

lithischen Funde werden nicht nur in ihren quantitativen Aspekten wie Menge und Gewicht erwähnt, sondern dankenswerterweise auch qualitativ angesprochen. Neben Stichworten zur Datierung finden sich beispielsweise Materialbestimmungen bei den Silexfunden. Das erleichtert zukünftigen Bearbeitern den Umgang mit den außerordentlichen Datenmengen. Darüber hinaus finden die mittelnolithisch datierbaren Befunde der Siedlungen Ditzingen „Stütze“, Ditzingen „Schweikergrund“ und Vaihingen a. d. Enz Berücksichtigung. Funde und Befunde der fünf Plätze werden im Tafelteil dokumentiert, der zusätzlich noch Material aus anderen Fundstellen, wie beispielsweise Bietigheim-Bissingen, umfasst. Klassische Typentafeln charakterisieren die typologische Entwicklung der mittelnolithischen Keramik vom frühen Hinkelstein bis zum klassischen Bischheim. Die Beilagen enthalten die Grabungspläne sowie eine Kartierung der mittelnolithischen Fundstellen im Arbeitsgebiet.

Zusammenfassend kann man sagen, dass die beiden Bände wesentlich mehr als nur ihre gut vier Kilogramm Gewicht in die Waagschale zu werfen haben. Da sind zum einen die Grabungsdokumentationen zweier bedeutender Siedlungsplätze. Sie sind nicht nur sehr sorgfältig und solide ausgearbeitet – wozu auch die vielen Abbildungen beitragen –, sondern umfassen auch eine umfangreiche Auswertung der Funde und Befunde nach den verschiedensten Aspekten. Die zusammenfassende Dokumentation von sechs weiteren Siedlungsplätzen im Arbeitsgebiet schließt diesen Teil ab. Das allein wäre schon ein bedeutender Beitrag zur Erforschung des Mittelneolithikums gewesen. Die zusammenfassende Auswertung und das Kapitel zur Siedlungsgeschichte stellen dann erstmals eine Siedlungskammer in ihrer Gänze vor, die zum südwestdeutschen Kerngebiet des Mittelneolithikums gehört. Damit wird ein Desiderat der Forschung thematisiert, das in dieser Form Modellcharakter für andere Siedlungsregionen hat und als Anregung dienen sollte, dieser wichtigen Periode des Neolithikums in Zukunft verstärkte Aufmerksamkeit zu schenken, denn sie wird durch zwei historisch bedeutsame Entwicklungen geprägt. Im frühen Mittelneolithikum wird eine multikausale Krisensituation, die das Ende der Bandkeramik einleitet, überwunden, indem Ökonomie und soziale Faktoren modifiziert werden, ohne das System grundlegend umzuwandeln. Im späten Mittelneolithikum sind die Ursachen zu suchen, die zu den substanziellen Umstrukturierungen führen, die im Jungneolithikum mit der Michelsberger Kultur ihren Abschluss finden. Es sind „interessante Zeiten“, und Publikationen wie die vorliegende machen sie noch interessanter und neugierig auf mehr.

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VIOLETTA REITER, Ressourcenmanagement im Pfahlbau. Technologie und Rohmaterial der Steinbeiklingen vom Mondsee. Mitteilungen der Prähistorischen Kommission Band 81. Two volumes (Text and Katalog). Österreichische Akademie der Wissenschaften, Wien 2013. € 129,-. ISBN 978-3-7001-7339-7. 555 pages, figures.

The quality of the research on polished stone and ground stone tools in Europe has greatly improved during the last thirty years, following the discovery of contemporary polished axe makers in southeast Asia (P. PÉTREQUIN / A.-M. PÉTREQUIN, *Écologie d'un outil: la hache de pierre en Irian Jaya [Indonésie]*. Monographie du Centre de Recherches Archéologiques, 12 [Paris 1993]). In effect, it is during the last two decades that research projects have been promoted in Europe aimed at the definition of the raw material sources exploited for making polished stone tools, and interpreting the circulation models of finished implements during different periods of prehistory,

mainly between the beginning of the Neolithic and the Early Bronze Age (P. A. DE LABRIFFE / É. THIERAULT [eds], *Produire des haches au Néolithique de la matière première à l'abandon*. Société préhistorique française, séance 1 [Paris 2012]). Although our knowledge has greatly improved, also thanks to the detailed study of the western Alpine raw material sources, their different models of exploitation and circulation between the Neolithic and the Bronze Age, and the typological variability of the implements produced in different parts of Europe (see P. PÉTREQUIN / S. CASSEN / M. ERRERA / L. KLASSEN / A. SHERIDAN [eds], *Jade. Grandes haches alpines du Néolithique européen* [Besançon 2012]), there are still several regions from which little is still known, parts of the Balkans for instance, where many important raw material sources are still to be defined and characterized. Increasing interest in the topic has greatly improved our knowledge from other territories of southern Europe, helped us follow the complex trade and exchange network between different areas from which raw material sources for polished stone production were available in prehistoric times (R. RISCH, Social and economic organisation of stone axe production and distribution in the western Mediterranean. In: V. Davis / M. Edmonds [eds], *Stone Axes Studies III* [Oxford 2011] 99–118), and interpret the modes and rituality of extraction activities (P. TOPPING, Neolithic axe quarries and flint mines: Towards an ethnography of prehistoric extraction. In: M. Brewer-LaPorta / A. Burke / D. Field [eds] *Ancient Mines and Quarries: A Trans-Atlantic Perspective* [Oxford, Oakville 2010] 23–32). The above observation is undoubtedly true for many of the lake dwelling sites of the Alpine chain, independently from their location and age, from which at present we have a limited number of data, although in some cases their investigation began already more than 150 years ago (F. KELLER, *The Lake Dwellings of Switzerland and Other Parts of Europe* [London 1866]).

