ACADEMIA ROMÂNĂ

INSTITUTUL DE ARHEOLOGIE IAȘI

TEZĂ DE DOCTORAT

REZUMAT

Conducător de doctorat

C.S. I dr. habilitat LAZAROVICI Cornelia-Magda

Doctorand **OPREAN Cristian**

2022

ACADEMIA ROMÂNĂ

INSTITUTUL DE ARHEOLOGIE IAȘI

Humans relations with the animal world in the settlement of Parța

SUMMARY

Conducător de doctorat

C.S. I dr. habilitat LAZAROVICI Cornelia-Magda

Doctorand **OPREAN Cristian**

2022

CUPRINS

Research specialists have confirmed that since ancient times, humans have lived in communion with nature. In the process of developing the human race, they have become more and more adept at using elements of nature to build his shelter, to feed himself, to warm himself, and to defend himself. Archeology is the science that deals with the research of these details, related to the way of life of ancient civilizations, in order to create the framework for the development of a relevant historical discourse related to these civilizations. A discipline of science, described as a multidisciplinary one, archeology associates several other disciplines, such as geography, biology, anthropology, physics, chemistry, paleoecology, paleontology, paleozoology, paleobotany. All of these in turn can be individual or can have or be part of a multidisciplinary area.

Following the archeological excavations, a series of objects are discovered, which belong to a certain category, such as ceramic fragments, architectural fragments, metals, osteological fragments (human or animal), seeds, etc. The science of archaeological research that deals with the identification, study and determination of osteological remains from animals is called archaeozoology.

Archaeozoology as an independent discipline has developed over the last 30-40 years. If in the beginning, archaeozoologists were asked to give a list of species identified in different archaeological sites, it is known that now collected faunal samples can provide much more complex information from archaeozoological analysis. The exponential development of archeozoology as a science has been achieved through the work of many archaeozoologists around the world, who have analyzed all aspects of different periods of human history. The formation and evolution of the International Council of Archaeozoology (ICAZ) and the significant increase in the number of publications, journals, textbooks, etc., which address this topic, attest to the importance and vigor of this discipline, being one of the few that crosses all periods and historical cultures in order to study human conditions.

Among the archaeological researches carried out for the historical area of Banat, the prehistoric epochs have been a constant concern of the researchers. Of these archaeological researches, one of the most important is that of the Neo-Eneolithic settlement at Parța. The numerous research campaigns started since the beginning of the 60's (campaigns coordinated by Gheorghe Lazarovici), contributed to the knowledge, definition and periodization of the culture of Banat. A series of interdisciplinary researches have also been carried out, including a series of preliminary archaeozoological studies.

Understanding the need for a more detailed analysis of the paleoeconomics of the settlement from Parța, Gheorghe Lazarovici proposed me to continue the archaeozoological

research of the osteological material discovered in this settlement, and under the coordination of Cornelia-Magda Lazarovici to carry out a detailed research work related to humans relations with the animal world observed in the case of the Neo-Eneolithic communities from Parța, through the prism of archaeozoological research. Thus, the subject of this doctoral research was born and, on this occasion, I would like to thank them for the trust and support given throughout this approach.

In the first part of the paper, we propose a short presentation, from a geographical and historical point of view, of the area of the settlement from Parța, specifying aspects related to the physical-geographical framework of the area, the historical framework and some brief data related to the studied complexes. This first step gives us the framework for the second chapter in which we want to mention aspects related to the study material and methods, where we will deal with details related to the archaeozoological sampling and particularities related to the specialized methodology that was used in the research. archaeozoological evidence of the faunal sample.

Concluding this first part, we could say introductory, of the paper, we created the framework of the second part of the paper where aspects related to the faunal sample analyzed and the results of the study of osteological material will be presented. Therefore, in the third chapter of the paper we will present the archaeozoological material discovered in the settlement of Parța. In the first instance, we presented the osteological material on archaeological levels, namely levels that were culturally framed as belonging to the Banat culture and those belonging to the Tiszapolgár culture, and then we presented the material on complexes for each of the two prehistoric cultures mentioned.

