that aims to extract new archaeologically meaningful information any time he/she analyzes a combination of some (not all) elements of archaeological record uncovered during excavations/surveys.

## Sense and sensibility in archaeological research

The first question is what constitutes sense in archaeological research? A reasonable short answer is that it is based on constructing abstract entities of normative-cultural typologies. Their description takes the form of exhaustive corpuses of data and datasets. These data become formalized in production of texts that aim to link formal traits, artefacts, and monuments into an "objective" reconstruction of often idealized or imagined past. In order to achieve a "total" reconstruction of a past event (e.g., postholes of temporary structures are often interpreted as "houses" in prehistory) archaeologists measure artefacts' attributes in terms of form, time and distance in hope to correctly build "evolutionary" trajectories to social complexity where, for example,

hierarchical societies of early states are viewed as more complex than the egalitarian ones of the "primitive" hunter-gatherers and early farmers. On the other hand, a closer look at the procedures of archaeological research will reveal that most of the rigorously defined classificatory schemes fail or show insufficiency when trying to account for the diversity of archaeological materials. In this respect, the best example, out of many, is the Magdalenian culture. It is known that all Palaeolithic "cultures" are constituted by relatively strict classificatory schemes. Although flaws in these classifications can be revealed for all of them the most prominent one concerns the Magdalenian. The particularity in this case is that Magdalenian is the only Palaeolithic culture that is not classified according to the typologies of its lithic industries. It is known with its enormous variety of flint-knapping techniques, artefacts and art that made its discoverers to classify it on the base of the bone artefacts: sagues and harpoons [5]. Another striking example of impossibility of classificatory schemes to form normative "cultural" distinctions concerns the above mentioned problem with the presence of Levallois and discoidal core reduction techniques in the transitional industries (initial Upper Palaeolithic) in the Balkans, Anatolia and the Near East. This issue is complicated by the question whether Neanderthals were partly responsible for production of these industries. Examples for their presence at a number of sites with Middle and Upper Middle Palaeolithic and transitional industries can be traced by the volcanic ash layers of the Campanian Ignimbrite eruption dated to ca. 40,000 years ago (40 ka B.P.) [6].In my view the common thread that unites the enormous variety of such examples lies in the way traditional archaeological studies produce text by constituting a discourse which grounds its validity in the exhaustive way of detailed description that aims at totalizing the process of reconstruction of past human behavior. In such mental process space is entirely dissolved at the expense of time. The total way of description and reconstruction of human presence at one place finishes off by taking up particular time interval that can be compared with infinite number of similar presences with evolutionary significance. Thus, social evolution is measured only in terms of the amount of quantified similarity to a priory defined social structures (e.g. band, tribe, chiefdom, state) and formal criteria (artefact typological classifications). Even if these comparisons are combined with specialists' studies, these additional scientific inquiries remain confined within their own disciplinary goals (e. g. identification of regional layers of paleosoils in late Pleistocene) with a lack of holistic text bonding the results of these multi-disciplinary studies to the relevant problematic of archaeological research. This further fragments the relationship between archaeological explanations and results from analyses of archaeological science. Among traditional archaeological discourses detailed descriptions of the different natural and circumstantial phenomena remain valuable aspects of research but they have little significance for the interpretative process of past human behavior as they become isolated from one another and loose significance within the conceptual frame of the basic explanatory metaphor of the 'universal evolutionary tree'. This process of isolation becomes most visible in archaeological exhibitions where the common practice is not to include illustration of the specialists' studies of various materials, artefacts, structures. The reason for this exclusive practice is not only that the illustrations of these studies cannot compare to the attractive for the public exotic and precious artefatcs. The real motivation for this practice is that multi-disciplinary studies do not fit the grand metaphor of universal evolution of material culture and when taken seriously these studies reveal the fallacy of the 'grand metaphor' both as a basic explanatory tool and as symbolic convention that unites the authoritative expectations of archaeologists and their public. At the level of text production and reading this reduced and simplified knowledge does not stimulate attention and hence memorization of archaeological knowledge. Its descriptive nature lies close to the one of a book with endless lists of telephone numbers. The memorization of such information is hampered by the lack of any real possibility for experimentation and logical comprehension. Experimental neurological studies explicitly show that the rate of forgetting information is much faster than the rate of its recalling. For this reason recalling should be done at frequent and regular intervals in order to consolidate a single piece of information in the working memory (Jean-Luc Berthier's public lecture: 'Neuroscience: is the brain, always remain an unknown?' held in the French Institute in Sofia, Bulgaria, March 22, 2016). The process of consolidation of knowledge and memorization of any information of such texts is hampered by the lack of metaphorical expressions. The contemporary theory of metaphor considers them not as particular expressions of language but as interplay between the values and meanings created by language, thought and communication [7].The identification of metaphors in texts of the other scientific domains shows that they are numerous. Contrary to this, the descriptive language in archaeology, which main occupation is exact featuring of constant range of epiphenomena, provides nothing else but an outline of material objects to which unchangeable, context-free human and social values are ascribed. In such poor of metaphors texts based on large spreadsheets of formalized archaeological data the metaphor-rich information coming from the other multi-disciplinary research areas is of no help when trying to explain meaningful features of past human behavior. Looking at these texts from another perspective it becomes clear that the cognitive load when studying such texts cannot be reduced. This requires archaeologists to involve great amount of conscious efforts in order to memorize such information. The most compelling evidence that supports this line of reasoning is the public of archaeological museums. The fact is that most of the visitors to such exhibitions show blurred attention, browse irregularly or run fast along the exhibition lines. Even detailed digital 2D and 3D reconstructions or

