

Stone Tools in the Paleolithic and Neolithic Near East: a Guide, by John J. Shea, 2013. Cambridge: Cambridge University Press; ISBN 978-1-107-00698-0 hardback £60 & US\$99; xii + 408 pp., 93 figs., 7 maps, 54 tables

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The Near East and the Levant, in particular, have been a focal point in the study of prehistory for almost a century. Whether this is due to the region being a natural bridge and a major landmark for tracking the *Out of Africa* models, the early encounters between Neanderthals and *Homo sapiens* or due to the more recent *Neolithic Revolution* the area is echoed in many of the syntheses discussing human evolution. As a result of this interest the Levant is rich in well-excavated and documented sites from various periods, thus becoming one of the rare regions where one can examine evolutionary patterns of change through clusters of sites from almost each period or sub-period. However, it is this richness of data, with its many strengths, which may become an obstacle for those who try to deal with the material from an outside perspective and it is exactly at this point that Shea's '*Stone Tools in the Paleolithic and Neolithic Near East, A Guide*' is a much welcome contribution.

In Shea's words: '*Stone tools in the Paleolithic and Neolithic Near East* is intended as a reference work for those beginning their studies in Levantine prehistory and for experienced researchers seeking an efficient way to become familiar with the lithic record for this region.' (p. 2). The book stands well to this task: while general guidebooks to stone tools have been around for quite some time (e.g. Andrefsky 2005; Debénath & Dibble 1994), books that deal specifically with the Levant (e.g. Rosen 1997) are still in need. The strength of Shea's book is in providing, for the first time, a textbook that incorporates a general background to Levantine prehistory, an introduction to methods for the analysis of stone tools and a description of the industries

from the Palaeolithic and Neolithic periods in the Levant and adjacent regions. It also provides various typological lists (old and new) that enable researchers to utilize previous flint reports in a more effective way and compare between them. The book also criticizes many past analyses of stone tools suggesting alternative approaches that strive to improve our ability to use stone tools for uncovering patterns in human behaviour. While the book's title claims to cover the Near East, its geographical focus is mainly the Levant with some reflections on adjacent regions as stated within the text (p. 2).

The book is divided into eight chapters and two appendices. The first two chapters (Introduction and Lithics Basics) provide the framework for the book and general acquaintance with the definitions of lithics. The subsequent five chapters cover the timeframe between the Lower Palaeolithic and the Neolithic periods. Each such periodical chapter is concluded with a section suggesting new directions for a more effective description and analysis of lithic studies within that period. The last chapter further elaborates on this issue and discusses general trends in the technological behaviour within and throughout the various periods.

Summarizing the bulk of work performed in the Levant regarding lithic technology and typology for each period with a limit of pages is a difficult task but the author accomplished it in that he provides a comprehensive view while directing readers who would like to explore specific issues further to the relevant literature. The description of the lithic industries includes many drawings and an additional digital source provides an even larger inventory of them. Contrary to the conventional method, Shea uses a drawing method that marks the directionality and character of scars by sets of arrows. The concentric lines used in conventional lithic drawing, however, are not mere marks of directionality but rather provide a three-dimensional representation as well. While for experienced researchers this might be a small and negligible difference, for students or for those encountering these lithic types for the first time — who constitute the target audience of this book — the use of conventional drawing might have been more informative.

Shea is rightly trying to avoid the Eurocentric view that heavily influenced past studies of Levant prehistory; still it is present in the text in a few places. For example, he describes the scraper types in detail in the Middle Palaeolithic chapter as common in the European landscape (Debénath & Dibble 1994), although in the Levant they have been a significant component already from c. 400 kya during the Acheulo-Yabrudian complex of the late Lower Palaeolithic. Furthermore, types such as *déjeté* and transversal scarpers (even if they represent just the outcome of extensive resharpening) are more common in the Acheulo-Yabrudian than in the Levantine Mousterian (Bordes 1984, 16–37).