Given the above premises, it is not surprising that not only old and new collections of polished stone tools have recently started to be published either as scientific papers or monographic volumes in order to provide archaeologists with detailed information of previously badly known or forgotten assemblages; they are now also framed into a broader pattern of circulation and supply together with other types of tools obtained from chippable and ground stone as well as scientific pottery manufacture identification (E. STARNINI et al., *Lithics from the tell site Hódmezővásárhely-Gorzsa* [Southeast Hungary]: Typology, technology, use and raw material strategies during the Late Neolithic [Tisza Culture]. In: S. Hansen / P. Raczky / A. Anders / A. Reingruber [eds], *Neolithic and Copper Age between the Carpathians and the Aegean Sea. Chronologies and Technologies from the 6th to the 4th Millennium BCE*. *Archaeologie in Eurasien* 31 [Berlin 2015] 105-128.

This is the case for the publication produced by Violetta Reiter that fills a gap in our knowledge on this topic along the fringes of the northern Alpine arc. The author has analysed the ground and polished stone material from a Late Neolithic pile-dwelling of Upper Austria recovered along the shores of Mondsee, radiocarbon-dated to the beginning of the 3rd millennium B. C. It is well known, since Ferdinand Keller's times, that alpine lake dwellings started to be discovered around the middle of the 19th century when prehistoric archaeology was still in its infancy. Mondsee is one of these cases. The polished stone collections from the site analysed by Reiter were recovered in the 1870s by Matthäus Much, a pioneer of Austrian archaeological research. They were later moved to the Institute of Prehistoric Archaeology of Vienna University where they are at present stored.

Although only a part of the original 19th century collection was available to the author for study, the number of analysed implements is nevertheless impressive. They are represented by 463 axe blades, some 70 % of which are complete and in a very good state of preservation. The assemblage has been analysed from both techno-typological and raw material provenance points of view. As regards the first, the author has reconstructed the methods utilised for the manufacture of the tools, the operative production chain and its progressive stages of flaking and polishing to obtain

different types of finished products. According to the author, most blades were imported into the site as finished products. This observation is due to the occurrence of a limited number of fabricators and debitage flakes that can help define the local production of the tools. In contrast with what is known from other sites of the same periods in other regions of the Alpine chain, the sawing technique was very rarely employed for manufacture.

The typology of the stone tools has been described according to statistical evaluations, taking into account weight, dimension, cross-section shape, extension of the cutting-edge, as well as eventual morphological variabilities due to re-sharpening and intensive or secondary use as pestles or fabricators. It is regrettable that no complete wooden-handled axe has been recovered from a site from which, given to ideal anaerobic conditions, other wooden tools have been found in a good state of preservation.

The provenance of the raw material utilised for making tools has been studied by M. Götzinger. According to his microscopic analyses, they can be subdivided into two main groups. Most tools were produced from different types of Alpine metamorphic rocks, whose sources are suggested to be local. In contrast, 31 % of the implements were obtained from exogenous, volcanic rocks, whose outcrops are most probably to be sought in the Bohemian massif, an important question still to be solved.

Volume 1 (Text) consists of preface, history of the archaeological research at Mondsee, detailed description of the finds, determination of the raw materials utilised for the production of each single tool. This chapter, which is followed by the bibliography, illustrates the laboratory methods and microscopic techniques employed for the identification of the different raw materials and includes a distribution map of the suggested sources.

Volume 2 (Katalog) is the very detailed and comprehensive description of all the polished stone axes. The catalogue is enriched by good-quality colour photographs and line drawings. The second are of major importance because they provide the reader with basic information regarding manufacture, eventual presence of striations, pickling, re-sharpening, damages, possible secondary use etc. for each single tool.

The detailed publication of the Mondsee polished stone assemblages is welcome to all archaeologists interested in lithic studies in general. It fills a gap in our knowledge of a well-defined region of the eastern Alpine range from which little was known about the topic. The volume is systematically organised, richly illustrated and easy to read. It is an important contribution to the study of the Neolithic pile-dwellings in the northeastern Alpine piedmont (see H. SCHLICHTERLE, *Aspekte der siedlungsarchäologischen Erforschung von Neolithikum und Bronzezeit im südwestdeutschen Alpenvorland*. Ber. RGK 71, 1990, 208–244) whose distribution covers a unique region, located midway between southern, central and Balkan Europe. The monograph by Violetta Reiter is important in this regard and helps improving our understanding of the stone tool industry in the Alpine region and beyond.

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