DISCUSSION ON THE CHARACTERISTICS OF ARCHAEOLOGICAL KNOWLEDGE. A ROMANIAN EXPLORATORY CASE-STUDY¹

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ABSTRACT: As study of knowledge, epistemology attempts at identifying its necessary and sufficient conditions and defining its sources, structure and limits. From this point of view, until present, there are no applied approaches to the Romanian archaeology. Consequently, my present paper presents an attempt to explore the structural characteristics of the knowledge creation process through the analysis of the results of a series of interviews conducted on Romanian archaeologists. The interviews followed a qualitative approach built upon a semi-structured frame. Apparent data saturation was reached after four interviews within initial target group (senior researchers with institutional authority). Under these conditions a decision was made to continue the interviews within a secondary control group (young doctoral or post-doc researchers guided by members of the initial target group) in order to both verify the observed data saturation and to assess the impact of the attitude of senior researchers towards scientific research on the younger generation. The preliminary results allow to assert that Romanian archaeology is still caught in a highly conservative and intradisciplinarian manner of knowledge production with a negative effect on both new knowledge production and future specialists' education.

KEYWORDS: archaeological knowledge, knowledge production, Romanian archaeology

Introduction

At this point in time, the sealing of the Romanian archaeology within a descriptive attitude has brought it in the situation where it is perceived as a

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cultural luxury practiced by a group of exotic intellectuals, totally oblivious to the realities of the society who offers their context of existence.

This may seem as a harsh opening statement. I believe that, in order to justify such an apparently unjust judgement, it suffices a summary look on the statistics of the European Research Council regarding the financing of fundamental research projects funded through Framework Programme 7 during 2011. Thus, from a total of 774 projects selected for funding, 142 are focused on humanistic sciences, and from these 25 belong to the SH6 panel, dedicated to the study of humanity's past. What I find interesting is that from these 25 projects 10 are dealing with archaeological topics and from these, eight have managers from Great Britain.²

In my opinion, the explanation for the success of Anglo-Saxon archaeology relies heavily upon one single word: theory.

This term may be quite often met in Romanian archaeological literature as well, but its meaning is ambiguous at best, varying from researcher to researcher. In most cases, Romanian archaeological theory is perceived in the manner of the German archaeological school of thought, under the influence of which it has also formed, being assimilated to methodology. In the case of Anglo-Saxon archaeology, theoretical thinking is defined by epistemology. As study of knowledge, epistemology tries to identify its necessary and sufficient conditions and to define its sources, structure and limits. From this point of view, until now and to the best of my knowledge, there have been no applications of an epistemological analysis to the Romanian archaeological practice. Since an analysis and argument on the necessity of the renovation of the archaeologists' attitude towards theoretical and philosophical introspection cannot be made in the absence of the enunciation of current perceived characteristics, I am thus compelled to reiterate them briefly.

Romanian archaeology has formed in a fundamentally positivistic context, under the influence of the German school of thought. Its current theoretical core has been formulated more than seventy years ago and still remains unchanged.³ Numerous theoretical studies have criticized⁴ this state of facts and its intellectual

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² Statistics concerning various aspects of fundamental research funding through the Ideas programme of Framework Programme 7 are available at http://erc.europa.eu/erc-funded-projects (Accessed March 13, 2012).

³ Ion Nestor, "Sabia de bronz de la Boiu," Sargeția I (1937): 155-214.

⁴ Mircea Anghelinu, "Note privind teoria şi metoda arheologiei preistorice din România," in *Cercetare şi istorie într-un nou mileniu* (Galaţi: Editura Universităţii Dunărea de Jos, 2002), 36-44; Mircea Anghelinu, "De ce nu există teorie în arheologia preistorică din România," *Sargeţia* XXX (2002): 39-49; Mircea Anghelinu, "Theory and Method in Romanian Prehistoric

immobility. However, this value judgement is built upon bibliographical analysis which I feel the need to verify and, hopefully, complete with empirical data.

The main topics, on which data collection through interviews will focus, will be aimed at the definition of the manner in which the process of creation, validation and transmission of knowledge is perceived by archaeologists.

As reference for the outlining of some characteristics of knowledge, such as it is perceived by Romanian archaeologists, I will be referring to the dichotomous view on new and old modes of knowledge production advanced by Gibbons et. al.⁵ I will thus try to establish the context of knowledge production, its attitude towards transdisciplinarity (as defined by Gibbons et. al.), social accountability and reflexivity, and manners of quality control. I will also complete my frame of reference with the definition of the process of knowledge creation advanced by the SECI model,⁶ with special emphasis on the specific characteristics of tacit and explicit knowledge.