It is important to mention that the archaeozoological sample from Parța was analyzed in several stages and by several specialists, and in this paper we have combined all these analyzes. Thus, the first archaeozoological analysis for the materials from Parța was performed by Alexandra Bolomey, who determined and published in a preliminary form a part of the osteological material discovered in the campaigns of 1978-1984, where data were exposed about almost 2000 remains. osteological. The campaigns between 1985 and 1993 were analyzed by Georgeta El Susi, and the data were published for a number of approximately 4,300 faunal remains. And Diana Bindea published the analyzes of a number of 180 faunal remains that had as archeological context the Casa Cerbului complex.

In this paper we introduced these data obtained previously for the settlement of Parța, along with which were added new data, analyzed by us during the doctoral research. In addition to the more than 6,000 previously published osteological remains, determinations

were added for another nearly 6,000 osteological remains. It is also important to mention that a large part of the entire archaeozoological analysis mentioned was entered in a digital database, thanks to the kindness of Georgeta El Susi to search and provide us with the determination journals of the archaeozoological material analyzed by her and with this occasion I would like to thank her for all the help offered in carrying out the research of the faunal material.

It should also be noted that the number of archaeozoological remains would probably have been higher, but the discovery of some of the osteological fragments in the places where they were repositioned was no longer possible, despite repeated attempts to identify possible other places where they could have been moved. (Frequent relocation of the deposits has led to the loss of some of the osteological remains that have been discovered in archaeological research).

With this database, we were able to start the search for the next stage of research that is the subject of chapters four and five, being the sector that describes the characteristics of animals exploited in the settlement of Part and preferences related to the management of activities involving these animals. The fourth chapter presents particularities of the anatomical-comparative study of faunal remains. This chapter mentions aspects related to the morphology of domestic and wild mammals identified in the settlement of Parța, as well as details related to the reconstruction of the size of some fish species caught by prehistoric communities. Given that we have an almost complete sample of the settlement in Parța, this chapter is important to see different characteristics of animals raised or hunted by prehistoric communities and their comparison with animals from contemporary settlements in Banat or other regions of the country.

Correlating these data with those related to the ages of slaughter of animals, archaeozoological research continues to address the assessment of animal resources, a topic that is the subject of the fifth chapter. This chapter presents the ways and preferences of managing the raising of domestic animals in the settlement of Parța, along with issues related to how to manage the practice of hunting, but also fishing and gathering by the prehistoric communities of this settlement.

These two chapters mark the animal economy sector of the Parța settlement, which presents particularities of the characteristics of the fauna of the settlement and those of the use of animals for food and obtaining related products. The last section of the paper, which in turn consists of two chapters, aims to present secondary aspects of the use of animals in the settlement. This presents aspects related to the use of animal hard matter for the purchase

of tools, a topic that is the subject of Chapter Six and in which the stage of determination and analysis of the processed bone tools obtained will be presented. Along with the description of the processed parts, photographic details are attached and where a more detailed look was needed, I turned to the drawings made by Alina Gheorghe, to whom I would also like to thank for the mastery of making these graphic details.

The theme of using animals for different ritual practices is the subject of the last chapter of this paper, where we try to present in terms of information obtained certain aspects of the spiritual life of prehistoric communities. Thus, we refer to aspects observed on the basis of osteological materials in sanctuaries, but also in other complexes outside them, which have characteristics of ritual practices in which animals or parts of them were used.

This whole approach of the archeozoological research from this paper, related to the animal economy of the settlement from Parța, aims to enrich the knowledge related to the history of the area, contributing, at the same time, to the extension of the references about the stages of historical and cultural development. in the prehistoric period.

As we observed in the paper presented, a significant amount of osteological remains were identified for the Neolithic settlement at Parța, representing a significant archaeozoological sample to offer the possibility of concrete interpretations related to the relationship of prehistoric communities in this area with the animal world. They. The determined archaeozoological sample now totals a number of over 11600 osteological remains (of which 6000 new osteological remains were analyzed by us in this paper), most of them presenting the specific characteristics of some household remains, and following the analyzes, the data obtained were correlated with results of other archaeozoological research from the same historical period, found in the literature.

