

Paleolithic Art: Cognitive Aspects of Human Evolution

Tim Gill (Doctoral Candidate in Anthropology, U. C. Berkeley)

One of the questions guiding Tim Gill's research, and the question to which he addressed his lecture, is what we can learn about the minds of prehistoric human beings from observing the archaeological records of their lives, including the art they created – understood not as we understand art today, i.e., understood not as something created solely to be collected and displayed in homes and museums, but rather as a wider range of expressive forms and media. One of the periods of greatest interest to him and other archaeologists who have asked this question is the Upper Paleolithic, between roughly thirty and forty thousand years ago, when human beings with brains and bodies much like our own appear to have moved into Europe (ca. 40,000 years ago), and when Neanderthals, who had already lived in Europe before the arrival of modern humans and then existed alongside them in some places for over five thousand years, trading and possibly interbreeding with them, seem to have disappeared (ca. 27,000 years ago). This is also the period in which, as some modern archaeologists have alleged, human beings underwent a “creative explosion,” beginning to create all kinds of things that they had not created before, including more advanced tools and works of art with symbolic meaning.

This alleged “creative explosion” was the focus of most of Gill's lecture. Among the works of art created by humans at the time (and, in the case of new kinds of tools and some jewelry, created by Neanderthals as well), Gill displayed images of carvings, tools, figurines, paintings, musical instruments, and pendants, including the famous cave paintings of animals from Chauvet, France (*figure 1*); carvings of a horse and a mammoth (possibly a pendant) from Vogelherd, a cave in the Lone Valley in Germany (*figure 2*); a “Löwenmensch” figurine, also found in the Lone Valley (lion-man - *figure 3*), and a similar figurine found in Hohle Fels; a female figurine (*figure 4*) and a flute found in Hohle Fels (*figure 5*); paintings of horses (*figure 6*), a painting of an intriguingly ambiguous composite figure (*figure 7*), and handprints (*figure 8*) discovered in Chauvet; and bone and ivory tools from Chatelperronian sites.

Gill presented two theories that seek to explain these developments. According to the first, developed by Steven Mithen and described in his book, *The Prehistory of the Mind* (London, 1996), there are three kinds of intelligence, defined by the abilities that depend on them: “technical” (related to tool-making), “natural” (related to knowledge of the natural world), and “social” (related to insight into other minds). Before the “creative explosion,” these types of intelligence were separate from one another in human thinking, and at some point the barriers between them broke down, allowing human beings to produce representations with symbolic meanings, in the form of art objects and religion. According to a second theory, known as “conceptual blending” or “conceptual integration,” which is similar to Mithen's and is described by Gilles Fauconnier and Mark Turner in *The Way We Think* (New York, 2002), human beings became capable of “blending” concepts that they had previously been able to cognize only separately. Blends (like our “computer desktop”) are one type of concept that results, according to this theory, from the integration of two distinct

"mental spaces." The creation of such blended concepts explains the growth of human creativity in art and religion. The "lion-man" figurine (*figure 3*) could be an example of such blending. Metaphors can also be seen as a type of blend.

It has been argued by several prominent archaeologists that the cause of the "creative explosion" was a fundamental biological change in the human brain. The difficulty with such theories is that it is not clear when and to what extent the human brain did change in a biological way. Also, regardless of what point in time one selects for the supposed mutation, there are difficulties explaining the archaeological record. Whether the various apparently newly creative human productions discovered in Europe can be considered evidence of a relatively fast creative "revolution" is debatable. As Sally McBrearty and Alison Brooks have noted in an article, much of the allegedly European breakthrough—including the use of pigments and relatively advanced tools—had already been happening in Africa for a long time. Moreover, as Gill pointed out, changes in human society and culture are also plausible parts of an explanation of why art arose when it did.

Summarized by Simon Grote.

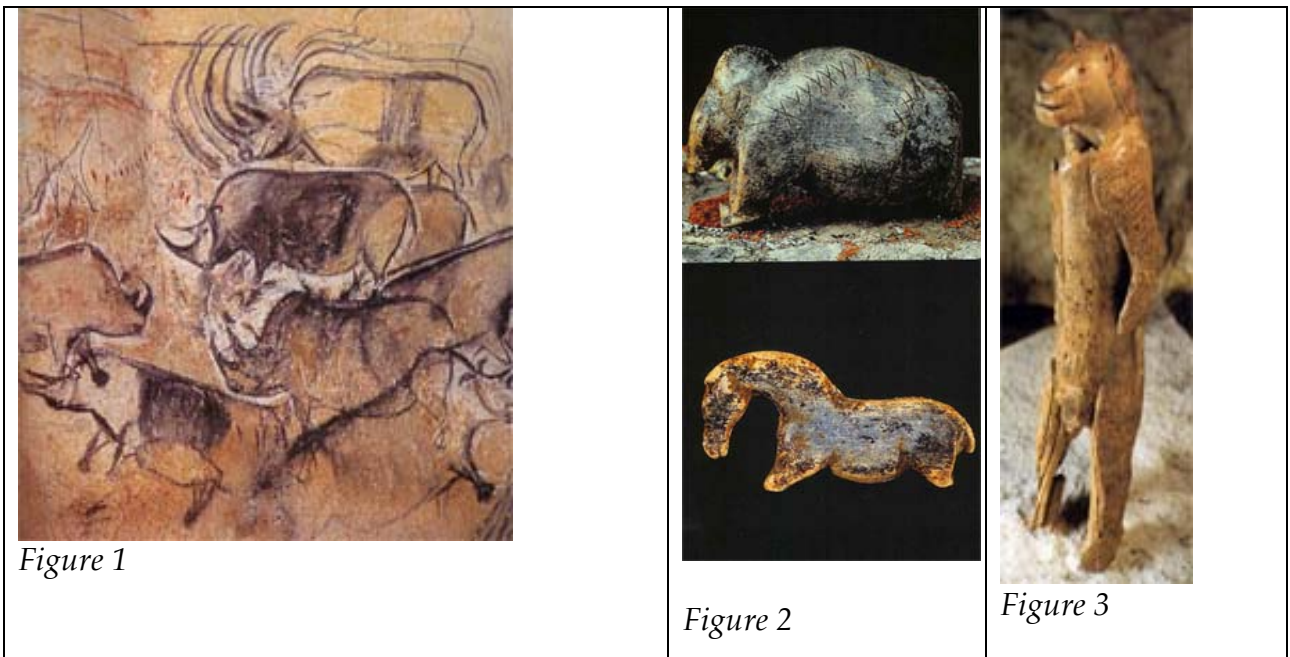




Figure 4



Figure 5



Figure 6



Figure 7



Figure 8