places from sites I and III. These fireplaces consist of accumulations (30/40 cm size) of small burned bone fragments and ash that were deposited in a radial fashion around the outer area. The bones were intentionally used in the process of combustion and they undoubtedly prove the use of fire by *Homo erectus* at Vértesszőlős.

The fifth part (pp. 523—541) deals with paleonutrition and tool technology. M. Kretzoi offers some considerations concerning the *Settlement Fauna and Food Economy of Homo erectus*, on the analysis of faunal assemblages (macromammal species) especially from site I. M. Kretzoi believes that the inhabitants of Vértesszőlős were exploiting animals which frequently visited the thermal springs. The animals were ambushed and in the panic of their escape, several animals were injured and provided easier prey for the hominids. This assumption is purported by the tool assemblage which contains no hunting implements. Also, scavenging practices are admitted. V. T. Dobosi presents *Settlement and Technology : The Evaluation of the Site and Its Connections*, complied on the basis of L. Vértes published articles and unpublished manuscripts. At Vértesszőlős, early man occupied the small basins excavated by springs in the lime tuff. The archaeological excavations were made in eight areas (sites I—VIII). The most important of these are sites I and III, whereas site II represents natural bone accumulations. The stratigraphy of site I contains four layers. The first three of these are in limestone beds, due to the deposition of a calcareous mud layer by the active spring. The fourth layer is a loess stratum. A great many of the bones found in the living floors of sites I and III had been broken by man into finger-sized pieces, accompanied by lots of quartzite, flint, and chert chips and tools, all preserved "in situ". L. Vértes formulates several hypotheses concerning the *Homo erectus* skull cult and considerations concerning the lithic assemblages. including : raw materials, tool standardization and technological remarks. He also discusses the pebble tool industry and his interpretation of the proposed migration of *Homo erectus* populations out of Africa into Asia and Europe. The last part (pp. 543—555) offers the absolute dating of the fossil bones (K. Oakley, amino acid racemization). Also, using the Th/Th corrected method of dating, H. P. Schwarcz and A. G. Latham have obtained an absolute age of the culture layers at Vértesszőlős of between 210 to 185 Ky. These results indicate younger ages than those found by Cherdyntsev and Osmond, that were highly contaminated with loessic silt. This data indicates that hominids used pebble tools much later than has previously been recognized and it is sustained by the results of magnetic polarity travertine measurements.

It is well known that the discoveries from Vértesszőlős are of major significance for the early Paleolithic period in Europe. The volume presented here offers a detailed analysis of various kinds of data concerning the site. Excellent illustrations and an accurate English translation contribute to make this book a good reference monograph of the Lower Paleolithic in Europe. This volume will serve as a lasting tribute to L. Vértes, who lived and died for Vértesszőlős.

Corneliu Beldiman

Le Paléolithique et le Néolithique de la Roumanie en contexte européen, V. Chirica and D. Monah (editors), Bibliotheca Archaeologica Iassiensis IV, Iași, 1991, 471 p., 169 figures, 3 tables.

The city of Iași, the capital of Moldavia, has a very active archaeological research center. The specialists that work at the Institute of Archaeology of the Romanian Academy, the History College of the University of "Al. I. Cuza", and the History Museum of Moldavia, promote the systematic excavations at many important archaeological sites, from the Paleolithic through the Middle Ages. The results of their research are published in such notable periodical reviews as : *Archaeology of Moldavia, Historical Research, Annual of the Institute of Archaeology and History "A. D. Xenopol"*, *Studia Antiqua et Archaeologica*, or in many monographic studies (volumes). In 1987, a new archaeological series, *Bibliotheca Archaeologica Iassiensis* (BAI), was initiated, which aims at publishing recent archaeological studies and monographs in several languages to facilitate easier access by foreign scholars. It has published three volumes to date : *The Cucuteni Civilization and the European Context* (BAI I 1987, M. Petrescu-Dîmbovița et alii eds.), *The Genesis and Evolution of Paleolithic Cultures in Romania* (BAI II 1987, V. Chirica ed.), and *The Gravettian in the East Romanian Carpathians* (BAI III 1989, V. Chirica). Recently, a fourth volume in this series was published, *Le Paléolithique et le Néolithique de la Roumanie en Contexte Européen* (The Paleolithic and the Neolithic of Romania in an European Context). This volume is dedicated to the memory of N. N. Moroșan, the father of modern Paleolithic research in Romania (1990 commemorates the 50th anniversary of his death).

