

Podium Presentation: Session 5, Fr (12:30)

There is more to life than subsistence: use-wear and residue analyses on pre-Still Bay stone tools at Sibudu

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The rich and long MSA sequence of Sibudu Cave in KwaZulu-Natal has provided many new insights [1,2], including insights on the use and hafting of various projectile forms [3,4]. Since 2011, the new excavations under the direction of N. Conard continue to contribute significantly to our understandings of the technological variability in the MSA [5] and have further exposed a so-called “pre-Still Bay” industry containing bifacial points and a laminar technology pre-dating 75 ka.

Previous functional analyses at Sibudu Cave have mainly focused on points and segments from the Howiesons Poort and late MSA and these were identified as weapon armatures. Here we present the first results from the “pre-Still Bay” layers focusing both on points and other tool categories. Independent residue and use-wear analyses were performed in a phased procedure involving two separate analysts, which allowed the confrontation of two separate lines of functional evidence. Thanks to the excellent preservation at Sibudu Cave, a wide range of animal, plant and mineral residues was observed in direct relation with diagnostic wear patterns. We present the results obtained for serrated bifacial points and for non-bifacial pointed tools (perforators). In addition to subsistence-related activities linked with the use of the serrated points as resin-hafted weapon tips, manufacturing activities were identified for the perforators. The perforators prove to form a new and intriguing tool category, not described before, and devoted to perforating and grooving activities on different types of materials, including hard animal material, several of them while mounted in a hafted arrangement. Their abundance testifies to the importance of special manufacturing activities at the site. The identification of hafting for industries older than 75ka contributes to an improved understanding of the development of complex technologies and the variability in human behaviors.

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References:[1] Jacobs, Z., A.G. Wintle, G.A.T. Duller, R.G. Roberts, L. Wadley, 2008. New ages for the post-Howiesons Poort, late and final Middle Stone Age at Sibudu, South Africa. *Journal of Archaeological Science* 35, 1790–1807 [2] Wadley, L. 2007. Announcing a Still Bay industry at Sibudu Cave, South Africa. *Journal of Human Evolution* 52, 681–689 [3] Lombard, M. 2005. Evidence of hunting and hafting during the Middle Stone Age at Sibudu Cave, KwaZulu-Natal, South Africa: a multianalytical approach. *Journal of Human Evolution* 48, 279-300 [4] Wadley, L., Hodgskiss, T., Grant, M. 2009. Implications for complex cognition from the hafting of tools with compound adhesives in the Middle Stone Age, South Africa. *Proceedings of the National Academy of Sciences* 106, 9590-9594 [5] Conard, N.J., G. Porraz & L. Wadley, 2012. What is in a name? Characterising the ‘Post-Howieson’s Poort’ at Sibudu. *South African Archaeological Bulletin* 67, 180–199