BOOK REVIEW

Limited Places at the Lithocentric Restaurant.


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If you are one of those people who like to look for historical reasons to justify their vegetarianism, then this is not a book that will be much to your taste. Great fillets of stone tool technology are hewn off the carcass of human prehistory and served up, raw and bloody, inextricably entwined with the sinews of hominid evolution; and all this under sun drenched African skies. Great stuff!

Before we dissect the book with our sharp edged tools let us first consider the carcass as a whole. The book attempts to describe how and why early humans developed a tool assisted survival strategy, and considers the phenomenon of technology and tool use throughout the prehistoric and protohistoric periods. The book is divided into nine chapters, the first six dealing with the Oldowan and its African Early Stone Age context. Chapter seven describes the Acheulian in Africa, and its subsequent spread into Europe and Asia. The last two chapters describe the technological innovations of the Middle and Upper Palaeolithic as well as later periods.

The book is clearly laid out and well written. There is good use of illustrative material to support the text, and unusually, more photographs than line drawings. It is a shame that there are no section drawings or schematized site stratigraphies in the book. These would have helped with some of the site descriptions. Those dealing with the sites to the east, north, and west of Lake Turkana, cried out for an intersite correlation diagram, especially since they are part of the same sedimentary basin. Some illustrations of the earliest stone tools yet discovered from sites like Gona (2.4 myr), would have been useful to compare with the illustrations of Oldowan tools from 2.0 myr and later.

This lack probably reflects the fact that the book is intended for a general market and/or as an introductory text. At this level, the book works quite well. I imagine that students of the author's facility at Indiana University will find it invaluable (as well as compulsory). This also explains the rather poor referencing system. The bibliography is not well integrated into the text and those readers wishing to chase up cited authors or topics will find this frustrating.

Whether or not you are fans of Schick and Toth's work (and I am), it is difficult to deny that they are innovative and stimulating researchers, and refreshingly empirical. An integrated precis of all their work to date, in a single volume, and set against a theoretical framework which provides context and direction for their work is therefore very welcome. But the originality of their work also highlights one of the more disappointing aspects of the book. The first six and a half chapters, which deal with the African Early Stone Age, of which both authors have considerable personal experience, are both authoritative and informative. The chapters that cover human experience outside of Africa (i.e., post 1.0 myr) are not. The treatment of the different topics covered is pedestrian, and does not take into account much recent research. The last two chapters are too general to be successful even for an introductory text. I got the impression they were added as an afterthought for the sake of completeness. Regrettably they detract from the impact of the originality which characterises the first part of the book.

Having cut through this outer hide the meat and bones of the book are revealed. The flesh of the book is the empirical work that the authors have done in experimental archaeology and site formation processes. This is wrapped around a theoretical skeleton that is simple but intriguing.

The increasing emphasis on stone tool use seen in the archaeological record from 2.5 myr onwards reflects major dietary changes in the lifestyle of Homo habilis. Stone tools identify an increasing dependence on meat in the diet. The knock on effect of this is profound. Ultimately the mental requirements for tool use, and a technologically assisted life style selects for brain expansion. Tool use is the *hors d'oeuvres* that precedes intelligence and adaptive success as the main course. Vegetarianism becomes a side dish on this particular menu as the more specialized *Australopithecines* commit evolutionary suicide on nuts and berries.

This is of course just the bare bones of the theoretical skeleton, but the author's direction is quite clear. The backbone of their argument is that technology and stone tools are the mainspring of all change. My main concern with this is its lithocentric character. The interested reader, with no other knowledge of this phase in human evolution, could be left thinking that tool use is the only reason for human development. In fact tool use is one of a series of major differences in life style and biology that first appear with *Homo habilis*. These changes are not discussed. Not least amongst them is that the switch to greater meat consumption provided a stable and protein rich fuel which allowed brain expansion to occur. Without this, no amount of tool use would have induced brain expansion. I do not disagree with the authors contention that stone tools have played their part in influencing development, but I do think that there are other contributing factors as well. The authors should have established the primacy of their case rather than presenting it as
The real meat of the book is the experimental work of both authors. This is served up as a series of proofs to substantiate various aspects of the theoretical skeleton. All the familiar Schick and Toth themes are covered, and there is plenty for the reader to sink his or her reduced canines into. There is a lot I agree with; the Oldowan as a flake based assemblage type, the paucity of design templates in artefact morphology, Schick's seminal work on site formation process, and spheroids as hammerstones. There is some I am more dubious about; the identification of right handedness in Oldowan artefacts, the value of studies on flaking behaviour in modern indigenous tool using peoples or chimps. Irrespective of whether or not you agree with these fillets of data, they are nonetheless a praiseworthy attempt to provide an empirical basis for the author's ideas. The only difficulty here could be that the generalised coverage can give the impression that the experimental results and the hypothesis they support are cut and dried. There are few such clear cut marks in science!

All in all I enjoyed reading this book, there is a lot in it, and those who dip into it will not be disappointed. I felt rather sorry for poor old Australopithecus at the end, denied the benefits of commuter travel, Radio One, and... More nut cutlet vicar!