

ABSTRACT

This project represents an original approach, from an interdisciplinary approach, of one of the key eras of Romania's history – the Neolithic (ca.7000-3700 B.C.). This period represented a turning point in the evolution of mankind, comparable on a historical scale only with the industrial revolution of the late XVIIIth century, which modified the very essence of human society, thus allowing all subsequent progress. This is the moment of those fundamental discoveries, like agriculture, pasturing, pottery and metal works and of great transformations of man kind's habits, like the appearance of the first sedentary settlements and later on the of the kernels of proto-urban life appear. Unfortunately a research of the Neolithic with all its material and spiritual aspects represents a far greater challenge when compared with other historical eras (like the greek-roman era, the byzantine period, the middle-age etc.), due especially to the lack of complementary sources of information (written sources, oral information, direct observations). In these circumstances, only the data obtain through archeological diggings can help understanding these prehistoric communities and their material creation, but just in a limiting way. This is the reason why we propose an interdisciplinary approach of the Romanian Neolithic, based on the synergic involvement of some diverse fields, like archeology, archeozoology, archeoichthyology, anthropology, geology, architecture, petrography, topography, chemistry, etc., which would offer a background knowledge composed of contemporary archeological discoveries, doubled by studies of experimental archeology that would allow a scientific validation of some of the existing theories and concepts. Thus, experimental archeology transforms into a very strong research instrument, able to complete the Neolithic knowledge base. This subject in original and unique, never being approached again in Romania. The project aims at starting from the archeological data from the Neolithic, in order to recreate, by the means of the experimental archeology, all the elements that create the material culture of these communities (pottery, houses, figurines, tools made by flint, horn, shells, bone, metal, etc. Also the project shall study the functional dimension of these objects, that will be tested in various Neolithic activities (agriculture, gathering, wood chopping, house building, tools and objects crafting, etc.). All the resulting products shall be interdisciplinary analyzed, as well as all the archeological artifacts, after which a comparative study shall be made. Furthermore, the project aims at (re) building a Neolithic settlement at a 1:1 scale, with all its specific buildings and artifacts, thus creating a true, Archaeodrom like, science park which will comprise a museum and a research base. This shall represent an economical product, with a strong experimental and eloquent character, based upon the collaboration between the research institutions that make up this consortium and the business environment, which will both contribute to the implementation of the „education through research” concept by allowing both initial and continuous forming of human resources (students, master and PhD candidates), and also shall represent an extremely valuable cultural product, able to be integrated in the national touristic circuit. In the same time, the construction of this scientific park in a rural environment, in an economically disadvantaged area, will contribute both to a socio-economic development of the host community and to a significant rise in educational opportunities for the youth of this community. This approach of the research process can be considered a new technique of cultural marketing, yet to be applied in Romania, at least for the Neolithic archeological discoveries.

THE PROJECT TOPIC AND ITS PRACTICAL RELEVANCE

The project fits within the main research area no. 9 – *Socio-economic and humanities research*, research direction 9.5 - *Material/non-material cultural humanities research*, research direction 9.5 - *Material/non-material cultural heritage, cultural tourism and creative industries*, and research theme 9.5.11 - *Evaluation of the "key-periods" in Romanian history*. This research area is the most relevant for our project, since the latter has as theme the Neolithic (cca. 7000-3700), a real key-period in the evolution of humankind (including in Romania), resembling, on a different note, to the industrial revolution of the late XVIIIth century. The Neolithic represents the advent of pottery, agriculture, metallurgy, sedentism, and urban structures, which essentially altered the course of human development.

Sadly, studying Neolithic material and spiritual way of life is by far a most challenging endeavor, given the lack of direct observations, or written and oral informants. Archaeological data is the only, sometime severely limited, source of information on Neolithic societies and their material realm. This is why we propose a pluri-, inter- and transdisciplinary approach of Romanian Neolithic, involving different research areas (archaeology, archaeozoology, archaeoichthyology, archaeobotany, geology, architecture, petrography, topography, chemistry, etc.) and also experimental archaeology studies which will test different hypotheses on artifact raw material, production, exploitation, and functionality.

The practical relevance is surely obvious, since our research will be conducted through several scientific domains and the expected results target multiple beneficiaries (the scientific community, the university and educational milieu, the non-informed public, the social and economic environment, etc.). The project will provide an alternate image of the Romanian Neolithic societies, settlements and artifacts and last but not least, the past creators of objects to be found in archaeological excavations and museum exhibitions. The targeted goals are complex, yet fully attainable during the implementation stage (see section 1.3). There are multiple indicators of success that can be grouped as follows: a). The involved human resource – young, responsible, and motivated research team, experienced in collaborative projects implementation; b). Project management – coherent implementation plan of three annual different stages which ensure the financial feasibility, with workpackages strictly focused on individual scientific objectives (see section 4.1) and complementary activities; c). Project coordination – key-concepts (planning, surveilling, implementation, dissemination and communication) which will increase the project success rate, and a parallel risk management; d). Solid research infrastructure – the consortium partners benefit from the knowledge, abilities, experience and materials required for the project optimal implementation; e). Original research theme – exotic character of the research theme, with the definite advantage of ensuring a public impact of several targeted beneficiaries; f). Project multiple impact – the project results and products target beneficiaries from different social and economic environments; its scientific relevance is doubled by economic, educational and formative applicability; g). Subsequent development potential – the project results and products applicability and functionality exceed the project duration, without the diminishing of their impact rate.