We noticed in the first part of the presentation of the faunal sample how the osteological remains identified in the archaeological research are distributed for each of the levels of the Neolithic settlement. Thus, we noticed that in all these levels, the remains of mammals predominate, and the difference between the fragments coming from domestic mammals is not large compared to the wild ones. This indicates a mixed community economy, based on both animal husbandry and hunting. The domestic species exploited by the Neolithic communities in Parța are beef, pig and ovicaprines (represented by both species). The wild boar and the deer are the most hunted species by the inhabitants of the settlement, followed by the deer and the ox. The rest of the wild species (bear, wolf, fox, marten, sheep, rabbit and wild cat) are species with very few osteological remains in the wildlife sample.

Secondly, we observed the distribution of faunal remains on complexes. Thus, for the housing complexes, those belonging to the Banat culture, we showed in the case of two huts, one half-board and 11 houses, the number of osteological fragments and their distribution by species for each of them, and for those belonging to the Tiszapolgár culture the distribution was shown. debris for a half board and six homes. In the case of the dwellings, the same characteristics of the faunal material are observed as for the whole settlement. The remains of mammals predominate in the dwellings, being found fragments of both domestic and wild species.

For the worship complexes, the remains from three such complexes (the two shrines and the house altar) were analyzed. Although in two of them the material is not very numerous, they together allowed the observation of some characteristics related to the use of animal parts in worship practices, both at the level of sanctuaries and at the level of dwellings (aspects related to family spiritual life), as we saw in chapter 7.

In the case of the pits, faunal remains were identified in 12 of them, belonging to the Banat culture and in five pits belonging to the Tiszapolgár culture. Although the number of faunal fragments in the pits is very small, it is observed that the taxonomic list does not change significantly, being found here the main species of mammals (domestic and wild). There are also no remains of molluscs and fish.

Based on the anatomical-comparative study of the osteological remains, we noticed that the cattle from Parța have a higher size compared to the populations from the south of Banat, Transylvania or Moldova. In the case of pigs, we noticed that they are represented by individuals of similar size to other contemporary settlements in southern Banat, but they are more robust. For the two species of ovicaprines, the sheep from Parța are represented by small animals, similar to those from the Neolithic settlements in Oltenia, Transylvania and Moldova. And for the deer species, in the case of the deer, a population with robust, large animals predominates, and for the prehistoric communities from Part there is a preference for hunting males of this species. Robust, medium and large animals predominate for deer. In the case of this species, the preference for male game is also noticeable.

In terms of animal resource assessment, I noticed that hunting and raising animals were the two main activities in the prehistoric communities of Parthia. However, there is no lack of evidence that, in the background, fishing and gathering were also activities, resulting in the remains of some species of native fish and molluscs, which could be found in the waters near the settlement.

In order to raise animals, we observed the evolution of the share of the main domestic species during the prehistoric habitation of this settlement and the way the exploitation of the main domestic species was managed. In the case of domestic cattle, we noticed that for most of the period this species was raised mainly for meat and in the background for traction, milk and breeding. For ovicaprines we observed a mixed economy of this population, being used both for obtaining meat and for milk and reproduction. Pigs were mainly used to obtain meat, and in some cases it was neglected to provide a breeding ground with domestic species (this was probably provided by mating with wild pigs).

Hunting was an important activity for the prehistoric communities of Parța, and the deer, wild boar, deer and ox were the main hunted species. In the case of the deer, it was possible to observe the fact that this species was the object of an active hunt in the autumn-winter period and the hunting of mature animals predominates. In the spring-summer period, the deer was an actively hunted species, with mature animals predominating in the case of hunting this species as well. During the periods of declining share of deer in the area of the settlement of Parța (which could be caused by massive deforestation in certain periods of habitation), there is an increase in the share of species that can live in reeds (such as wild boar) and those that live in open areas or forest edges (such as deer and ox).

