

A Record in Stone: The Study of Australia's Flaked Stone Artifacts

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A Record in Stone is a descriptive presentation of stone-tool types from the continent of Australia, which combines Australian prehistory with lithic typology from a tutorial perspective. A unique and welcome feature is a supplemental compact disc (CD-ROM) which stores color images of the black and white illustrations in the text. The CD contains nearly 500 images of various stone tools, data tables, and images of flintknapping. The images are high-quality and include both JPEG and HTML formats; in many of the photographs, diagnostic morphological features are labeled. Such a visual format in books about prehistory is rare; it provides the reader with a quick-reference source for color images that often are too expensive to print in the text. A CD is a suitable alternative and should be considered by other authors in paleoanthropology and related disciplines.

The book is divided into seven chapters, followed by an appendix of the illustrations on the CD, a list of references and an index. Each chapter is further divided into sections; each of these sections is followed by its own summary. Rather than being a continuous part of the text (in other words, as paragraph form), the summaries are presented as bullet points, making it quick and easy for readers to grasp the essence of the individual sections within the chapters.

Chapter 1 focuses on an introduction to stone-tool studies. Five sections discuss topics that range from the flaking properties of various stones to distinguishing between flakes, tools, and cores. This chapter includes excellent illustrations of the diagnostic morphological features on stone artifacts (e.g., p. 6) and short-exposure photographs of flintknapping processes (e.g., pp. 12–15).

Chapter 2 discusses the framework for studying stone artifacts and consists of four sections. Aspects such as artifact variability, functional approaches, and generating valid research questions are discussed. The boxed text (see below) mentions some important subjects such as “Raw materials and Acheulian bifaces” and “Levallois flaking techniques.” A major component of this chapter is the topic of style, an important attribute that often guides artifact morphologies; another important topic discussed is research design (including a basic flow chart).

In Chapter 3, the authors offer a detailed focus on flakes and associated characteristics. Six sections are devoted to flakes and include mostly morphologically-diagnostic features and metrical attributes. Two sections discuss platform attributes and dorsal surfaces on flakes, respectively. This is one of the longer chapters in the entire book and rightly so, because flakes form the bulk of stone archaeological material at prehistoric sites. This chapter also includes case studies from Bone Cave, in southwestern Tasmania, and discusses flake variation and flaking orientation.

The next chapter (“Attributes in Describing Tools”) is one of the shorter chapters and details formal tool types, including two sections, “describing the retouched edge” and “broken tools and their dimensions.” Some of the boxed-text themes include “Methods for estimating the original size of a tool blank” and “Tool design and risk.” This chapter could have provided more detail regarding attributes for describing tools, considering the large morphological diversity of formal lithic types; many of which are often amorphous.

Chapter 5 is about cores and comprises two sections: “core face and platform attributes” and “core shape categories.” Some of the specified core-types mentioned are horsehoof, burin microblade, and burin blade cores. Many of the specimens are illustrated from three perspectives to show key diagnostic features and shapes. A critical section deals with the different ways to measure cores of different shapes and associated illustrations are clear and precise in showing the quantitative methods.

Chapter 6 includes five sections and highlights artifact types and typologies in greater detail. Descriptions of formal lithic types indigenous to Australia comprises a large part of this chapter. Some of the types described are Tula adzes, Bondi points, Juan knives, and Elouera. Adzes, backed tools, and points have their own respective sections. A necessary aspect of this chapter includes brief typological examples from experienced flintknappers such as Nicholas Toth and François Bordes.

Finally, Chapter 7 provides a brief overview of Paleolithic archaeology in general and goes into a historical account of Australian stone-artifact studies at some length, resulting in a total of three sections. The third section in this chapter is entitled “Recurring themes and new directions” and covers the topic of the future of Australian prehistory studies.

The text itself is interspersed with gray boxes which illustrate examples from actual sites or investigations and occasionally include tables of data. There are a total of 37 “boxed text” sections and some examples of associated topics of discussion include: a brief history of stone technology, heat treatment, the Bordian method, evolutionary ecology, flake types at Ponui, bifaces: cores or tools?, and culture-historical classification of Australian stone artefact assemblages. In addition to being suitable temporary ‘breaks’ from the detailed description of lithics and associated data in the main text, these boxes help the reader contemplate other related topics and place the lithic assemblages and individual tool-types in diverse theoretical contexts.

Although the book is an ideal example of lithic typological descriptions should be done, there are several points which may help improve the volume for future editions, if any. The following are general suggestions from a reader’s perspective and are not meant to criticize the authors in any way.

In some cases, it would have been (perhaps) more suitable (visually and dimensionally) to show many of the specimens in their actual size rather than increasing or decreasing the centimeter scale in each of the illustrations. Of course, projecting larger-than-actual-size images of artifacts to show minute diagnostic features and definitive attributes is well justified and often necessary—as has been demonstrated by the authors.

Considering that the general theme is Australian prehistory, only two chapters are dedicated to it and most of the book deals with lithic typology from a general perspective.

There are no maps of some important prehistoric localities in Australia, where many of the traditional lithic types are found. Likewise, readers also do not get an idea of how old some of these assemblages are. A table of important dated sites may therefore help readers place some artifact-types or assemblage-types in context. An added bonus would have been if the authors had included (more) images on the CD, particularly 'missing' but useful information. For example, such information may be in the form of maps, a historical timeline of Australian prehistory studies, images of important sites and site contexts, a short video clip on experimental flintknapping (related to images on pages 12–15), an illustration of the Levallois flaking technique (p. 61) and so forth. In addition, the authors could have included an appendix or a typological glossary of all the formal terms discussed in the various chapters. Finally, Chapter 7 may have been more suitable as the first chapter, thus introducing Australian assemblages from an historical perspective.

Over all, the book is very easy to read and is suitable for the lay-person as well as specialists and students in the discipline. The definitions described in the volume are technical and professional and often accompanied by images as examples. The theme of an appraisal of the historical development of the discipline in that country is a valuable and informative feature of the volume and aids the reader in understanding the theoretical concepts from a historical context. Probably for the first time, the authors place Australian lithic typology on par with other international typological frameworks, by mentioning non-Australian technology (e.g., Acheulean, Oldowan). This way, these geographically-isolated assemblages from Australia can be directly compared with other assemblages in the Old World, both from technological and morphological perspectives.