Scientists find evidence of cannibalism in Palaeolithic Britain

Joan Smith
29 April 2011

Recent analysis on the three skulls discovered in Gough's Cave at Cheddar gorge, Somerset, southwest England, suggests that they may have been used as cups or containers.

The skulls were discovered at different times; two were discovered in the 1920s and one in 1987. They belong to two adults and a child that lived in the Upper Palaeolithic period 14,700 years ago.

Chris Stringer and a team from the Natural History Museum in London have recently re-examined these skulls using an Alicona 3D microscope, which has made it possible to examine the cut marks on the skulls in fine detail.

Gough's Cave was occupied during the upper Palaeolithic, when there was a slight relief in the Devensian ice age and warm weather briefly returned. The three bodies were beheaded, the skulls were meticulously scraped clean of flesh and the facial bones removed.

Globally, the Palaeolithic begins roughly 3 million years ago when the first stone tools were fashioned, with the earliest portion referred to as the lower Palaeolithic. The middle Palaeolithic is roughly around 300,000 to 30,000 BP (before the present). At one point during this period, humans came close to extinction as an almost global freeze left only those in tropical regions surviving. The last part of the Palaeolithic, the upper Palaeolithic, witnesses the development of the first modern humans, *Cro-Magnon*. This period ends around 10,000 BP with the retreat of the ice sheet, and the extinction of the larger mammals such as mammoths. Northern regions of Europe could now be continuously occupied.

Britain—or, more correctly, the territory that is now Britain—would have faced extreme fluctuations in climate during the Palaeolithic period. The climate would have ranged from arctic-like conditions in glacial periods to the tropical warmth of the African savannah during interglacials.

This unstable environment made permanent settlement impossible and during glacial periods all evidence of above ground occupation from interglacial periods, such as camp sites, would have been destroyed by the reshaping of the landscape by the freezing and melting of ice. It is for this reason that cave occupations are so important. They provide the only evidence that survives the changes of the outside world.

The Palaeolithic occupation of Britain can be summed up chronologically beginning with the lower Palaeolithic site at Boxgrove in West Sussex. Some 500,000 years ago a *Homo heidelbergensis* sat here on the edge of a chalk cliff overlooking a water hole and made a flint hand-axe. This apparently crude tool in fact displays considerable ability to think ahead and plan. It would have required a suitable piece of flint to be selected, which was then chipped into a tool. The people who lived here shared their environment with lions, bears, rhinos, horse and giant deer.

The next evidence we have from Britain is the Neanderthal occupation of a cave at Pontnewydd in North Wales dating from about 230,000 BP. There is then a break in the occupation of Britain as conditions become too harsh for survival. Approximately 33,000 BP, *Homo sapiens sapiens* (he who thinks) moves into Britain.

In 2003 it was discovered that *homo sapiens* had travelled further north than was previously known. The evidence came from the Creswell Crags Gorge in Nottinghamshire in northern England. Inside the caves 14,000 years ago, at roughly the same time as the Cheddar Gorge occupation, humans carved figures of animals into the rock walls, using the natural irregularities of the surface to give a three dimensional effect. Someone also carefully carved the figure of a horse into a piece of horse bone and tried to depict galloping using horizontal lines.

Earlier examples of rock art can be seen in France and Spain. The Lascaux Caves in the Dordogne region of France contain some of the most complete and impressive cave paintings of the Palaeolithic. These paintings are 17,000 years old and appear to depict the ideal hunt. Horses, reindeer, bison and aurochs are all crammed together as they flee the non-depicted hunters, and the horses in particular look fat.

It is interesting that the occupants of this cave should include reindeer in this hunting scene, as excavation of the cave floors revealed that they did not consume reindeer even though the animals were in the area. A rather haunting image of a half-man half-bird being trampled was found in one of the recesses of the cave, this could have been a symbolic warning to hunters of the dangers of the hunt or an actual event that happened as some archaeologists have suggested hunters would go hunting disguised as prey.

In 1879 the cave art of Altamira, Spain was discovered. The paintings were of hand prints, animals and geometric shapes. The bones of the animals depicted were littered all over the floor and the remains of the tools and paint used were among them. These paintings were made between 17,000 and 13,000 BP, and unlike other rock art the creators have used several different colours. These art works were made in almost total darkness and would have taken great time and effort, raising questions as to why early *homo sapiens* felt the need to depict the ideal hunt in the darkness of the caves, carve their prey into the very bones of the prey and leave the outline of their hands behind.

