Porc Epic Cave

In 1933, a human jaw fragment with two premolars and three molars was discovered by Vallois showing both non-neanderthal and neanderthal features. Inside the cave, red and yellow ochres were found with areas of striation and faceting due to being rubbed on a grindstone to produce pigment. 90% of these pieces also show cracking and fracture patterns which indicate that they were heated by fire to produce different colored paints. Although no definite evidence of hearth areas were found inside the cave. The cave itself is 14 meters wide and 3 meters tall. It was occupied as a fall and spring camp from 60,000-70,000 years ago. This is a report of what was found during an excavation in 1974, in a 1 by 6 meter trench.

Porc Epic is a cave in Ethiopia, two kilometers south of the town Dire Dawa. The cave itself is located 9 meters below the top of a vertical cliff called Garad Erer, and 140 meters above the wadi bed. The cave is not easily accessible, although, it commands a view of the open terrain to the north and the wadi system leading to the south. The wadi system today is still used by herders and migrating animals.

The habitat at Porc Epic Cave today is two rainy seasons, the smaller in April and the main one in July and August. During the dry winter months of September to March, the temperature at night nears the freezing mark every night. The plateau contains evergreen forest with junipers, and the lower slopes and plains are covered by xerophytic vegetation (which are plants that are adapted for growth and life with a limited water supply).

Temperatures are known to have been 6 degrees Celsius cooler during the last glacial maxium in high latitudes then what it is today. Today the cave is dry, there is evidence that a small stream flowed into the cave from above causing dripstone to form. 4278 artifacts were found and analyzed. Over twenty five percent of the artifacts display characteristics of heat fracture, but no definite hearths were found.

The majority of artifacts found were points (bifacial, unifacial and Levallois), made on flakes usually from Levallois and discoid cores, but rarely on blades. There are various types of scrapers straight side, double side, denticulate, convex side, concave side, and notched. There were also a few burins found (although these appear to have been made accidentally), 11 becs (borer like tool used for piercing) was recovered, and two multiple tools were found (bec/burin, and burin/scaper). "The counts for points and scrapers combined with qualitative study of attributes of retouched tools suggest that no
significant changes took place throughout the time that the MSA occupants used the cave" (Clark, Williamson, 47).

Chert was the most commonly used raw material at Porc Epic (80%), it is believed that it was obtained from the steep slopes of the wadis. Obsidian (5.5%) and Basalt (7.9%) was also used, but it is not known were they were collected since none of it occurs around the cave. Although, it is believed that they both came from extinct volcanoes either at Afdem (95 km.), or AssaBot (140 km) from Dire Dawa. There is no trend found in the use of these raw materials, meaning that for awhile they used chert then switched to basalt or obsidian, though the archaeologist admit that one might be found if the area of the excavation was larger.

As stated at the top of the paper, several pigment producing materials were found at the cave (friable and soft yellow and red ochre, as well as, red haematite). These raw materials were carried into the cave from some unknown location. These materials are found as abraded fragments, angular, small pebbles and lumps. Which 90% of the pieces found display fracture and cracking patterns suggesting they were heated by fire. Interestingly, a cast of a fossil cephalopod with a spiral shell was found having been completely replaced by these pigment producing materials. It is not known whether the pigment was used as a "ritual", or if the paint mixed with the oil on their bodies was used to keep warm, or to inhibit parasites.

Most of the bones that were found inside the cave were unidentifiable due to being broken up and burnt. Although, a few teeth of bovids were found including pig, zebra, duiker, and bushbuck. The hominids that lived in Porc Epic cave would of had to cut the carcasses up and carry them limb by limb up to the cave entrance due to the steep sides of the hill.

It is believed that the hunters followed the game to the rift valley during the animals migration. Since at the cave opening you can see vast distances of open plains it would have made a good hunting site during the spring and fall migrations. This would also explain why the hunters would have obsidian and basalt, since they would leave the cave during the summer moving westward following the escarpment to these locations.