Archaeology," in *Acts of the XIVth U.I.S.P.P. Congress, University of Liège, 2-8 September 2001*, Section 1, *Theory and Methods*, (Oxford: British Archaeological Reports- International Series, 1145, 2003), 87-93; Mircea Anghelinu, "Note privind impactul marxismului în cercetarea arheologică a preistoriei din România," *Cercetări Arheologice* XII (2003-2004): 275-304; Mircea Anghelinu, *Evoluția gândirii teoretice în arheologia din România. Concepte și modele aplicate în preistorie* (Târgoviște: Cetatea de Scaun, 2004); Mircea Anghelinu, "Dimensiuni naționaliste în arheologia preistorică din România: primele decenii ale secolului XX," *Valachica* 18 (2005): 5-23; Florin Gogâltan, "'Centru' și 'periferie'. I. Între teorie și realitate arheologică," *Revista Bistriței* XVIII (2004): 39-62; Florin Gogâltan, "Nevoia de teorie?" in *Centru și periferie. Lucrările colocviului național, Bistrița 23-25 aprilie 2004*, eds. C. Gaiu and H. Bodale (Cluj-Napoca, 2004), 7-16; Nona Palincaș, "On Power, Organisation and Paradigm in Romanian Archaeology before and after 1989," *Dacia* NS 50 (2006): 7-56; Nona Palincaș, "Despre conceptul de cultură arheologică și despre gândirea normativă. Pentru o dezbatere în arheologia românească de astăzi," *Studii și Cercetări de Istorie Veche și Arheologie* 57, 1-4 (2006): 159-185.

Michael Gibbons, Camille Limoges, Helga Nowotny, Simon Schwartzman, Peter Scott and Martin Trow, The New Production of Knowledge. The Dynamics of Science and Research in Contemporary Societies (London: Sage, 1994).

⁶ Rodrigo Arocena and Judith Sutz, "Changing knowledge production and Latin American universities," *Research Policy* 30 (2001): 1221-1234; Femke Jansik, "The knowledge-productive corporate university," *Journal of European Industrial Training* 29, 1 (2005): 40-57; Ikujiro Nonaka and Ryoko Toyama, "The knowledge-creating theory revisited: knowledge creation as a synthesizing process," *Knowledge Management Research & Practice* 1 (2003): 2-10; Ikujiro Nonaka, Georg von Krogh, and Sven Voelpel, "Organisational Knowledge Creation Theory: Evolutionary Paths and Future Advances," *Organization Studies* 27, 8 (2006): 1179-1208; Célio A. A. Sousa and Paul H. J. Hendriks, "Connecting Knowledge to Management: The Case of Academic Research," *Organisation* 15, 6 (2008): 811-830; Jing Tian, Yoshiteru Nakamori, and Andrzej P. Wierzbicki, "Knowledge management and knowledge creation in

Method

The target group has been initially limited to experts in archaeology. Through *expert* I understood a person holding institutionalized authority, which thus possesses the capacity to influence the conditions in which archaeological research is carried out within a given institutional context. I found this limitation to be necessary due to the short and fixed time frame of my project. However, I believe that the current definition of the target group will allow us to gain maximum of information with a minimum time investment. However, since apparent data saturation appeared earlier than expected – only after four interviews, the initial target group has been extended in order to include doctoral students or young post-doctoral researchers tutored by members of the target group. I believe that the expansion of the initial target group – within which I have conducted three more interviews – will be beneficial to my research, since it will both allow to verify the initial data obtained from the target group, and supply new data regarding the manner in which the attitude of senior researchers towards the process of knowledge production influences the future generation.

Interview structure

Following the initial analysis of the target group and of the interviews' topics, I decided that the most suitable form for empirical data collection would be represented by semi-structured interviews, since through its series of open questions it allows both for freedom of expression, but it also offered the means to focus upon clearly defined subjects of discussion and to detail or clarify certain aspects through the use of probes.⁷

The structure of the interview has been built through several stages involving construction of questions, criticism of questions by peers, verification of revised question through pilot interviews, second revision of interview structure and completion with possible probes. The result of the process is presented in the table below.

academia: a study based on surveys in a Japanese research university," *Journal of Knowledge Management* 13, 2 (2009): 76-92.

