

Lithic Studies: Anatolia and Beyond

Edited by

Adnan Baysal

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This book is dedicated to the memory of Prof. Dr. Nur Balkan-Atlı (2nd January 1953 - 10th April 2019).



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Ground stone tools from Neolithic Barcın Höyük. Photo: Fokke Gerritsen.

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Vidan Dimić finished elementary and master studies at the Faculty of Philosophy in Belgrade, Department of

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Foreword

Mehmet Özdoğan¹

The present volume, bringing together a fine selection of papers, is a most welcome contribution to lithic studies, covering not only chipped stone but also fine and coarse groundstone assemblages. In the historic development of archaeology the main concern in the study of artefactual assemblages has conventionally been based on typology and style with little concern either about the procurement or the characterisation of raw materials. Likewise, concern about technology had remained more or less in the domain of Palaeolithic and metallurgical studies. Colleagues working on other artefacts, either pottery or other materials, hardly showed any interest in the technologies employed in production. In this respect, groundstone artefacts, though being the most iconic tool of food-producing economies of later prehistory, were habitually overlooked, never mind any concern about the technology of their production, there was not even any available comprehensive typology of these tools; indeed, not many excavations bothered to collect them. Here, it is worth stressing that the editor of this volume was one of the first, at least in Turkey, to develop an interest in groundstone artefactual assemblages during the early years of his career, soon to play a leading role in promoting such undertakings. We are aware of the fact that it would be totally incomprehensible to the present generation of young scholars, now intent to recover every item coming out of the soil, to disregard a group of artefacts just because they don't have the visual appeal of other finds; that is why we consider it necessary to take a look in retrospect at the years when young Baysal developed an interest in groundstones, to narrate why dealing with an unappealing assemblage sounded so unusual at that time.

Many years ago, during late 1970s when our work at Çayönü was at its peak, we were faced with the serious problem of classifying, sorting, analysing and describing the finds. At that time Çayönü was the only Pre-Pottery Neolithic site under excavation in Turkey, and as the site was of the Pre-Pottery horizon, most of what we were encountering consisted of bone, chipped stone and groundstone. Çayönü was a joint project of our department in full collaboration with the Chicago Oriental Institute. There were several experts who came with the Braidwoods to work on chipped stone

and the bones. What was being done – the sorting and analysing chipped stone, bone artefacts and faunal remains – had appealed to our students, and they began volunteering to work with the guest experts, laying the foundations of present-day Turkish specialists in fauna, bone artefacts and chipped stone. However, we still had the problem of the groundstones – there were hundreds of them displaying a wide variety of shapes and of raw materials. None of us even considered being engaged, Braidwood's team was also of no help, the only solution we devised was to label them by noting their find spots and then to put them on to the shelves of the excavation house, giving a few nice-looking ones to the museum. Through time the problem became more and more acute, we had to construct and add a new storeroom to the excavation house just to find a place for the steadily increasing number of groundstones. Finally, Michael Davis, one of our collaborators, and an ex-student of the Braidwood's, took the initiative to study and to catalogue our groundstone assemblage, and though we were all very appreciative it was still considered as rather a peculiarity. He had no possibility at that time to get any help from anyone in the team either in categorizing or in assessing; he developed his approach by consulting other colleagues working in the southern Levant. For some time, his work stood as an exemplar in groundstone studies. Not too long ago, only 30-40 years previously, we could not envisage that one day there would be so many lithic experts working and publishing, as best displayed in this volume.

The diversity of approaches covered by this volume, both on chipped and on groundstone assemblages, is worth noting, some going beyond the state of the art. Even a brief survey of the papers thus presented provides an insight into the current state of research, exemplifying the outstanding dynamics of research and the employment of new analytic technologies in the study of lithic artefacts. In this respect, the amazing advancement that took place within a few decades on sourcing and characterization of various raw materials is worth remembering. It was only in 1963 that pioneering work took place in the characterization of obsidian in North America, making it possible to determine the source volcanism of obsidian artefacts, and which a year later was implemented on Anatolian obsidians, though with considerable uncertainties. Soon after, with the advances taking place in methods in analysing raw materials, including optical spectrometry and

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fission track, enabling more precise sourcing providing ample information that would not have been possible to dream of, our way of looking to the modalities of raw material procurement were revolutionised. Since then methods in defining particularities of raw materials, running from isotopic studies to geochemistry have been consistently developing, making possible new trajectories of research enabling us to look at materials with different approaches. While it is becoming possible to obtain much more precise data on technology, function and raw material characterization, each becoming a specialized field of research, at the same time we are also now developing a holistic approach considering all of these entities in relation with each other. What we were able to surmise previously about prehistoric trade being a unidirectional and simple mechanism has had to be considerably modified, as now at least we are aware of the complexity of past trading systems, even during prehistoric times.

In considering the contexts of some of the papers presented in this volume, I find it necessary to touch on the changing trajectories in the quest for defining the function of tools. In earlier years, the most convenient modality in guessing the function of lithic artefacts was, more or less, simple comparisons based on ethnographic documentation, which did not always reveal very convincing solutions. Even though there had always been some experiments with models to study the usage of tools, they were mostly sporadic efforts. The English translation of Semenov's ground-breaking book in 1970, stirring considerable excitement, had stimulated a generation to detect the technologies employed in shaping, use-wear and experimentation, also given rise by the advancements in micro-photography. Within a decade or so, distinct fields of specialization including experimental archaeology, ethnoarchaeology, use-wear analysis, technology and residue analysis became

fully established, each becoming a distinct field of research and developing their particular modalities and terminologies. As featured in some of the papers in this volume, we are just beginning to understand the importance of the boundaries among different raw materials, particularly in considering the types of stone tools to be employed in shaping other raw materials, such as in the making of bone or horn tools.

Thus far we have tried to present a conspectus on the advancements taking place in the study of lithics, particularly pointing to the modalities brought by multidisciplinary practices, revolutionizing what we can learn from the procurement of raw materials to shaping and usage. However, it should still not be overlooked that archaeology is a social science bound by behaviour, thus necessitating an understanding of the process. Interdisciplinary studies providing detailed, precise data enabling accurate descriptions, still have to be considered as a tool and not as the eventual end in assessing archaeological materials. In this respect it should not be overlooked that even devising a simple typological chart necessitates taking arbitrary decisions that are solely bound by accumulated knowledge. To exemplify – if we want to sort an assemblage into two categories, small and big, setting the dividing line necessitates an arbitrary decision, which would reflect accumulated knowledge and insight of the researcher. Accordingly, the success of the categorization is defined by deciding on befitting criteria. Here, I want to conclude by stressing that in archaeology, as for all social sciences, to sort, to classify or even to generalize depends on being able to take correct decisions in assessing when all criteria are relative and this is bound by developing a mutual understanding of the materials. That is exactly why such works as this volume are a necessity.