the originals of spectacular artefacts cannot capture their attention for long time.

## Do ontology and epistemology differ significantly as conceptual approaches to the studies of the past?

This problematic comes down to the ways of transformation of archaeological knowledge from 3rd (objective) to 1st (phenomenological) person's experience. The key questions in this problematic are whether the thus defined knowledge is less objective and close to extreme relativism. Archaeology has been accepted by archaeologists and their public as vaguely defined discipline which holds within its analytical apparatus the unique characteristic that requires personal involvement with material expressions of past societies. It is not that the other research domains do not have similar characteristics but their particularity is that the range of their analytical apparatus is well defined by experimentally proven results. Archaeologists do not have the comfort of positivist sciences that are in possession of objective truth. Any attempt of archaeologists to reach such truth fails just because it is commonly understood practice that establishes its social significance through personal involvement with its subject-matter. Looked from another perspective the personal involvement in the process of discovery and presentation of the life of past societies increases responsibility of archaeologists. Thus,good and bad archaeological practices and management of cultural heritage became known and analyzed [8]. From this perspective archaeology may be considered as a craft [9]. Thus, understood archaeology as most of the crafts can serve slavishly to different political regimes. Yet archaeology is in possession of another unique characteristic that can save it from politically imposed interpretative schemata and support the gradual progress towards greater satisfaction of public's 'will to know' its proper past. This unique characteristic is that archaeology is a skilled practice. This should not be understood as that the specialized university training always leads to good archaeological practice. Although necessary it requires additional systematic training in the other scientific disciplines and broader knowledge in the area of humanities and social sciences.A question arises why this broad theoretical and practical knowledge is required? The answer is not straightforward but the first step in its elucidation stems from experimental research on human skilled action [10]. Thus, for example, archaeological field practices may be considered as skilled action. There is no doubt that they require semi-automated skills for manually excavating sediments, almost instant recognition of the qualities of different sediment spots, skilled abilities to draw the lay-out of the visible mixture of sediments' spots in the mechanical layers and profiles. In the same time the range of almost automated skills has to be put in a workflow with the aims to achieve realistic strategic goals for data archiving, storage, data retrieval and subsequent analyses of the various materials collected during excavations. Although the introduction of the combination between 3D and GIS technologies increasingly facilitates precise documentation and representation of field practices [11] they cannot replace the professional requirement for applying higher cognitive control in managing semi-automated skills in archaeological fieldwork. Yet archaeological practice does not finish there. It requires detailed knowledge about some and general knowledge about other technical processes that were used by past communities in the production of their material culture. It also requires knowledge about some of the many detailed classificatory systems that systematize the vast array of past artefacts and structures. Yet classifications are not good enough to encompass rigorously the material expressions from the past. For this reason and because of the existence of the immanent human characteristic of personalized and inter-subjective constitution of the world views the best archaeological practice is when it involves persons directly into work with authentic artefacts with the aim to extract maximum meaning out of their symbolic and technical characteristics, spatial distribution and evolutionary significance. This way the archaeologist involved in these analytical procedures becomes the center for interpretation of archaeological materials. The most visible result of this process is that each time a new archaeologist works with old collections he/she reaches slightly different interpretations from those of other researchers. This process is increasingly supported by the novel scientific methods of identification of materials or visualization of artefacts. Yet, the decisive role in this process will belong always to the interpretative potential of individual archaeologists because the research process of achieving results in a fully automated way out of a set of "properly" selected archaeological criteria/variables does not exist. Thus, archaeology has always been felt as a practice of constant re-establishment of 'epistemological uncertainties' into the process of ontological transfer of knowledge of the past into the present-day construal of the life of past societies. In this light phenomenological experience can be observed in structuring the particular ways of engaging with archaeological practice. One among many prominent ways of engagement involves the question how different archaeologists interpret lithic artefacts. Some tend to view in them morphologically finished end-products (e.g., side-scrapers). Other sees them as part of a wider technological and morphologically reductive sequence that corresponds to adaptive human behavior [12,13]. Such differentiated experience that involves mental schemata of either 'end-forms' or 'wider technological and behavioral processes' is not confined only to lithic analyses. It permeates all traditional interpretative schemes in archaeology and in particular the way material expressions of past human behavior become described, compared, geographically situated and fixed within the frame of the overwhelming metaphor of 'uni-linear evolution'. This type of experiential and higher-order conceptual framework may look similar to the general human phenomenological