⁷ Bogner Alexander, Littig Beate, Menz Wolfgang, eds., *Interviewing Experts* (Basingstoke: Palgrave Macmillan, 2009); Foddy William, *Constructing questions for interviews and questionnaires* (Cambridge: Cambridge University Press, 2001); Gilham Bill, *Research Interviewing. The range of techniques* (Maidenhead: Open University Press, 2005).

Problem definition	Question	Possible probes
Definition of the archaeologists' perception on the research process		- bibliography
	Which are the sources	- fellow researchers
	for the identification of	- technological progress
	new research topics?	- social environment
		- political environment
		- description of archaeological
	How would you define the purpose of archaeological research?	material
		- reconstitution of ancient reality
		- integration of archaeological
		data within contemporary
		context
Definition of the	Which are the principal	- independent research
	means to solve the	- pluridisciplinary team research
archaeologists'	research problems?	prariaiscipiinary team research
interaction with his	Which are the factors	- peer review
activity	that offer and confirm	- new research directions
environment	the value of the	- young researchers formation
	archaeological research?	- real world aplicability

During interviews I continued the improvement of the data collection methodology, with an accent on the systematisation and categorical analysis of the answers.

Results

Sources for new knowledge

As summarized in the table presenting the interviews' structure, the first two questions aimed at outlining the following two main ideas: the identification of sources for new research problems and the definition of the purpose of the archaeological research.

In the first case, all seven participants in my study indicated the archaeological literature as first and most important source for the identification of new research directions. The second main source is constituted by new empirical data obtained through field research, especially archaeological excavations. An interesting problem was raised by the analysis of the role played by interpersonal interaction as a source of new research ideas. In only two of the seven interviews dialogue with other specialists has been willingly advanced as secondary source of inspiration and new ideas. In the other five cases in which I

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used this notion as a probe the answers were as follows: in two cases interpersonal interaction was met with total rejection and in the other three it was accepted under the reserve of the existence of common interests within strictly delimited research topics. Within this context, the communication at an interdisciplinary level is seen as a second rank source, following intradisciplinary archaeological subjects.

Purpose of archaeological research

When asked to define the purpose of the archaeological research, the first option of all interviewed specialists has been *the reconstruction of the prehistoric life*. The detail of the idea highlighted the major attention towards economical aspects such as trade routes, subsistence strategies or technology, as well as the definition of the cultural evolution from the perspective of mutual interaction between distinct archaeological entities, an approach specific for the cultural – historical thought.

Only four of the researchers have regarded archaeology as being relevant towards a larger audience, either through the display of extraordinary finds, with a powerful visual or emotional charge, or through the elaboration of standards and policies for heritage management. None of the specialists considered that the general public might have an interest, nor have they conceived a larger spectrum of application of the extended results of the archaeological research. We must also note that the formative potential of the research activity does not constitute a concern for any of the participants in our interview.

Main methods

In the case of the methods used to acquire new data and build new knowledge, the intradisciplinarian approach is dominant. The main source for new data acquisition has been, in all cases, identified as the archaeological excavation, seconded by bibliographical research, while for data interpretation the cultural – historical perspective is dominant.

The importance of interdisciplinary investigations, although recognized as paramount, is oriented towards the verification of results obtained through conventional means. The activity of an interdisciplinary team is only seen as possible in the case where the archaeologist is capable of fully controlling the process of data acquisition and interpretation through the appropriation of the specific concepts and methodology; in one case, this idea is carried even further and the interdisciplinary research is seen as possible in the absence of a team, the

archaeologist being able to implement himself the methodology and to process the data.

Research validation

From the point of view of the seven archaeologists who participated in my study, research validation is constructed exclusively through peer-review, in its various shapes: reactions of colleagues to published results, citations, or awards and distinctions. The results of interdisciplinary research only come into play if they offer the possibility of supporting the intradisciplinary archaeological conclusions. The role of the general public has only been discussed as a result of the use of a probe and it usually was dismissed as a factor of validation of research results. I do feel compelled to note that, in the only one case where the general public has been accepted as a possible judge of the results of the archaeological research, its validity has been connected to the level of culture existent within the given society – in the case of the Romanian society, the general public's level of education has been considered insufficient in order for it to play a significant role in research validation.

Discussion

Although I have yet to complete the interpretation of the data obtained through my interviews, I consider the preliminary results to build a sufficiently clear and alarming image.