In this research, one of the aspects analyzed was the use of animal hard matter to obtain processed bone parts. Some of these pieces have been briefly mentioned in previous analyzes, but in this paper they are first mentioned in detail. Starting from the types of hard materials and from the way of procuring them, we made a presentation on groups of pieces of the processed osteological material. I noticed that in the category of tools there are two groups of parts, namely pointed tools, where piercers, chisels and needles were presented; and scraping and grinding tools where a series of scrapers and spatulas were presented. In the category of everyday objects, the identified pieces are spoons, in which case we noticed the existence of two types of spoons in the settlement of Parța. In the category of clothing and personal ornament items, a series of clothing items and pendants made of bone were identified.

Related to the spiritual life of the settlement from Parța, through the prism of this paper we tried to interpret the osteological material in the archaeological context discovered in order to provide some hypotheses about certain features of the ritual practices of prehistoric communities. For Sanctuary 1 we launched the hypothesis of a possible complex rite of passage, which marks the end of its functioning. Also mentioned were a number of issues related to possible uses of the massive ram skull in Sanctuary 1. For Sanctuary 2 we have

opened the idea of a working hypothesis, where it is possible that its division into zones may have a possible connection with specific rituals for the worship of certain categories of deities and for certain aspects of community life. In fact, we have opened the idea of a way to argue this hypothesis by trying to correlate the complexes outside the sanctuaries, to see if such divisions are found in other contexts than the sanctuary (and we believe that future research will help to materialize these Other aspects observed in ritual contexts were those related to totems, attested through the prism of monumental objects, in the context of blocks of flats, which were related to the family totem (being also mentioned the existence of other similar contemporary cases). of the communities from Parța represented a subject treated many times in numerous other researches, and in this paper we wanted to bring a series of additions related to some particularities of ritual practices, argued in terms of osteological material.

This entire doctoral research paper aims to provide a more detailed picture, in correlation with archaeological data, of the peculiarities of the Neo-Eneolithic settlement at Parța, especially related to the relationship of prehistoric communities with the animal world. Being an archaeozoological investigation that captured almost entirely the faunal material identified following the archaeological research, it provides a plenary picture of the animal economy of the settlement of Parța. Also, in different stages of the research, in terms of osteological material, were highlighted a number of issues related to the craft life of prehistoric people in this settlement, but also various features of the spiritual speed of neo-eneliothic communities. We hope that future archaeological research will expand the archaeozoological sample, contribute to the completion and even the concretization of the information related to the human relationship with the animal world within the settlement of Parța.

SELECTIVE BIBLIOGRAPHY

(1) Barone, R., 1976. *Anatomie comparée des mamifères domestiques*, 3é éd., Paris: Ed. Vigot.

(2) Bălășescu, A., 2014. *Arheozoolgia neo-eneoliticului de pe Valea Teleormanului*, Biblioteca Muzeului Național, Seria Cercetări Pluridisciplinare, XIV, Cluj-Napoca: Ed. Mega.

(3) Bălășescu, A.; Radu, V., 2004. *Omul și Animalele. Strategii și resurse la comunităţile Hamangia și Boian*, Târgoviște: Ed. Cetatea de Scaun.

(4) Bănărescu, P., 1964. *Fauna Republicii Populare Române. Pisces-Osteichtyes (pești ganoizi și osoși*), Vol. XIII, București: Ed. Academiei Republicii Populare Române.

(5) Bejenaru, L.; Stanc, S., 2013. *Arheozoologia Neoliticului din Estul și Sud-Estul României*, Iași: Ed. Universității „*Alexandru Ioan Cuza"* Iași.

(6) Beldiman, C.; Sztancs, D.-M., 2008. *Paléotechnologie et néolithisation dans la partie sud de la Transylvanie, Roumanie: l'industrie des matières dures animales de la culture Starčevo-Criş dans le site de Miercurea Sibiului-"Petriş", dép. de Sibiu*, Acta Terrae Septemcastrensis, VII, Proceedings of the International Colloquium: The Carpathian Basin and its Role in the Neolithisation of the Balkan Peninsula, pp. 77-90.

(7) Bindea, D., 2005. *Materialul faunistic din complexul „Casa Cerbului*" *de la Parţa (campania 2005),* Patrimonium Banaticum, IV, pp. 73-88.

(8) Bőkőnyi, S., 1989. *The vertebrate fauna*, În: Marija Gimbutas (ed.), Achilleion. A Neolithic Settlement in Thessaly, Greece, 6400–5600 BC, Los Angeles: Institute of Archaeology and Univerisity of California.