experience such as awareness of goal, awareness of initiating action, sense of movement, sense of control, experience of authorship, experience of mental causation, etc. [14]. Yet it differs in the ways material world is perceived as developing particular sense of agency and sense of ownership. Mostly they are related to experiences of reconstruction of past real-world objects such as toolkits, houses, settlements and monuments [15]. This is the most natural way to relate "real objects" from the past to present-day real experience of agency and ownership over materiality left by past communities. Although these practices are mostly visible within the problematic of archaeological museums and cultural heritage management, such as the notion of authenticity and its impact on concepts of agency and ownership [14], they play significant role in analyzing and understanding archaeological record. The relationship between higher-order conceptualizations of the personal experiences of agency and ownership divides practices of archaeological interpretation. The most common practice stems from the phenomenological understanding of body-as-object [14] that imposes the intersubjective discourse of the unquestionable experience of the past real-world through the material evidence that is considered to represent it in a "true" way. Such a practice defines, as it has been pointed out above, the highly descriptive nature of archaeological production of texts. This brings not only lack of metaphorical and metaphorically related expressions but these descriptive texts rely only on real presences of artefacts, sites and monuments. Despite the commonly accepted view that presences of past human behavior cannot be considered as representative for reconstruction of past social actions they constitute the dominant approaches in archaeological analyses. The detailed account of these presences is problematic in view that the mere description of past human behavior violates basic human personal experiences such as awareness of action, awareness of movement, experience of mental causation. Instead, they increase the sense of control over past materials which is followed by increased sense of ownership. The latter attitudes lead to further fragmentation of archaeological record. Thus, the past realities understood as coherent and situated social behavior dissipate into countless artefacts which have loose or no connection between them that become appropriated by practices of cataloging, classification and valuation which are set on present-day criteria based on modernist normative expectations about past human and social behavior. A question arises how it is possible to re-integrate the dissipated reality of past human behavior that has been divided between different present-day agents and stakeholders and "owned" by different nations, ethnic, religious, and cultural groups. The impossibility of traditional approaches to create coherent knowledge of the past shows that evolutionist's epistemological categories such as band, tribe, state, class that always come in combination with labelling through ontologies of "primitive" people like shamanism, animism, totemism do not work. Also, the process of assembling the fragmented past into coherent and situated knowledge cannot be achieved automatically through precise 3D reconstructions, detailed pictures and augmented reality tours [16]. The reasons for this may be sought in the fact that archaeologists and their public are the same 'dividual' persons as the members of "primitive" cultures [17]. They are not independent individual and social actors with recurrent similar experiences of "objective" features of the social and natural worlds that are based on discovering regularities in occurrence of passive signs. A possible solution to this problem would be to add space to archaeologists' conceptualization of dissipated archaeological data and involve it into a historical-geographical interpretative continuum as a conceptual framework for any analytical approach to archaeological record. It may be called a 'hermeneutical phenomenological approach' to the process of discrete representation of invisible relationships within spatially determined visible traits of human behavior [18]. Thus, any attempt to understand a historical-geographic distribution of a given category of artefacts or monuments (e.g. Neolithic package) requires constitution of particular representation. For example, each archaeologist interprets in his/her own way the advance of early farming in Europe (where opinions are always slightly different from the other interpretations despite the fact that they fall into the same or similar interpretational schemes). The otherwise disparate presence of early farming material record throughout Europe turns into particular events which depend on interpreter's cognitive capacities, educational and cultural background. Looked from this perspective the material turns in archaeology accounts for transformative power of material evidence as long as it activates its ability to represent through individual interpretations the events and effects of the otherwise invisible past human and social relationships. There are several advantages of this approach. The first is that it allows archaeologists to manipulate the archaeological record in order to test different hypotheses about past human behavior. For example, the supply with particular raw materials may indicate regional networks of communication and exchange. But if different temporal and geographic scales become applied in order to test the distributional characteristics of the spread of these raw materials the results may show contradictory patterns. Thus, the second advantage of this approach is its inclusive nature which is exactly opposite to the exclusive character of the universal metaphor of "uni-linear" evolution. This is so because controversial data always require addition of other archaeological materials and scientific analyses of various materials. When applied in sufficient manner they form comprehensive accounts that gain weight in scholar and public discourses and help bettering the understanding of past social realities with their ability to make visible past intersubjective relationships. The most important advantage of this approach is that the historical-geographic continuum of archaeological data offers an environment of dispersed in time and