PROJECT OBJECTIVES

The project main objective is the reconstruction of the Neolithic society through experimental archaeology, based on available archaeological information, and other multi-, intra- and transdisciplinary studies, by the development of experimental and

demonstration models. The approach is complex and ambitious and proposes a different approach from what currently exists in Romania and this complex intervention by applying fundamental concepts of *how-why* and *know-how*. This will be achieved through the use of analysis and investigation methods with a multi- and interdisciplinary form (in one transdisciplinary dimension), on certain categories of distinct archaeological complex and artefacts, in order to accumulate specific knowledge related to the production, manufacture, repair, use and their operation, in parallel with the determination of sources of raw materials used in the Neolithic period in Romania. Complementary with multi- and interdisciplinary studies the project will appeal to experimental archeology to achieve more research directions mentioned above. Alongside obtaining and processing raw materials and producing artifacts replicas (experimental and demonstration models), the latter will be functionally tested in activities similar to the neolithic ones (raw material and plant exploitation, hunting, fishing, gathering, artifacts producing, building construction, etc.).

Our experimental and demonstrative activities will be concluded with the reconstructed of a Neolithic settlement (scale 1:1) following the available archaeological data, as an experimental scientific park of archaeodrom type. This will facilitate the development of Neolithic way of life and subsistence complex experiments, which will carry on after the completion of the project and will potentially confirm or dismiss a lot of the already stated hypotheses concerning the Neolithic society. Also, this experiment could put forward new theories and interpretations of particular archaeological situations.

The experiment is complex and extensive, which will continue after the completion of this project, it has the potential to confirm or refute many of the assumptions made so far about the Neolithic society, only theoretically (sometimes speculative) and even the formulation of new theories and interpretations and to solve specific archaeological situations.

ORIGINAL AND INNOVATIVE CONTRIBUTIONS OF THE PROJECT

The present project proposal undoubtedly brings an element of novelty in Romanian research, especially in archaeology field and its related disciplines, first and foremost by its subject, and secondly by the anticipated products and results. The subject fits within the current international interests in the field and is a modern, new and original approach for Romanian as well as South-East European archaeology.

The degree of originality of the project lies in its proposed theoretical, methodological, experimental and demonstrative solutions in respect to the attainment of its anticipated goals, as well as the pluri-, inter- and trans-disciplinary character of its approaches. The project's research activities will take place at the frontier of several scientific fields, amongst which biology, geology, architecture, topography, archaeology, sociology and ethnology, furthering their development.

Taking into account the aspects mentioned above, considering the complexity of the tackled problems and applied solutions, the proposed project will contribute to bringing about new knowledge in the field, furthering the development of Romanian archaeological research and augmenting the pluri- and inter-disciplinary aspects of this type of research. On the other hand, considering the expected results and products, this project goes beyond the exclusive interests of the scientific and academic community, reaching other target-groups within society such as a general public, the socio-economic sector, etc. (see chapter 2 of this application), which offers it a multiple impact on several levels (scientific, educational, social, touristic, cultural,

economic etc.).

Most likely, the main novelty element of this project resides in these final products with multiple and varied beneficiaries, responding to the needs of a variety of target-groups.

DISSEMINATION AND EXPLOITATION OF THE PROJECT RESULTS

The dissemination of the project's results represents a major component of this project. The activities from this category are organized in distinct activity packages, coherently integrated in the three annual stages of the project. From the time management point of view, these work packages will cover generous time gaps, taking into consideration the distribution pattern, during a year's time, of the scientific events (congresses, symposia, sessions), and the peer-review articles acceptance politics. Thus, the dissemination process shall have three major directions: a). The national and the international scientific communities; b). The academic society and the future specialists that are undergoing any kind of professional development; c). The general public and the Romanian society.

INTELLECTUAL PROPERTY PROTECTION

This project does not involve obtaining goods, products, brands or inventions that require patenting, licensing or any additional certification of added protection at State Office for Inventions and Trademarks (OSIM), the scientifically results being framed in the category of author rights. In these circumstances, according to Annex 5 – The Partnership Agreement, the three institutions involved in the consortium, consent by common agreement that the rights of intellectual property out coming the project shall be divided between the partners, in respect with the qualitative and quantitative contribution of each partner, in compliance with the Romanian legislation (Law no.8/1996, modified and completed by Law no.285/2004 and by O.U.G. no.123/2005.

CONSORTIUM STRUCTURE

The current project's consortium is mad up of two research and public charter institutions, as defined by the current legislation (The National Museum of History of Romania and the University of Bucharest, Faculty of Geology and Geophysics) and an architectural company (S.C Prospect S.R.L) which will ensure the private financial component within the project for the purpose of engaging Romanian applied research with the evolution of the national socio- economic environment, as well as the growth stimulation of the public sectors' expenses towards scientific research. This association between a research institution, a university and a private company is the ideal combination for supporting and implementing a inter-, multi- and transdisciplinary project.

PROJECT MANAGEMENT

A quality management is the key element for the success of this project. The activities presentation and planning in a logical and coherent progression, in report with the proposed objectives, the structure of the consortium and its endowments, without ignoring the possible risks and blockings, represent the sure manner to obtain the results and products viewed by this project. The administrative structure of this present project is based on the concepts planning, forecast, organization, monitoring, implementation, dissemination and communication, in parallel with a management of the possible risks and blockings.

The working plan for this project is conceived on 3 distinctive stages, corresponding

to the 3 years of developing (2014-2016), for the purpose of activities efficiency and the obtaining of the proposed results. Each stage will include several working packages, each of them with several specific activities. Generally, we preferred a clear delimitation of the working packages on big themes proposed by this project (for instance the architecture, the clay artifacts, lithic artifacts, etc.) in order to make a coherent and correct quantification of the project data, but also to avoid risks and confusions of scientific or organizing nature.

The proposed project presents a high degree of feasibility, especially due to the fact that it represents an original scientific approach for Romania, whose results will have an impact both in the national and the international scientific communities, but also on the great public, contributing with its proposed activities at the improvement of the Romanian educational system and training of the future specialists.