PLEISTOCENE ENGRAVINGS
FROM WONDERWERK CAVE (SOUTH AFRICA)

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The 12-13 Pleistocene art sites known for sub-Saharan Africa are certainly a meagre tally, relative to the numbers that have been documented in smaller Europe or Australia, but they do, nevertheless, provide a record of regular palaeoart production that extends back to about 100 ka. Less continuity is presently evidenced by earlier finds; namely the Sangoan cupules at Sai Island and the > 276 ka Fauresmith occurrence at Wonderwerk Cave. We here provide a microscopic analysis of two items from the latter site.

The first stone fragment derives from Major Unit 2, in square O120 of Excavation 5, and has an age of ca. 70 ka, based on the date of 73 ± 5 ka for a lower nearby spit. It measures maximally about 48.6 mm by 38.5 mm, and has a thickness of 14.5 mm, is of variable petrological composition, but essentially a low-grade haematite of reddish colour, with a hardness of ~6 on Mohs scale. The extensive lattices of lines were therefore most probably engraved by quartz or chert, although we have made no attempt at traceological analysis, due to the presence of adhering sediment material in the grooves. For ease of analysis the seven surface areas of the fragment were numbered and engravings cover six of them.

A notable aspect of the numerous engraved lines is that all the prominent grooves are deeply notched at their point of commencement, usually beginning on the margin of the adjacent facet, and then diverging into streamer-like or fan arrangements. Overall, this specimen demonstrates great precision and competence in the application of stone tool points to a very hard, small object, which was eventually decorated over nearly its entire surface. The object represents a considerable labour investment on the part of the maker, the markings form repeated patterning involving mainly convergent lines sets and sets of parallel lines, but the edge treatment and the distinctive anchoring to edges is also a dominant factor.

The second, considerably older decorated stone object from Wonderwerk Cave consists of an angular slab of iron-rich cryptocrystalline silicate rock carried into the dolomite cave. It was excavated from spit 45-50 cm of Major Unit 3 in square BB149 of Excavation 6, and has an age of > 276 ka BP, based on dates of 276 and 278 ± 26 ka for the surface reaches of that level. The flattish manuport is primarily formed by two subparallel planes 41-45 mm apart, and one of its five margins, corresponding with five fracture facets (with some small subsidiary facets among them), shows breakage subsequent to the grooves being engraved. This is evident from the truncation of one of the seven remaining lines. The decorated surface is flattish, of coarse surface morphology. The remaining, major part of the panel is slightly concave, separated from the raised upper part by a scarp, and it constitutes the engraved area. The seven grooves are numbered 1 to 7, from top to bottom. Line 7 is truncated by a fracture and line 6 is in part so close to the fracture’s edge that it could not have been effectively executed subsequent to the fracture event. The edge formed by the fracture and the decorated panel also shows little subsequent damage, whereas all the other
margins of the panel are extensively worn, with impact flaking and crushing almost continuous. The rounding of these other edges is well visible macroscopically, while that of the bottom, most recent fracture is only clearly visible at × 10 magnification. Therefore it is evident that the plaque was longer at the time of engraving.

Lines 1 and 2 each show sections where the stone tool was raised and then reapplied, which underlines the deliberate Mode of engraving; these are not incidental or accidental grooves, their pattern is the result of intentionality. Line 4 is in one place of adequate depth to illustrate the cross-section of the engraving tool, which was somewhat rounded, non-symmetrical, and 100 microns wide, and the lack of visible striations may indicate that its surface was smooth.

An interesting aspect of the engraved stones from Wonderwerk is how well they match the transition elsewhere between marking strategies of Modes 1 or 2 (Earlier Stone Age) and Mode 3 (Middle Stone Age) attributions. Examples of the former are the engraved objects of Bilzingsleben in Germany, and of the latter those from Blombos Cave in South Africa and Oldisleben in Germany, among others.

From these findings it is likely that subcontinental palaeoart ranges back to before the advent of modern humans, as is also the case further north in Africa, where the ~200-180 ka-old cupules at Sai Island occur with Sangoan lithics comparable to those found with the < 190 ka-old Homo helmei skull from Singa. Furthermore, the Middle Stone Age at Wonderwerk extends back to ca. 250 ka, whereas the comparable Nubian Complex lithics from Sai Island postdate 152 ka.