The volume contains twelve articles and studies related to the Romanian and European Paleolithic (pp. 7—187) and ten to the Neolithic (pp. 188—453). Most of these articles are published in French, as well as English and German (one each). Based on recent archaeological research and radiocarbon results, V. Chirica discusses the important problems of the Gravettian culture in Romania and especially the discoveries from Moldavia. Taking into consideration the recent chronometric assays or the Middle and Upper Paleolithic, K. Honea points out the research perspectives for this epoch in our country. M. Cârciumaru examines from a palynologic and geochronologic point of the view the strata of the Paleolithic site at Mitoc "Piriul lui Istrati", Botoșani county. A. Farcaș offers a synthesis of the paleofaunal data from some Moldavian Upper Paleolithic sites. The set of papers regarding the Paleolithic of the rest of Europe begins with B. Kourtessi-Phllippakis' article concerning the history of research in Greece. The discoveries from the archaeological zone in the Dniestr valley are presented by N. K. Anisiutkin, *The Chronology of the Mousterian culture*, and I. A. Borziac, *The Gravettian site at Cosăuți. Republic of Moldavia*. G. V. Grigorieva and M. V. Anikovitch's work points out the cultural relations between the Upper Paleolithic sites from Hungary and those from the Ukraine, based on the analysis of lithic assemblages and radiocarbon dates. V. T. Dobosi presents the main results of the Paleolithic research in Hungary, developed during the last 80 years and especially during the last three decades. Two other papers refer to the features of the Aurignacian culture in Moravia (M. Oliva) and to raw materials used by Aurignacian populations in eastern Slovakia (L. Kaminská). The last article concerning the Paleolithic is J. Gaussen's contribution in knowledge of the Magdalenian culture in the Périgord, at the excavations of the open-air site of Le Chatenet.

The majority of the studies concerning the Neolithic refer to verious regions in Romania. Three of the papers present research stages for very important Early and Middle Neolithic cultures : the Linear Ceramic culture in Moldavia (N. Ursulescu), the Boian culture in the southern part of Romania (E. Comșa), and the Hamangia culture in Dobrogea (P. Haşotti). The following six papers deal with several categories of discoveries from Neolithic sites. A. S. Luca presents and discusses a unique type of clay statuette belonging to the Vinča culture and found at the Liubcova site in the Banat region. I. Paul's subject of study is the typologic and stylistic analysis of the painted pottery of the Petrești culture (Transylvania). He also examines the periodization of this culture. The ceramic vessels, which originate typologically and ideologically from the Near East, were used for cult purposes by many Neolithic communities in Romania. C. M. Mantu presents this category of manufacturing products discovered at the Scînteia site, Iași county, and belong to the famous Cucuteni culture, phase A3. In his consistent study, V. Ursachi discusses an exceptional discovery also related to the Cucuteni culture, phase A, which was discovered at the Brad site, Neamț county, and consists of a rich deposit of copper pieces (bracelets, rings, disks, an axe, and cylindrical beads), gold disks, and beads in marble and roe-deer canines. D. Monah discusses salt exploitation in Mol-

davia during the Cucuteni-Tripolye cultural period. Research at the Tripolyan site of Iablena I, phase BII, Republic of Moldavia, discovered various types of flint, bone and antler tools, presented by V. I. Sorokin. In order to define their function, the author turns to microwear analysis. P. L. van Berg's paper entitled, *Aspects of Neolithic Research in Northwestern Europe*, points out the results of excavations at Darion, a late Linear Ceramic culture site in Belgium and examines the problems regarding the early period of the Neolithic age and the ceramic vessels with conic bottoms from Belgium and France. The author formulates some conclusions about the diffusion of the ceramic technology and aspects of the economy in these Neolithic communities. The volume is completed by eleven reviews (pp. 457—471) of recent French, German, and Belgian books concerning the Paleolithic by M. Cârciumaru, R. Iorga, V. Chirica, R. Dobrescu, and C. Căpiță.

Despite the title of Chirica and Monah's fourth issue in the BAI series, the paper topics only partially cover the homogeneous title suggested by the authoss. The vast majority of these studies are new, however, some of them have appeared in earlier publications (e.g., S. A. Luca's and V. T. Dobosi's contributions). Other problems are related to the lack of a list of journal abbreviations which would be helpful to foreign scholars, especially for the Romanian papers. Also, there are a large number of printing and editorial errors, which should have been corrected prior to publication. Finally, despite these minor shortcomings, the volume combines, for the first time, studies by well-known Romanian and other European specialists, which helps to clarify some of the complex problems concerning the Paleolithic and Neolithic cultures. Dr. Chirica and dr. Monah's endeavors to publish such compilations are to be commended and it is hoped that this series, *Bibliotheca Archaeologica Iassiensis*, will continue to be successful.

