## Abstract

This text, which is a concise presentation of the main research directions that I have dealt with so far, is meant to sustain my application for a habilitation title. The thesis I wrote in order to obtain the above-mentioned title was organized according in keeping with discussed issues, and it does not have a chronological arrangement.

In Chapter I (*Modern investigation methods in archaeology*) I presented my involvement in the implementation of interdisciplinary research in archeology. I contributed to the increase of radiocarbon data for Romanian prehistoric sites (Neolithic, Eneolithic) and I elaborated the sketch of the absolute chronology. This sketch (1998/2000) is still valid today, with the amendment that new archaeological research brought into discussion new materials and combinations covering white spots and the new radiocarbon datings (especially for Transylvania, Banat and Wallachia) have completed the previous ones, but much remains to be done for a complete picture. In this paper I presented an update of Romanian radiocarbon datings in conjunction with neighboring countries.

In recent years, magnetic prospecting has played an important role. I have used this method of research since the early 2000s for two of the sites that I investigate; information has been obtained on the specificity of each, which allowed comparisons with other contemporary settlements.

In this chapter I focused on the interdisciplinary research on the investigation of Cucuteni-culture ceramics, implying study on the use of painting pigments or on provenance of modeling clay. I was concerned with statistical processing of ceramics and fine arts from various cultures (Cucuteni, Bodrogkeresztúr) and of other types of materials.

In Chapter II (*Investigation of Neolithic and Eneolithic sites*) I dealt with the Neolithic and Eneolithic sites that I have investigated so far: Scânteia, Ruginoasa (Cucuteni culture), Poienești (Starčevo-Criș and Cucuteni cultures), Cheile Turzii - Peștera Ungurească (Bodrogkeresztúr, "Knobbed-Handle culture" – "Toarte Pastilate"/ Scheibenhenkel). Each of them has specific features in regard to arrangement and inventory complexes. The Cheile Turzii - Peștera Ungurească site represents a *unicum* by the discovery of a goldsmith's workshop and its inventory.

In Chapter III (*Making the most of materials from Neolithic and Eneolithic sites*) I pointed out my contribution to the turning to account of materials from Neolithic and Eneolithic sites: by organizing and participating in some international exhibitions, and by contributions to the catalogs published on such occasions.

I also referred to the catalog on the Cucuteni culture (2009, in English) that I published together with Gh. Lazarovici and other colleagues; it includes an overview of the major sites and artifacts. In the same chapter I turned to account materials from the findings of other colleagues (e.g. Werteba Cave).

In Chapter IV (*Researches regarding salt exploitation in Transylvania*) I presented my preoccupation with salt and salt-spring exploitation in Transylvania (Cluj County). I drew attention on the large number of prehistoric settlements in the vicinity of salt sources and I connected tumuli from the mentioned area with the control of roads leading to those sources.

Chapter V (*Architecture of the prehistoric communities on the Romanian territory*) was dedicated to the architecture of prehistoric communities in the Romanian space. The two volumes that I and Gh. Lazarovici elaborated represent a synthesis of the evolution of human communities from the Neolithic (ca. 6200 B.C.) up until the end of the Copper Age (ca. 2900 B.C.). I made a presentation of our aims in outlining each civilization, relations with the environment, size of settlements, type of settlements and dwellings. I pointed out the existence of a plan for the organization of settlements, including foundation practices on the basis of regular and religious buildings. I made considerations regarding the type of houses, their dimensions, their inner partitioning and their evolution over time. I paid attention to building materials, manner of wall building, floor or other arrangements. Aspects of building functionality or some parts of them were not neglected. Proposed reconstructions implied archaeological and ethnographical data, as well as models provided by old houses that still exist.

Particular attention was paid to religious architecture, represented by domestic and communal sanctuaries. We made a clearer distinction, by determining the differences among them, inner arrangements, shape and dimensions. We also considered sanctuary models, which provide views of their interior and reflect rituals that took place in them. I made several

reconstructions of sanctuaries, first of all for Truşeşti, but for other sites of the Cucuteni or Gumelniţa cultures. I have returned on other occasions over the sanctuaries or cult constructions involving reconsideration of some artifacts, in all cases making the connection with similar findings of near or remote areas.

We paid attention to the defensive system of settlements involving ditches and palisades, which imply the existence of conflicts and contradict assertions about the peaceful nature of these communities.

The recent elaboration of a monograph on the Early Neolithic (the Starčevo-Criş culture) gave us the opportunity of reanalyzing settlements and dwellings of this culture on the basis of the latest discoveries.

In Chapter VI (*The communication system in Prehistory*) I focused on systems of communication specific to prehistoric times.

The Romanian territory is part of what Marija Gimbutas named *Old Europe*. It is a space where communities reached a high level of development in several fields that determined the emergence of some communication systems. Signs and symbols have their origin in the Paleolithic, but the development of society caused their augmentation in the Neolithic and the Copper Age, in close relationship with religious beliefs. It was from there that the idea of the *Danube script* was born, the latter representing a complex communication system specific to civilizations of the Danube area. This area I approached primarily from the perspective of the Cucuteni culture, but also in terms of other civilizations.

In the same context is also mention my participation in the elaboration of the monograph on Tărtăria, where the well-known clay tablets with signs and symbols were discovered. Specification of the chronological framework (according to the current knowledge) contributes to a better understanding of the above-mentioned artifacts whicht must be interpreted precisely in relation with the transmission of accumulated knowledge through sacred rituals.

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