(9) Bolomey, Al., 1973. *The present stage of knowledge of mammal exploitation during the Epipaleolithic and Earliest Neolithic on the territory of Romania,* În: Janos Matocsi (ed.), Domestikationsforschung und Geschichte der Haustiere, Budapest: Akadémiai Kiadó, pp. 197-203.

(10) Bolomey A., 1988. *Preliminarii despre resturile de animale de la stațiunea neo-eneolitică de la Parța*, Studii și Cercetări de Istorie Veche și Arheologie, t. 39, 3, pp. 207-221.

(11) Bolomey, Al.; Marinescu-Bîlcu, S., 2000. *The Bone and Antler Industry*, Marinescu-Bîlcu, S.; Bolomey, Al. (eds.), Drăgușeni. A Cucutenian Community, București: Ed. Enciclopedică, pp. 63-90.

(12) Bull, G.; Payne, S., 1982. *Tooth eruption and ephiphysial fusion in pigs and wild boar*, Wilson, B., Grigson, C., Payne, S., (eds.), Agening and sexing animal bones from archaeological sites, BAR British Series, 109, pp. 55-71.

(13) Driesch, A., Harvard, 1976. *A guide to the measurement of animal bones from archeological sites*, Peabody Museum Bulletin I, Massachusetts: Harvard University Press.

(14) Ducos, P., 1968. *L'origine des animaux domestique en Palestine*, Pubications de l'institut de l'Université de Bordeaux, 6, pp. 233-237.

(15) Durkheim, E., 1995. *Formele elementare ale vieții religioase*, Iași: Ed. Polirom.

(16) El Susi, G., 1995. *Economia animalieră a comunităților neo-eneolitice de la Parța (jud. Timiș)*, Banatica,13(I), pp. 23-52.

(17) Fenandez, H., 2002. *Determination specifique des restes osseux de chevre (Capra hircus) et de mouton (Ovis aries): application aux caprines du site de Sion-Ritz*, Chenale-Velarde, I. (ed.), La faune du site neolitique de Sion-Ritz (Valais, Suisse), Histoire d'un elevage villageois il y a 5000 ans, BAR International Series, 1801, pp. 116-143.

(18) Fock, J., 1966. *Metrische Untersuchungen en Metapodien einige europäischer Rinderrassen*, Munchen.

(19) Gheție, V.; Paștea, E.; Riga, I., 1954. *Atlas de anatomie comparată*, vol. 1, București: Ed. Agro-silvică de stat.

(20) Gilbert, M. B.; Martin, L.; Savage, H. G., 1981. *Avian Osteology*, Wyoming: Laramie.

(21) Gimbutas, M., 1991. *The Civilization of Goddess. The World of Old Europe*, San Francisco: HarperColins.

(22) Grant, A., 1982. *The use of tooth wear as a guide to the age of domestic ungulate*, Bob Wilson, Caroline Grigson, Sebastian Payne (eds.), Ageing and Sexing Animal Bones from Archaeological Sites, Oxford: British archaeological reports, 109, pp. 91-108.

(23) Grigson, C., 1982. *Sex and Age Determination of some Bones and Teeth of Domestic Cattle: a Review of the Literature*, Bob Wilson, Caroline Grigson, Sebastian Payne (eds.), Ageing and Sexing Animal Bones from Archaeological Sites, Oxford: British archaeological reports,109, pp. 7-23.

(24) Grossu, Al. V., 1955. *Fauna Republicii Populare Române*, Vol. III: *Mollusca*, Fascicula 1: *Gastropoda, Pulmonata*, București: Ed. Academiei Republicii Populare România.

(25) Grossu, Al. V., 1962. *Fauna Republicii Populare Române*, Vol. III: *Mollusca*, Fascicula 3: *Bivalvia* (scoici), București: Ed. Academiei Republicii Populare România.

(26) Grossu, Al. V., 1993. *Gasteropodele din România: melci marini, de uscat și apă dulce: compendiu*, București: IPCT.