space cues (cognitive artefacts) that facilitate the acquisition of new knowledge. It has been recognized that the process of building new knowledge goes through the mechanism of distributed knowledge and selves [19]. This may be considered as human adaptive mechanism of off-loading the up-coming redundant information and structuration of new knowledge in concise and coherent ways of understanding.On the other hand this mechanism plays a double role in archaeological interpretation. Traditionally archaeological data are viewed as passive signs that serve as mere building blocks in the process of physical reconstruction of the material evidence left by past societies. The material turn to archaeological interpretation views all material evidence as active events that have their own effects on interpretative schemes [20-23]. In my view the truth lies somewhere in between these two extremes. For example, some archaeological artefacts and monuments (e.g. 'jade' axes, megaliths, tell sites) may be considered as active signs (self-recognizable cues that represent typical social relationships) but other need the active role of theoretically and scientifically informed archaeologist to assign particular meanings and values to them. The relationship between archaeologists and their material evidence is always asymmetrical one where the role of archaeologist is the active one. It depends entirely on him/her to spread his/her distributed knowledge (interpretative cues) over the historical-geographic field in such a way so that to produce the most coherent and understandable narrative about past human and social behavior in particular locale or region. This helps overcoming the grid of fixed individual and collective identities through the constant process of re-current constitution of new knowledge about past societies and a wide range of flexible identities based on personal 'will to know' one's proper past.

## Conclusion

The present study defines the possibility for transition of archaeological knowledge from the current state of practical objective discourse for reconstruction of material remains from the past to distributed knowledge and related to it wide range of individual and collective identities marked by cognitive cues placed at key locales within a historical-geographic continuum. It has been pointed out the characteristics of traditional object oriented discourse in archaeology. In this respect the most fundamental feature is that traditional archaeological interpretational schemes tend to alienate archaeologists from their subject-matter. This trait has its effects on production of archaeological texts that lack metaphorically rich language. The reasons for this state-of-affairs are constituted by the properties of archaeological data which are partial and incomplete. This leads to common practices of exclusion of rare or marginal data and data outliers. The process of exclusion is enhanced by the strong normative expectations generated by present-day social realities. Thus the analyses of archaeological data matrices constructed only by the most frequently present features do not produce new knowledge because they lack any possibility for manipulation and variation of initial conditions. In fact, the 'initial conditions' are locked within the present-day normative expectations. The latter define universal concepts of social organization of past communities – bands, tribes, chiefdom, state, class which are used as labels for the most frequent archaeological features that serve back as evidence for their universal validity. The possibility of allowing archaeologists and their public to carry out the process of constant creation and re-creation of the otherwise invisible realities of past human and social behavior enriches the natural practices of personal perceptual experience. By adding space to the construed evolutionary schemes that are exclusively based on time makes visible what so far has been considered as rare, marginal or laying outside mainstream explanatory schemes. Once "marginal" phenomena become placed on maps or on any abstract representational space allow archaeologists and interested public to assign their own individual or collectively shared meanings and values. This enhances the phenomenological trait of human's awareness of action because each step in the process of assigning meanings and values to spatially distributed archaeological phenomena means adding new or rejecting some old knowledge. Although this is an entirely mental exercise it also enhances the awareness of movement as it triggers schemata of automatic process of defining central and peripheral areas. This process of defining important objects and spaces depends not on their physical distribution but on the meanings and values that each individual assigns to them. Thus the process of populating the historical-geographic continuum with cognitive artefacts and cues imbued with meanings and values helps re-directing the human awareness of mental causation. So far the practice of representation of archaeological data reveals physical movement of large populations that explain cultural interaction and change. These simple causal relationships (e.g. origin of particular archaeological culture) have been presented by neutral points and arrows on a map. Instead, it has been proposed that the higher order concepts and interpretational cues form an intermediary layer that requires complex representations and explanations that involve invisible human and social interactions. In addition to this the inclusion of "marginal", rare and absent phenomena reveals a wide range of co-emergent phenomena. By doing this archaeologists will change their discipline from studying fragmentary field of epi-phenomena to studies of complex events that have their own particularity in each locale or are expressed by a particular combination of cognitive artefacts.

