The Cutting Edge: New Approaches to the Archaeology of Human Origins

Kathy Schick and Nicholas Toth (eds.) Bloomington, IN: Stone Age Institute Press, 2009, 344 pp. (hardback), \$74.95. ISBN-13: 9780979227622.

Reviewed by ROBBY COPSEY

Centre for the Archaeology of Human Origins, University of Southampton, Hampshire SO17 1BJ, UNITED KINGDOM; rac306@soton.ac.uk

Reviewing an edited book with a large number of contributors with no specific theme is a difficult task. I must lay my hands on the table and admit that I may not have done the volume justice. I have decided not to provide a review of all the articles within this volume, but instead am presenting a review of the flavor of the filling, using chapters which I feel help to form an overall impression of the volume. Despite some of my comments below, I did enjoy the book.

The Cutting Edge: New Approaches to the Archaeology of Human Origins, the third edited volume, is the result of a conference held at The Stone Age Institute in October 2006, which principal investigators of Early Stone Age (with specific interest in the Oldowan) sites gathered to discuss and present major issues and new methodologies in the field. The primary focus of both the conference and this volume was the Early Stone Age lithic technologies and what they can inform us of hominin behavior and adaptation; in effect, a compliment to the second edited volume "Breathing Life into Fossils: Taphonomic Studies in Honor of C.K. Brain." As such, 'The Cutting Edge' presents a wide array of topics from Europe, Asia, and Africa and highlights the great diversity of current research. Of the 23 contributors to this volume, the late F. Clark Howell served as principle discussant at the 'Cutting Edge' conference, and is to whom the book is dedicated.

As the old saying goes 'you should not judge a book by its cover,' but naturally one does, and I am glad that the cover's main display has possibly a record for representing the most tools used in any early hominid painting. The artist, Jay H. Matternes goes all out and includes one male knapping, another male bone crushing, as another male finishes off cutting off the forelimb of a zebra while two females work at the last remaining hind leg, all the while the buzzards and the infant hominin watch. In the background, two females use a digging stick to work out some roots, while a single hominin stands alone with, by the looks of it, malicious intent, waiting for his moment to attack with the stick in his hands. The whole group is protected by two brave stick-waving hominins who are keeping a pack of nine wild dogs at bay. Thankfully the book is as interesting at the cover!

The introduction by Kathy Schick and Nick Toth informs the reader of the conference and provides a clear overview of the volume, despite numbering the last few chapters incorrectly. Since they wrote the introduction and edited the volume you would have thought that they would have known precisely what number their joint chapter would be. Unfortunately this is not the only issue they fall short on; indeed, the final chapter (13) by the two authors did not match my expectations. This chapter presents over three decades of experimental and actualistic studies that should have been a great read. There were three problems with this final chapter. First, the associated images were not placed with their text at all, but were provided like an appendix, indeed the last figure is no less than 56 pages from the text it was suppose to illustrate. Second, the images are in black and white; the majority of these pictures would have been infinitely more helpful in color. The final problem was that some of these pictures were just page fillers, as they were simply not needed. Of the first 14 images, seven are not needed in my opinion. These three problems could have been easily rectified to produce what should have been, in my opinion, the best chapter in the volume.

The volume is not divided into thematic sections and so the reader does not have to follow the chapters in order. I freely admit that I did not, though it was difficult to decide just where I should start. The volume begins with Robert Blumenschine, Fidelis Masao and Ian Stanistreet reinforcing the need to invest heavily in reconstructing palaeoenvironments. This is done by demonstrating changes in Oldowan hominin behavior (material transport) that are related to changes in the landscape. Though it sounds an easy task, the data for this was gathered over a 12 season period over 17 years, focusing on the Lowermost Bed II. Thankfully the figures are clearly associated with the text throughout the rest of the volume (except the previous mentioned Chapter 13), however, like the images of Chapter 13, many figures throughout this volume would have better in color. This chapter stresses the need for a long term trans-generational effort to increase reconstruction of meaningful Palaeolithic landscapes.

Chapter 3 (Was There An Oldowan Occupation in the Indian Subcontinent? A Critical Appraisal of the Earliest Paleoanthropological Evidence) provides a review of the claims of an early occupation of India. Parth Chauhan rejects the current evidence and his explanations are made clear—bad dating, assemblages that are too small for analysis, and secondary contexts. Admittedly I have not yet foraged into the deep forest of the Indian Palaeolithic and while Chauhan provides a a strong argument for rejecting an early occupation, I remain cautious with respect to as-

PaleoAnthropology 2011: 74 –75.© 2011 PaleoAnthropology Society. All rights reserved.ISSN 1545-0031doi:10.4207/PA.2011.REV99

suming that all pre-Acheulean sites can be disregarded

Chapter 7 (Learning from Mistakes: Flaking Accidents and Knapping Skills in the Assemblage of A.L. 894, (Hadar, Ethiopia)) was a thoroughly good read, however, there were several easy-to-spot limitations to Erella Hovers' study. The database was far too incomplete to make the assertions that were made. Refitting cores and tools illustrates that some had been transported off the site, so while the proportion of waste flakes to whole flakes within the assemblage was correct, the assemblage is only a sample of the behavior actually displayed at the event, rendering the remaining dataset incomplete. Hovers' also was over calculating the hinge flakes. After the initial hinge mistake, the following strikes also will result in a hinge; this is not a mistake, but a knapping necessity. From one hinge mistake, one may calculate three or four more necessary hinges when indeed only the first hinge was the mistake.

The final limitation to this particular study was that the knapping skills of a bonobo were compared within the study. I simply do not understood this concept of using bonobos within knapping experiments, or even using them a metaphors for early hominids. The date that we split from our common ancestor is forever being pushed back. And there is not current evidence to suggest that bonobos have ever knapped. They are, of course, known to use tools, but so do elephants and dogs, and we do not use these animals as metaphors for early humans.

The penultimate chapter, Chapter 12 (Understanding Oldowan Knapping Skill: An Experimental Study of Skill Acquisition in Modern Humans) by Dietrich Stout, Kathy Schick and Nicholas Toth was indeed an interesting read. An experimental program with six participants (all novice knappers) and three experienced knappers conducted knapping experiments for four weeks and demonstrated that knapping skill is measurable in variations in both assemblage composition and artifact morphology. These variations were reportedly similar to early Oldowan artifacts, suggesting that already at this early age, knapping was the product of significant hominin investment.

The book is an excellent reference book for academics, and should be on the reading list for Masters level study. Each chapter ends with a full reference list so should the reader want to delve deeper, it is quicker than browsing over one reference list for the entire volume. The volume may prove too expensive for many students. However, it should be made available at university libraries and archaeology students should be encouraged to read it.