(27) Haimovici, S., 1968. *Caracteristicile mamiferelor domestice descoperite în stațiunile arheologice de epoca bronzului de pe teritoriul României*, Analele Științifice ale Universității „Alexandu Ioan Cuza" Iași, t. XIV, s. II, f. 2, pp. 185-200.

(28) Halstead, P. *et alii*, 2003. Halstead, P.; Collins, P.; Issakidou, V., *Sorting the Sheep from the Goats: Morphological Distinctions between the Mandibles and Mandibular Teeth of Adult Ovis and Capra*, Jurnal of Archaeological Science, 29(5), pp. 545-553.

(29) Harcourt, R. A., 1974. *The dog in Prehistoric and Early Historic Britain*, Journal of Archaeological Science, 1, pp. 151-175.

(30) Helmer, D., 1992. *La domestication des animaux par les hommes préhistoriques*, Coll. Préhistoire, Paris-Milan-Barcelona-Bonn: Ed. Masson.

(31) Horard-Herbin, M-P., 1997. *Le village celtique des Arènes à Levroux. L'élevange et les productions animales dans l'économie de la fin du second Age du Fer*, Levroux: 12ème supplément à la Revue Archéologique du Centre de la France.

(32) Ianoș, Gh.; Pușcă, I., 1998. *Solurile Banatului, III, Prezentare cartografică a solurilor agricole*, Timișoara: Mirton.

(33) Kalmar, Z., Corbu, Al., 1990. *Data processing of archaeological materials from the Vinča and Banat Culture*, Frangopol, Petre T.; Morariu, V. V. (eds), Archeaometry in Romania. 2nd Romanian conference on the application of physics methods in archaeology, Cluj-Napoca, 1989, Vol. 2, București: Institute of Atomic Physics Press.

(34) Krämer, S.N., 1988, *History Begins at Sumer: Thirty-nine Firsts in Recorded History*, Pennsylvania: University of Pennsylvania Press.

(35) Lazarovic, C.-M.; Lazarovici, Gh., 2006. *Arhitectura Neoliticului și Epocii Cuprului din România, I, Neoliticul*, Iași: Trinitas, Bibliotheca Archaeologica Moldaviae IV.

(36) Lazarovici, C.-M.; Lazarovici, Gh., 2007. *Arhitectura Neoliticului și Epocii Cuprului din România, II, Epoca Cuprului*, Iași: Ed. Trinitas, Bibliotheca Archaeologica Moldaviae VI.

(37) Lazarovici, C.-M.; Lazarovici, Gh. 2008. *Sanctuarele culturii Precucuteni – Cucuteni*, Angustia, nr. 12 – Arheologie, pp. 9-40.

(38) Lazarovici, C.-M.; Lazarovici, Gh., 2015. *Bucraniul – simbol și semn. Bucraniile monumentale (partea I)*, Arheovest, III-1, In memoriam Florin Medelet, Interdisciplinaritate în Arheologie și Istorie, Szeged: JATEPress Kiadó, pp. 47-83.

(39) Lazarovici, C.-M.; Lazarovici, Gh., 2016. *Bucraniul – simbol și semn (partea a II-a)*, Arheovest, IV-1, In honorem Adrian Bejan, Interdisciplinaritate în Arheologie și Istorie, Szeged: JATEPress Kiadó, pp. 43-94.

(40) Lazarovici, C.-M.; Lazarovici, Gh., 2017. *Bucraniul – Simbol și semn (partea a III-a)*, Arheovest, V-1, In honorem Doinea Benea, Interdisciplinaritate în Arheologie și Istorie, Szeged: JATEPress Kiadó, pp. 163-220.

(41) Lazarovici, Gh., 1971. *Unele probleme ale neoliticului în Banat*, Banatica, I, pp. 17-60.

(42) Lazarovici, Gh., 1979. *Neoliticul Banatului*, Cluj-Napoca: Biblioteca Mvsei Napocensis IV.

(43) Lazarovici, Gh., 1982. *Parța, un monument preistoric*, Studii și Comunicări, Anul XIII, t. 1, pp. 31-39.

(44) Lazarovici, Gh., 1986. *Sanctuarul Neolitic de la Parța*, Documente recent descoperite și informații arheologice, pp. 12-26.