The task of describing a vast topic as the variable character of the Epi-Palaeolithic and, let alone the Neolithic industries over various sub-periods and sub-regions from which numerous assemblages were retrieved and published, is a complex issue. Within these chapters Shea raises former debates about the need for a uniform type list (p. 286), a constant method of calibrating dates and the resulted difficulties in synthesizing the data of the various sub-regions. In fact the data concerning Neolithic stone tools is so vast

(as for example the set of papers published each couple of years by the Neolithic workshop: e.g. Healey *et al.* 2011) that it clearly deserves a monograph by itself.

In a wide perspective of the Near East three tool types are at the heart of the Neolithic assemblages: bifacials/celt, projectile points and sickle blades/inserts. The various subtypes of the arrowheads are relatively well defined and many of them are presented in the book. Nevertheless, while in the case of the early Neolithic arrowheads from many regions are presented, for the late Neolithic the presented arrowhead types embody the character of the southern Levant without the more diverse character found in the north (e.g. Özdoğan 1994).

The sickle blades, which in fact best reflect the economic transformation of the Neolithic, are not uniformed under a systematic typo-technological framework. Shea suggests a new division instead of the numerous definitions (p. 256), however it seems that this is too simple to encompass the huge variability exist and especially within the late Neolithic (e.g. Vardi 2011). Within the sickle inserts he also mentions items with burin blows, which seem to reflect more on the issue of life history of tools — an issue that is well discussed regarding earlier periods and less treated in the case of the Neolithic. An important aspect emphasized in the text is the fact that the pace of change of the material culture in the late Neolithic is not constant among the various realms of material cultures, nor among regions. This is indeed a major key for understanding processes within the Neolithic.

The book also attempts to cover the groundstone tools which are presented in a short description at each relevant period. However, while being a very welcome contribution, given the growing amount of data (e.g. Rosenberg 2008; Rosenberg & Gopher 2010), this aspect would deserve a textbook on its own. This is highlighted by the fact that some significant types, such as the stone-sling stones of the late Neolithic (Rosenberg 2009) are missing. Similarly, the presence of production centres in the Neolithic is also hardly discussed (e.g. Rosenberg *et al.* 2008). The explanation of distribution of obsidian (p. 230) is based on the 'down the line' model. Centres of production such as Domuztepe (Healey 2001) or Hagoshrim (Gopher *et al.* 1998) which shed new light on the distribution of obsidian in the Levant are not mentioned.

Shea raises the problem of current definitions for synthesis-studies and in Appendix 1 he suggests simpler techno-typological lists. However he uses different terminologies for various periods which will make it harder to decipher evolutionary trends in lithic technology. For example, why does the 'tested cobbles' category appear only during the Neolithic and not previously? Why crested blades and overpasses are listed in the Upper Palaeolithic and not in the Middle and Lower Palaeolithic while it is clear they appear in these periods as well (e.g. Meignen 2011)? These discrepancies illustrate the inherent problem of all techno-typological lists limiting the documented variability to a framework based on past assumptions that do not give free wings to new possibilities.

The need for a new approach to lithic study is echoed throughout Shea's book and suggestions for creating new

directions constitute its significant element. However, its content still focuses more on the 'old ways' of studying stone tools. Many of the typological lists (some of which have been heavily and rightly criticized in the past) are here presented and described in length while other, more innovative approaches, are not always given adequate attention (e.g. McPherron 2006). This signifies a major problem in the study of stone tools. If indeed for using the vast literature present about the Near East and other regions one must understand the methods and definitions they used thus investing an enormous effort in keeping or passing on this knowledge as performed in this book, then it is of no surprise that our journey toward a new way of lithic analysis is only slowly progressing. At the same time Shea's work is an important landmark which tries to find a balance between the two venues and hopefully will constitute a point of departure with its call for the need for a significant change. In all, the book is an important tool for students and researchers and I can only hope that this endeavour will be duplicated to present the complexity of stone-tool technologies with an evolutionary perspective in other parts of the world.

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