Corneliu Beldiman

Mesolithic Adaptations on the Lower Danube : Vlasac and the Iron Gates Gorge, Beth Prinz, BAR International Series 330, 1987, 259 p.

This volume is of great importance for archaeologists interested in the end of the Paleolithic, the Mesolithic, or the advent of the Neolithic. The author has compiled a rather complete examination of the very important Mesolithic site of Vlasac, located on the Yugoslavian side of the Danube river in the Iron Gates region.

The first chapter, the introduction, lays the groundwork for this study and covers such important aspects as the geological history, lithic resources, local topography, climate, soils and modern flora and fauna. This chapter provides information essential in an understanding of the prehistoric Vlasac populations and their cultures. It is followed by three short chapters on the history of research at Vlasac, excavation methods, and the site stratigraphy.

Chapter five discusses the architectural remains at Vlasac and compares them to those found at a neighboring site, the important Mesolithic site of Lepenski Vir. Based on the number and size of the structures at Vlasac, the author attempts a discussion concerning population estimates. As the points out these are highly tentative given the hypothetical nature of this type of data. Chapter six, entitled *Chronology and Dating*, presents the rather controversial radiocarbon data. Fifteen radiocarbon dates were obtained for Vlasac, however, many of the dates from the lowermost levels have been disregarded as too early by many Mesolithic scholars. The dates for Vlasac are somewhat later than those recorded at Lepenski Vir, although several scholars believed these sites to be contemporaneous. This belief is founded on similarities in lithic assemblages and architectural structures.

Chapters seven and eight discuss the prehistoric faunal and floral remains, respectively. Of particular interest is the claim for the *in situ* domestication of dog at Vlasac. Tables of counts and minimum number of individuals are provided combined with a discussion of the exploitation of fauna for food and raw materials (e.g., fur, antler, and bone). Fish constitute 60 % of all bones collected although half of these were unidentifiable. The author also includes a discussion of faunal sampling bias and its effect on the faunal assemblage.

The prehistoric human remains are reviewed in Chapter nine. Evidence for population replacement is difficult to determine, all available evidence suggests continuity in these Mesolithic populations. This is not only true for Vlasac, but for all other Iron Gates sites containing human remains. A discussion of skeletal pathologies and paleonutrition concludes that the inhabitants were generally healthy except for seasonal calcium deficiencies.

The non-chipped stone artifacts are briefly discussed in Chapter ten and the lithic artifacts are discussed in great detail in Chapters eleven and twelve. The non-chipped stone artifacts include numerous bone and antler tools, ground and pecked stone tools, and objets d'art. Over half of this volume is dedicated to a detailed analysis of the chipped lithic artifacts found at the site. Three data sets have been selected for investigation. First, is a detailed study of the 2070 retouched and unretouched pieces and cores which includes: a description of attributes, the methodology of classification, a use wear analysis, a descriptive classification of artifacts, and a technological analysis. Second, is a detailed study of all material from one 4×4 meter square (square 523). Finally, summary information concerning the 22,000 pieces of debitage and unretouched flakes, blades, and cores. These studies are all accompanied by numerous drawings and tables.

The conclusion attempts to draw all of the preceding information together in assessing the nature of Vlasac and its inhabitants during the Mesolithic. Vlasac is considered in relation to other sites within and outside the Iron Gates gorge and a similar pattern seems to emerge, that of a subsistence system based primarily on fish and an increasing control over indigenous plants. Prior to the full development of food production technology, "it is likely that gathering, hunting, and fishing were at least as productive and reliable as farming" (p. 1).

The author's opinion regarding the nature of the transition from the Paleolithic to the Mesolithic and from the Mesolithic to the Neolithic is expressed within the first few pages and essentially states that continuity between these archaeologically defined periods is unequivocally evident. Given the nature of current debates concerning the nature of the transition from the Middle Paleolithic to the Upper Paleolithic, it is refreshing to find a study which supports the notion of continuity through time. This continuity exists not only for the cultural remains but also for the human populations responsible for the creation of the cultural materials. My only criticisms are minimal, but nonetheless, the inclusion of these few items would have served to make this volume even more definitive. First, I was somewhat disappointed by the lack of drawings/photographs for the chapters on the prehistoric human remains and the non-chipped stone artifacts. The author states that bone, antler, and tusk constitute nearly 4000 of the artifacts at Vlasac (p. 228), yet not a single artifact is illustrated. This is unfortunate because drawings of the bone and antler tools and the objets d'art would have been very useful for scholars interested in these aspects of Mesolithic technology. Second, I was surprised by the nearly complete disregard of the quartz chipped stone industry. It is pointed out in the text that quartz and chert constitute the two main raw material sources at Vlasac (p. 5); and that flint "is the second most