(45) Lazarovici, Gh., 1989. *Das neolitische Heiligtum von Parța*, Varia Archaeologica Hungarica, II, Neolithic of Southern Europe and its Near Eastern Connections, Budapesta, pp. 149-174.

(46) Lazarovici, Gh.; Kalmar, Z., 1987. *Tipuri de locuințe în așezarea neolitică de la Parța*, Sargetia, XX, Acta Mvusei Devensis, pp. 18-34.

(47) Lazarovici, Gh.; Maxim, Z., 1993. *Parța. Despre arhitectura culturii Banatului*, Tibiscum, VIII, Seria Etnografie și Istorie, pp. 41-62.

(48) Lazarovici, Gh. *et alii* 1985. Lazarovici, Gh.; Kalmar, Z.; Drașoveanu, Fl.; Luca, S.A., 1985. *Complexul Neolitic de la Parța*, Banatica, 38, pp. 7-71.

(49) Lazarovici, Gh. *et alii* 1991. Lazarovici, Gh.; Drașovean, Fl.; Tulbure, L., 1991. *Sactuarul Neolitic de la Parța*, Timișoara.

(50) Lazarovici, Gh. *et alii* 1994. Lazarovici Gh.; Maxim, Z.; Drașovean, Fl., *Complexul neolitic de la Parța, III*, Analele Banatului, S.N., Arheologie-Istorie, III, pp. 106-134.

(51) Lazarovici, Gh. *et alii*, 1995. Lazarovici, Gh.; Kalmar, Z.; Drașoveanu, Fl., *Cercetările arheologice de la Parța, Campania 1990*, Analele Banatului, IV, pp. 3-44.

(52) Lazarovici, Gh. *et alii* 2001. Lazarovici, Gh.; Drașovean, Fl.; Maxim Z., *Parța. Monografie arheologică*, Vol I.1, Timișoara: Ed. Waldpress.

(53) Lazarovici, Gh. *et alii* 2002. Lazarovici, Gh.; Chiș, Ch.; Oproiu, T.; Iharka, I., 2002. *The Neolithic Shrine at Parța*, Barla, K.; Kutzián, I.B. (eds.), „Unwritten Messages" from Carpathian Basin, Konloky Observatory of the Hungarian Academy of Sciences, Monographsm, 4, pp. 7-17.

(54) Luca, S. A., 2010. *Descoperiri arheologice din banatul românesc. Repertoriu*, ediția a doua, Sibiu: ALTIP, Bibliotheca Brvkenthal XLVI.

(55) Matolcsi, J., 1970. *Historische Erforschung de Körpergröße des Rindes auf Grund von ungarischem Knochenmaterial*, Zeitchrift für Tierzüuchtung und Züchtungsbiologie, 87(1-4), pp. 89-137.

(56) Mărgărit *et alii*, 2014. Mărgărit, M.; Bălășescu, A.; Mirea, P., *Prelucrarea oaselor de Ovis aries/Capra hircus în nivelul Starčevo-Criș din așezarea de la Măgura „Buduiasca" („Boldul lui Moș Ivănuș")*, Buletinul Muzeului Județean Teleorman – Seria Arheologie, 6, pp. 7-18.

(57) Mărgărit *et alii*, 2018. Mărgărit, M.; Mirea, P.; Bălășescu, A., *Industria materiilor dure animale din nivelul Vădastra de la Măgura "Buduiasca – Boldul lui Moș Ivănuș" (Jud. Teleorman)*, Buletinul Muzeului Județean Teleorman – Seria Arheologie, 10, pp. 73-88.

(58) Mărgărit *et alii*, 2022. Mărgărit, M.; Boroneanț, A.; Bălășescu, A., *Industria materiilor dure animale din așezarea Cucuteni de la Drăgușeni – Ostrov (jud. Botoșani)*, Târgoviște: Cetatea de Scaun.

(59) Miloia, I., 1931. *Săpăturile dela Parța (Campania 1931)*, Analele Banatului, Anul IV, pp. 171-186.