The southwest of Britain has yielded many interesting human remains such as Cheddar man, who died possibly from a blow to the head, and the Red Man (formerly known as the Red Lady) of Paviland

cave in Wales, who died some 27,000 years ago. He was buried towards the back of the cave, meaning that those who buried him would have needed torches to see what they were doing. They also sprinkled red ochre over his remains. This is the first time we see some kind of burial rites taking place in Britain.

Another cave in the southwest area is Kent's cavern near Torquay on the south coast of England. Occupation of this cave started around 31,000 BP and the remains told a similar story to that of Gough's. Human bones recovered from the cave showed cut marks consistent with that of defleshing, a practice used on animals to prepare them for consumption.

Animals that were hunted and killed would be brought to the camp in order to be prepared. The meat would be stripped from the bone, creating defleshing cut marks, and the bones would have been split in order to extract the marrow. The skin would then have been treated and prepared so that it could be used as clothing, bedding or even tent covers, and needles and pins would be made from the spare bones. Almost every part of the animal was used and what could not be used was then discarded in a particular place like an alcove in a cave or a pit. It appears that the bones of the three humans were also split to extract the marrow. It is fairly likely that cannibalism was taking place and so it is possible that the three individuals in Gough's cave were consumed.

At this time the landscape of Britain would be mostly covered in birch forests, in which herds of wild horses and red deer would live. The caves of Cheddar Gorge contained a large amount of horse bones that bear the same marks as the human remains. These bones were of 10- to 12-month-old horses, which suggests that the caves were occupied during the spring and summer seasons as the herds travelled northwards to breed.

The fact that the food was quite plentiful and the weather was not extreme throws out the idea that humans were being consumed out of desperation. The presence of Baltic amber within the occupation layers of the caves also reveals that the people here were capable of long-distance travel between Britain and the rest of Europe. This was possible during this period as Britain was connected to Germany, Denmark and the Netherlands by a low-lying stretch of land along the eastern coast.

This stretch of land is referred to as Doggerland, and physical evidence of its existence was recovered when commercial trawlers started pulling up mammoth remains and barbed antler points. Doggerland was completely submerged around 8,500 BP, making Britain an island. Before this, bands of early humans could have travelled through Doggerland hunting the migrating herds and gathering wild seasonal foods to spend the summer in the caves of Cheddar Gorge before heading south again for the winter.

The skulls of Gough's Cave were fashioned into cups much as animal hides were fashioned into clothing. But this could be more than just a practical act. We know from the artefacts at the other sites that these early modern humans were beginning to explore more abstract forms of thought, expressing a development beyond their immediate sensory experience of the world. Cannibalism could be evidence for belief in an afterlife or other relatively developed concepts of human identity.

It may be that the cannibalism at Cheddar Gorge is an act of victory over another rival band. Or the three Cheddar Gorge skull cups may represent individuals who were members of the band that consumed them. It seems unlikely that this was an act of violence against outsiders because there is no evidence of traumatic damage. Smashing someone on the head with a hand axe would have been the quickest way of killing someone. But these skulls remain intact and the only marks on them are of careful craftsmanship. There are plenty of accounts of this during modern colonial periods, but caution is needed as these accounts were used to justify the subjugation of many peoples.

If disputes were to break out between tribes during the Palaeolithic era, it would not have been about land, as the people were nomadic and followed the herds. There is also evidence from occupation deposits that certain bands ate certain prey. For example, the people of Cheddar Gorge 14,000 years ago ate only horse even though there were deer in the area. This suggests that there was some form of agreement between the bands so that they would not exhaust the food supply by over-hunting. The development of ownership and land divisions would lead to skirmishes between tribes, but for Europe such developments would not occur until the introduction of farming in the Neolithic period, nearly 9,000 years after the Cheddar Gorge occupation. At the same time vast areas of land had disappeared as sea levels rose in the Flandrian interglacial period and mammoths and other mega fauna became extinct.

It is during the Palaeolithic period that humans start to develop abstract thought, which was expressed through their cave art. They show the animals that they hunted or, as could be the case with the reindeer, revered, or both. It could be that a higher development of self-awareness was taking place, which is suggested by their early burial rites. The Red Man of Paviland has the mineral red ochre scattered on him. The hand prints at Altamira seem to suggest that the artist was saying "this is the hand that created this work, this is me."

It seems likely that these early modern humans were also beginning to think about death. They may have been wondering "what happens to the bit that is you?" It is possible that the bands of this era had developed their own identities, and, as all members of the band would contribute to the band's wellbeing when they died, they would either be buried or their spirit/soul reabsorbed into the band by consumption.

The Skull cups from Gough's Cavern are currently on display at the Natural History Museum in London.