
BOOK REVIEW

A Report on the Archaeological Assemblages from Excavations by Peter Beaumont at Canteen Koppie, Northern Cape, South Africa. By John McNabb & Peter Beaumont. BAR International Series 2275, University of Southampton Series in Archaeology 4, 2011, vi + 86 pp. ISBN 9781407308494.. £ 29.00 (Paperback).

In 1869 as a ragtag army of miners set up camp at Klipdrift on the Vaal River they transformed the social landscape of the interior of South Africa and set in motion the political tensions that culminated in the Boer War. They also created a massive headache for Paleolithic archaeologists. The hill at Klipdrift, which became known as Canteen Koppie (alternate spelling Kopje), produced not only diamonds but also massive quantities of handaxes. Canteen Kopje became a key spot on the Paleolithic grand tour, easily accessible for visitors to South Africa who took the train from Cape Town to Kimberley. The Vaal River sequence came to play a major role in the development of a framework for the Paleolithic archaeology of Africa in the years preceding the discoveries at Olduvai Gorge. Like the other hominin localities along the Vaal River, Canteen Koppie did not produce associated fauna and lithics, and although it was possible to develop a relative chronology for the Vaal River gravels absolute dating has been elusive. As a result Canteen Kopje has languished in an archaeological purgatory as a site that is mentioned in many syntheses of African archaeology but has contributed little to contemporary research.

The volume under review is part of an uptick in the archaeology of Canteen Koppie, which can be linked to the broad trend of increasing international research engagement in the Paleolithic of South Africa in the years since the fall of apartheid. This is a modest volume that adds some badly needed primary data on the assemblages collected during Peter Beaumont's excavations through the Younger Gravel. This volume makes no effort at syntheses, although a bit more of an effort in this direction is found in a recent article by the same authors (MCNABB & BEAUMONT 2012).

As a result of a recent publication by Mike DE WIT (2008), which builds on earlier contributions by Söhnge, Stratten, Butzer, and Helgren, there is now a

clear understanding of the geology of Canteen Koppie (see also GIBBON 2009). The site is “a splay deposit developed at the exit point of the palaeo-loop of the Vaal River as it emerges from a narrow structurally controlled channel in the Ventersdorp basement” (DE WIT 2008: 65). As the Vaal River cut its present course the palaeo-loop was gradually abandoned. There was a shift toward the accumulation of colluvial scree deposits derived from the neighboring Koppie, punctuated by occasional flooding events. This scree deposit is dominated by large angular clasts of andesite, which was the predominant raw material used for stone tool production. The boundary between this colluvial unit and the overlying Hutton sands is abrupt. The Hutton sands at Canteen Koppie are likely derived from the Vaal River and a program of OSL dating shows significant reworking by bioturbation (CHAZAN *et al.* 2012). The OSL dating indicates that the accumulation of the Hutton Sands likely began by ca. 300,000 years ago, providing a rough minimum age for the underlying colluvial deposits.

Canteen Koppie is famous for producing large numbers of handaxes, leading the Abbé Breuil to quip that at this site one could build a museum out of artifacts. However, before Beaumont began excavation in 1997 there was absolutely no data on the context of these artifacts. A partial human skull found by a miner at Canteen Koppie — also lacking any provenience — has further added to the confusion surrounding this site. Recent analysis by Patricia Smith (SMITH *et al.* 2012) has shown that the Canteen Koppie skull is a modern human and likely Later Stone Age in age. Beaumont's excavation was on a scale that most archaeologists would quickly shy away from. His goal was to expand a pit left behind by miners to excavate the 8 meters accumulation of gravel, boulders, and sediment in carefully controlled 10 cm spits. That he succeeded in clearing an area of 7 x 2 meters down to 5.5 meters

not in refs.

in refs 2013

and a smaller area down to the base of the deposit is impressive. Beaumont also excavated a trench through gravels exposed by mining to the north of the protected site (Site 2).

Beaumont divided the sequence from his excavations in the colluvial deposits into four archaeological units. Unit 2b Lower extends from 3.1 m to 8.8 m from the top of the colluvial deposits covering a total depth of over five meters. Unit 2b Upper is approximately a meter deep from 2.2 m to 3.1 m below the top of the colluvial deposits. Artifacts are concentrated in 3 horizons (described in the volume as 'trails') which slope toward the south and are crosscut by the horizontal excavation spits. Unit 2a begins at the top of the colluvial deposits down to 2.2 m, however the top 30 cm. of this unit is archaeologically distinct and attributed to the Fauresmith.