Through the answers I was offered, I must first observe that the process of knowledge production in Romanian archaeology continues to be characterized by a highly conservative attitude. The location of the sources for new knowledge within intradisciplinarian boundaries, the acceptance of only peer-review as factor for results validation/quality control and the sub-summation of interdisciplinary research to intradisciplinarian objectives, all point to the immobilisation of knowledge production in 'mode one.' This state of fact blocks the archaeological research to involve itself in a series of actions which might impact and benefit its social context. In my opinion, there are a series of fields where archaeological knowledge could bring a valuable contribution, such as: building a diachronic perspective on durable environment exploitation (with possible consequences on agricultural and forestry policies) or heritage management policies oriented towards tourism development, which are currently largely ignored. It all becomes much more evident when we try to identify the existence of a feeling of social accountability of archaeological research. Although heritage management and protection are regarded as one of the important outputs of archaeological research,

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the manner in which the elaboration of their policies is perceived ignores their possible social impact and denies the right of the general public to contribute to the process or judge its outcome due to what the archaeologists perceive as the lack of societiy's education on the matter. This self sufficiency comes in flagrant contradiction to the large body of literature concerning this very sensitive topic already existent at European and global level.⁸

Furthermore, I find even more distressing the rigidity with which interpersonal communication is built. The dissemination of the various aspects of the research activity is only seen possible in explicit form through papers or communications. This attitude directly impacts on the formation of future generations; formed on the basis of values expressed through explicit knowledge, the patterns of thought of doctoral or post-doctoral researchers closely replicate those of their professor, being characterized by the linearity and uniformity specific for the still dominant cultural – historical approach within the archaeological practice.

To conclude, the results of my interviews confirm the existent criticism towards Romanian archaeological intellectual immobility and strengthen my belief in the necessity of archaeological thought reconfiguration on pragmatist foundations, which would allow a natural evolution towards 'mode 2' of knowledge production. The reorientation of archaeological research along the lines of thought of William James and Richard Rorty' would allow the Romanian

⁸ Only a few titles for exemplification: Cristopher A. Bergman and John F. Doershuk, "Cultural Resource Management and the Bussiness of Archaeology," in Ethical issues in archaeology, eds. Larry J. Zimmerman, Karen D. Vitelli, and Julie Hollowell-Zimmer (Oxford: AltaMira Press, 2003), 85-97; Ian Hodder, "Archaeological Reflexivity and the 'Local' Voice," Anthropological Quarterly 76, 1 (2002): 55-69; Ian Hodder, The Archaeological Process. An Introduction (Oxford: Blackwell Publishing, 2003): 59, 63, 160-161; Cornelius Holtorf, "Paul Feyerabend: Towards a Democratic Relativism in Archaeology" with comments by Kathryn Denning and Per Cornell, in Philosophy and Archaeological Practice. Perspectives for the 21st Century, eds. Cornelius Holtorf and Håkan Karlsson (Göteborg: Bricoleur Press, 200), 241-259; Michael Shanks, "Archaeology/politics," in The Blackwell Companion Guide to Archaeology, ed. John Bintliff (Oxford: Blackwell Publishing, 2001); Laurajane Smith, Archaeological Theory and the Politics of Cultural Heritage (New York and London: Routledge, 2004); Michael K. Trimble and Eugene A. Marino "Archaeological Curation: An Ethical Imperative for the Twenty-First Century," in Ethical issues in archaeology, eds. Larry J. Zimmerman, Karen D. Vitelli, and Julie Hollowell-Zimmer (Oxford: AltaMira Press, 2003), 99-112.

⁹ William James, Essays in radical empiricism (New York: Longmans, Green & Co., 1912), 73-74; Richard Rorty, Philosophy and the Mirorr of Nature (Princeton: Princeton University Press,

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archaeological research to rediscover its humanity and to assume an empathic and open attitude towards the cultural dilemmas of the communities within which it finds its field of action, pushing the archaeologist towards an active role in the education of the general public and thus creating himself the premises of a wider foundation for the justification of his activity. Moreover, the acceptance of truth as a hermeneutical, continuous process of contextual dialogue, would help the archaeological enquiry break open its descriptivist corset and evolve towards a truly transdisciplinary conception of its research topics, thus increasing its capacity to incorporate within its interests some of the needs of the contemporary world.

^{1981);} Richard Rorty, *Truth and Progress: Philosophical Papers, Vol. 3* (Cambridge: Cambridge University Press, 1998).