(60) Moga, M. 1964. *Muzeul Regional al Banatului*, Revista Muzeelor, Nr. 3, Anul I, pp. 294-296.

(61) Necrasov, O.; Haimovici, S., 1963. *Contribution à l'étude des cervidés sousfossiles et de leur distribution géographique au Néolithique en Roumanie*, Annales Scientifiques de l'Université "Al. I. Cuza" Jassy, t. 11, s. 2, f. 1, pp. 131-146.

(62) Oprean, C.; El Susi, G., 2019. *Synthesis of results related to the animal economy of the prehistoric settlement in Parţa (Timiş county): An archaeozoological study*, Terra Sebvs, 11, Acta Mvsei Sabesiensis, pp. 9-36.

(63) Pales, L.; Garcia, M.A., 1981. *Atlas ostéologique pour servir à l'identification des Mammifères du Quaternaire, 2, Tête, rachis, ceintures scapulaire et pelvienne membres*, Paris: Editions du C.N.R.S.

(64) Payne, S., 1971. *A metrical distinction between sheep and goat metacarpals*, Peter J. Ucko, G. W. Dimbleby (eds.), The domestication and exploatation of plants and animals, London: Ed. Duckworth, pp. 295-305.

(65) Payne, S., 1973. *Kill-off patterns in sheep and goats: the mandible from Asvan Kale*, Anatolian Studies, 23, Journal of British Institute at Ankara, Cambridge: Cambridge University Press, pp. 281-303.

(66) Payne, S., 1985. *Morphological distinction between the mandibular teeth of young sheep, and goats,* Journal of Archaeological Science, 12, Oxford: Springer, pp. 139-147.

(67) Prummel, W., 1988. *Distinguishing features on postcranial skeletal elements of cattle, Bos primigenius f. taurus, and red deer, Cervus elaphus*, Kiel.

(68) Prummel, W.; Frisch, H-J., 1986. *A guide for distinction of species, sex and body side in bones of sheep and goat*, Journal of Archaeological Science, 12, Oxford: Springer, pp. 567-577.

(69) Radu, O. *et alii*, 1974. Radu, O.; Resch, E.; Germann, C., *Plastica antropomorfă și zoomorfă de cultură Turdaş-Vinča de la Parța (com. Șag, jud. Timiș)*, Tibiscus, III, Muzeul Banatului Timișoara, pp. 65-69.

(70) Radu, V., 2005. *Atlas for the indentification of bony fish bones from archaeological sites*, București: Ed. Contrast.

(71) Schmid, E., 1972. *Atlas of Animal Bones, for Prehistorians, Archaeologists and Quaternary Geologist*, Amsterdam-London-New York: Elsevier publishing company.

(72) Schramm, Z., 1967. *Kicsi dlugie a wysokosc w klebie u kozy*, Roczniki WyzsejSzkoly Rolniczej w Poznaniu, XXXVI, Poznan, pp. 89-105.

(73) Silver, I. A., 1975. *The Ageing of Domestic Animals*, Brothwell, D.; Higgs, E.; Clark, G. (eds.), Science in Archeology, London: Ed. Thames&Hudson Ltd, pp. 283-302.

(74) Sîrbu, I. *et alii*, 2010. Sîrbu, I.; Sîrbu, M.; Benedek, A. M., *The freshwater mollusca fauna from Banat (Romania)*, Travaux du Muséum National d'Histoire Naturelle, Vol. LIII, pp. 21-43.

(75) Teichert, M., 1975. *Osteologische Unterschungen zur Berechnungder Widerristhöhe bei Schafen*, Archaeozoological studies, pp. 51-69.

(76) Ţalkin, V. I., 1961. *Izmencivost metapodii u oveţ*, Biull. MOIP., otd. Biol., 66, 5, pp. 5.

(77) Udrescu, M. *et alii*, 1999. Udrescu, M.; Bejenaru L.; Hrișcu C., *Introducere în arheozoologie*, Iași: Ed. Corson.

(78) Watkins, T., 2015. *Ritual performance and religion in early Neolithic societies*, Laneri, N. (ed.), Defining the Sacred: Approches to the Archaeology of Religion in the Near East, Oxford & Philadelphia pp. 153-160.