The essential distinction between Unit 2b and Unit 2a is the appearance of Victoria West cores for large flake production in Unit 2a. A great deal has been written about the Victoria West as a prepared core technology that anticipates some of the characteristics of the Levallois method (McNABB 2001; SHARON & BEAUMONT 2006; LYCETT 2009). In the absence of an age for the Unit 2a deposits the position of the Victoria West technique in the evolution of the hominin lineage remains uncertain, yet the technology in itself is fascinating. The data presented in this volume allow us a better understanding of the context of the Victoria West technology in the Canteen Koppie sequence. It is now clear that boulder cores and other non-prepared cores were used in both Unit 2b and Unit 2a to produce large flakes that served as blanks for bifaces. There is a very good match between the size of large cutting tools from Unit 2b with the negative scars on cores from these units. Non-prepared cores (mostly irregular polyhedrons) appear to continue to play a major role in large flake production in Unit 2a and in fact greatly outnumber Victoria West Cores. There are 140 non-prepared cores on andesite in Unit 2a as opposed to 53 Victoria West Cores. Only 22 detached pieces are reported as having been struck from Victoria West cores, although it is possible that either handaxes (following McNabb) or Cleavers (according to Beaumont) were made on blanks produced off Victoria West cores (BEAUMONT & McNABB 2012). Thus on the whole the Victoria West method appears to emerge against the background of a very stable pattern of large flake production on large unprepared cores. The vertical distribution of Victoria West Cores does not support the idea that this technology is actually limited to a late time horizon within Unit 2a. Victoria West cores are found in small numbers in almost all spits between 40 and 220 cm below the top of the gravels. However, it should be kept in mind that

the deposition was sloping to the east so that the spits cross cut depositional contexts leaving open the possibility that the Victoria West is actually a phenomenon that occurs in a discreet time horizon. Assessing this possibility is further complicated by the likelihood that the deposits have been significantly reworked by fluvial action (due to episodic flooding of the palaeo-loop) and bioturbation, which could lead to mixing.

The top thirty centimeters of Unit 2a are treated in this volume as a distinct entity due to the increased density of artifacts and the characteristics of the industry. McNabb and Beaumont suggest that this context represents a Fauresmith occupation of the site. As there are no distinctive handaxes and only one core is clearly identified as a blade core (which unfortunately is not illustrated), the identification of this context as Fauresmith is based on the preferentially detached pieces which include 26 andesite blades and 20 blades on other materials along with a total of 38 flakes with convergent scar patterns. It is quite striking that three of the blades were made on ironstone, a material that is not part of the bedrock lithology in the Vaal River Valley. There is currently a lively debate about the reality of the Fauresmith as a cultural entity and the remains from Canteen Koppie offer an important piece of the puzzle (see HERRIES 2011; UNDERHILL 2011; WILKINS & CHAZAN 2012). At Canteen Koppie it appears that at an age earlier than 300,000 years ago there was a shift toward prepared core technology that included the production of blades and flakes with convergent scar patterns. Whether such an industry should be considered to be Fauresmith or not, Canteen Koppie does provide support for the early appearance of prepared core technology and blade production that has been identified at Kathu Pan 1 and as well as the stratigraphic position of this type of industry overlying Acheulean deposits (PORAT *et al.* 2009). Given the importance of this context it is very unfortunate that no illustration of these pieces is included in the publication.

The biggest surprise in the volume is the relatively small size of the assemblages recovered from a site known as one of the richest Earlier Stone Age localities in southern Africa. The sum total of handaxes recovered in Site 1 is 34 and there were only 56 cleavers — hardly the building materials for a museum! The total assemblage of whole flakes is 5895. The most impressive count is the recovery of 492 irregular polyhedral cores. Canteen Koppie represents a site with impressive duration and extent of occupation but without the kind of very high density of artifacts found at sites such as the MSA occupation at Kudu Koppie or the ESA occupation of Kathu Townlands (POLLAROLO *et al.* 2010; BEAUMONT xxxx). At this stage of research it seems best to interpret Canteen Koppie as an extraordinarily

2010?

McNabb & Beaumont?

2012?

not in refs? or 2009?

