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PLEISTOCENE ART OF THE WORLD

Short articles
THE DOUBLE AND THE VISION:
What Cognitive Level is Necessary to Associate a Drawing with its Referent?

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This article addresses the possibility that the creation of the first figurative (or iconic) images by *Homo* can inform us on the degree of cognitive development of their creators.

**Semiological analysis of images**

Starting from the basis that the production of images implies the capacity to read them, I proceed with a semiological analysis of the act of reading. Like any sign, the iconic image transmits a limited amount of information relative to the Object to which it refers. The receiver of the image is thus asked to make a “semiotic investment” in order to reconstruct, through cognition, the idea or mental image that was already that of the producer. The reading of images is thus associated with a competence that is more cognitive than sensory.

Following Persson, I propose a three-part division of the act of reading depending on the “mode” of reading the images: as a “surface”, as a “reality” and as an “image”. We perceive only the “surface” of an image when we perceive it only in its “plastic” sense, meaning the colors, shadows and gray tones. On the contrary, the image perceived as a “reality” is interpreted as a reflection of an iconic reference, but with no conscious awareness of this reflection (there is thus confusion between the “image” and its “referent”). Finally, when an image is read in the “image” mode, there is a full iconic recognition of the object represented, and at the same time, a full awareness that the image is not the object.

After considering experiments conducted with animals, we arrive at the conclusion that some animals possess certain visual competencies when faced with stimuli as poor in information as are bi-dimensional images. Nonetheless, we have no proof that a “pictorial competence” has been acquired as such. In contrast, following experiments with *Homo sapiens* children, as well as populations with an oral tradition, we conclude that human beings are equipped with a true semiotic network that enables them to automatically and instantaneously decode an image (figurative).

**Image and representation**

Like Michel Denis, we will consider the “image […] as an instrument for the figuration of the signification”. According to him, an image as a representation permits the construction of a model of reality that can be the object of mental manipulation. The image as a “representation” would thus be a sort of “double” of the world, a virtual world in which it is possible to make predictions, calculations and manipulations of all kinds.
Finally, if our aim was to understand why the human visual system provides us with the capacity to read visual signs as an “image”, the question to ask would be pragmatic: what (adaptive) behaviors can be manifested by an animal species that can use images (internal and external) to show its cognition? According to Denis, “Representations can be interpreted as the functional bases of these conduits, as permanent structures that serve to anchor these conduits which are by nature circumstantial”.

**Conclusion**

To conclude, we suggest that the beginning of the visual-poietic behavior of humanity proves the existence of its capacities for planning and manipulating reality through “representations”. Concretely, “a rock art image may have [...] served as a cognitive and mnemonic tool”. However, we know that animals constitute the major theme of Paleolithic “art”. Considering that they “incarnated [the] survival of [the human being]: a violent death or a full stomach”, we can conclude that a representational cognitive treatment of images of animals would have had a high adaptive value. The image thus conceived could have served, for example, to “emphasize the precise spot to shoot a projectile into a prey or a hunter or to reveal the morphological characteristic of an animal of a given age”.

A painted rhinoceros in Chauvet Cave (Ardèche, France), considered here as a symbol of the first figurative image created by our ancestors.
Bilingual review of prehistory