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## Conflicts of Interest

No conflict of interest.

## References


1. Teyssandier, Nicolas (2005) The beginnings of the Aurigniacien in Europe. Discussion based on the sites of eissenklösterle, Willendorf II, Krems-Hundssteig and Bacho Kiro. Summary of Prehistory Doctoral Thesis. Bulletin of the French Prehistoric Society 102(1): 211-220.
2. Yoffee, Norman, Severin Fowles (2012) Archaeology in the Humanities. Diogenes 58(1-2): 35-52.
3. Frega, Roberto (2015) The Normative Structure of the Ordinary. European Journal of Pragmatism and American Philosophy website 8(1): 54-76.
4. Woodward, James (2003) making things happen. A Theory of Causal Explanation. New York: Oxford University Press.
5. Vialou, Denis (2004) la préhistoire. histoire et dictionaire. Paris: Éditions Robert Laffont, pp. 879-882.
6. Lowe, John, Nick Barton, Simon, Blockley BE, et al.
7. Steen, Jerard (2011) The Contemporary Theory of Metaphor -now new and improved. Review of Cognitive Linguistics 9 (11): 26-64.
8. Winter, Tim (2012) Beyond Eurocentrism? Heritage conservation and the politics of difference. International Journal of Heritage Studies 123-137.
9. Shanks, Michael, Randall H McGuire (1996) The Craft of Archaeology. American Antiquity 61(1): 75-88.
10. Christensen, Wayne D, John Sutton, Doris JF McIlwain (2016) Cognition in Skilled Action: Meshed Control and the Varieties of Skill Experience. Mind & Language 31(1): 37-66.
11. Leusen, Martijn van, Serge van Gessel (2012) Towards 3D GIS. Notes from the 2012 CAA-NL/DE chapter session 'From 2.5 to 3 Spatial Dimensions. In The Three Dimensions in Archaeology, Proceedings of the XVII UISPP Congress (Burgos, Spain), Volume 7, Sessions A4b, A12), In: Kamermans, Hans, Wieke de Neef, Chiara Piccoli, Axel G, Posluschny, Poberto Scopigno (2014) pp. 33-39.
12. Dibble, Harold (1987) The interpretation of Middle Palaeolithic scraper morphology. Antiquity 52(1): 109-117.
13. Dibble, Harold (1995) Middle Palaeolithic scraper reduction background, clarification, and review of the evidence to date. Journal of Archaeological Method and Theory 2 (4): 299-368.
14. Gallagher, Shaun (2014) Phenomenology and embodied cognition. In: Routledge Handbook of Embodied Cognition, edited by Lawrence Shapiro 9-18.
15. Olsen, Bjornar, Michael Shanks, Timothy Webmoor, Christopher Witmore (2012) Introduction: Caring about things. Archaeology: The Discipline of Things. Berkeley: University of California Press.
16. Forte, Maurizio (2014) 3D Archaeology. New Perspectives and Challenges-The Example of Catalhoyuk. Journal of Eastern Mediterranean Archaeology and Heritage Studies 2(1): 1-29.
17. Strathern, Marilyn (1988) The Gender and the Gift. Studies in Melanesian anthropology. Berkley and Los Angeles: University of California Press.
18. Foucault, Michel (2004) La painture de Manet. Paris: Editions du Seuil.
19. Heersmink, Richard (2016) Distributed selves: Personal identity and extended memory systems. Synthese.
20. Hicks, Dan (2010) The Material-Cultural Turn: event and effect. In The Oxford Handbook of Material Culture Studies, edited by Hicks, Dan, Mary C Beaudry, 25-99.
21. Brewer, Bill (2004) Realism and the nature of perceptual experience. NOUS 14(1): 61-77.
22. Giddens, Anthony (1984) The constitution of society. Cambridge: Polity Press.
23. John Lowe, Nick Barton, Simon Blockley, Christopher Bronk Ramsey, Victoria L Cullen, et al. (2012) Volcanic ash layers illuminate the resilience of Neanderthals and early modern humans to natural hazards. PNAS 109(34): 13532-13537.