Beaumont & Morris?

favorable location, with easily available raw material and access to the resources of the Vaal River with the cut off paleo-loop perhaps also offering a context favorable for hunting and/or gathering. The buildup of archaeological material is consistent with continuous occupation across this hill over long periods of time as opposed to a brief period of particularly intensive occupation. There is no reason to believe that this site functioned as a specialized quarry site. We are left with the question of the size of hominin groups that accounts for an occupation that is at once dispersed and intensive. There is also reason to question how reworking of sediments has contributed to the vertical dispersal of artifacts within the deposits.

McNabb and Beaumont have both made a tremendous contribution by first taking up the daunting task of excavating such a massive site and then carrying out a detailed analysis of the lithic assemblage. The resulting volume does partial justice to the scope of these efforts. We now have real data for the entire sequence at Canteen Koppie but more comprehensive illustrations both of artifacts and of the excavation would make a further contribution. The ongoing excavations at the site by a team from the University of the Witwatersrand (FORMANN *et al.* 2010) will certainly build on the results presented here to fit Canteen Koppie into our emerging picture of the Earlier Stone Age of the Northern Cape Province and of hominin adaptations in the interior of southern Africa during this time period.

Michael Chazan

University of Toronto, Canada

References

- Beaumont, P. & Morris, D. 1990. *Guide to Archaeological Sites in the Northern Cape*. McGregor Museum, Kimberley.
- Chazan, M., Porat, N., Sumner, A. & Horwitz, L.K. 2013. The use of OSL dating in unstructured sands: the archaeology and chronology of the Hutton Sands at Canteen Kopje (Northern Cape Province, South Africa). *Archaeological and Anthropological Sciences*. DOI 10.1007/s12520-013-0118-7.
- DeWitt, M.C.J. 2008. Canteen Koppie at Barkly West: South Africa's first diamond mine. *South African Journal of Geology* 111, 53–66.
- Forssman, T.R., Kuman, K., Leader, G.M. & Gibbon, R.J. 2010. A Later Stone Age assemblage from Canteen Kopje, Northern Cape. *South African Archaeological Bulletin* 65 (192), 204–214.
- Herries, A. 2011. A chronological perspective on the Acheulian and its transition to the Middle Stone Age in Southern Africa: the question of the Fauresmith. *International Journal of Evolutionary Biology* 2011, Article ID 961401, 25 pages. doi:10.4061/2011/961401.
- Lycett, S.J. 2010. A comparative 3D geometric morphometric analysis of the Victoria West cores: implications for the origins of Levallois technology. *Journal of Archaeological Science* 37 (5), 1110–1117.
- McNabb, J. 2001. The shape of things to come. A speculative essay on the role of the Victoria West phenomenon at Canteen Koppie, during the South African Earlier Stone Age. In: Cook, J. & Milliken, S. (eds.), *A Very Remote Period Indeed. Papers on the Palaeolithic Presented to Derek Roe*. Oxbow Books, Oxford, pp. 37–46.
- McNabb, J. & Beaumont, P. 2012. Excavations in the Acheulean Levels at the Earlier Stone Age Site of Canteen Koppie, Northern Province, South Africa. *Proceedings of the Prehistoric Society* 78, 51–71.
- Pollarolo, L. & Kuman, K. 2009. Excavation at Kudu Koppie site, Limpopo province, South Africa. *South African Archaeological Bulletin* 64 (189), 69–74.
- Porat, N., Chazan, M., Grun, R., Aubert, M., Eisenmann, V. & Kolska-Horwitz, L. 2010. New radiometric ages for the Fauresmith industry from Kathu Pan, Southern Africa: implications for the Earlier to Middle Stone Age Transition. *Journal of Archaeological Science* 37 (2), 269–283.
- Sharon, G. & Beaumont, P. 2006. Victoria West: a highly standardized prepared core technology. In: Goren-Inbar, N. & Sharon, G. (eds.), *Axe Age. Acheulian Tool Making from Quarry to Discard*. Equinox, London, pp. 181–199.
- Smith, P., Nshimirimana, R., de Beer, F., Morris, D., Jacobson, L., Chazan, M. & Horwitz, L.K. 2012. Canteen Kopje: a new look at an old skull. *South African Journal of Science* 108 (1–2), 9 pages.
- Underhill, D. 2012. The Fauresmith: the transition from the Earlier to Middle Stone Ages in northern South Africa. Ph.D. Dissertation, University of Southampton.
- Wilkins, J. & Chazan, M. 2012. Blade production ~500 thousand years ago at Kathu Pan 1, South Africa: support for a multiple origins hypothesis for early Middle Pleistocene blade technologies. *Journal of Archaeological Science* 39 (6), 1883–1900.

not in
text?