



PROCEEDINGS OF THE IFRAO CONGRESS
September 2010

2013 # 5

<http://www.palethnologie.org>
ISSN 2108-6532

directed by
Jean CLOTTE

PLEISTOCENE ART OF THE WORLD

Short articles



THE COLLECTIVE RESEARCH PROJECT "CUSSAC CAVE" (DORDOGNE, FRANCE):

Study of a Decorated Cavern with Gravettian Human Remains

Jacques JAUBERT, Norbert AUJOULAT†, Patrice COURTAUD, Marie-France DEGUILLOUX, Marc DELLUC, Alain DENIS, Henri DUDAY, Bruno DUTAILLY, Catherine FERRIER, Valérie FERUGLIO, Nathalie FOURMENT, Jean-Michel GENESTE, Dominique GENTY, Nejma GOUTAS, Dominique HENRY-GAMBIER, Bertrand KERVAZO, Laurent KLARIC, Roland LASTENNET, François LÉVÊQUE, Philippe MALAURENT, Jean-Baptiste MALLYE, Pascal MORA, Marie-Hélène PEMONGE, Nicolas PEYRAUBE, Magali PEYROUX, Hugues PLISSON, Jean-Christophe PORTAIS, Hélène VALLADAS, Robert VERGNIEUX, Sébastien VILLOTTE

Following the discovery of Cussac Cave (Le Buisson-de-Cadouin, Dordogne) in 2000 and its expertise by a first group of researchers (N. Aujoulat and collaborators), the services of the Ministry of Culture adopted a rigorous heritage policy to protect the cave, ensure its security and to acquire the property on which it is located in order to create an archaeological reserve that would be the property of the State. Environmental studies of the entire massif (climatic, hydrogeological, microbiological, CO₂, ...) and the equipment of the main sectors of decorated galleries then followed. This phase, requiring nearly ten years to complete, was an indispensable prerequisite to the scientific archaeological research program.

In 2008, a group of researchers was constituted to develop a collective research project in order to program the multi- and inter-disciplinary study of the cave. Let us recall a few of the factors that make this cave exceptional in many ways:

- the first is the good fortune of both the heritage services and the scientific community to be able to work with the main discoverer, M. Delluc, a passionate and rigorous speleologist who is attentive and altruistic, and who offered us an ideal situation. He is now associated with the research team;
- the known length of the gallery is more than 1.6 km. Currently, only a sub-horizontal path, close to the first path of the discoverers, has been walked upon; the discoverers did not attempt to explore the parts of the galleries adjacent to the untouched ground. This is one of the great advantages of Cussac;
- the existence of a complex external (resurgence, travertine) and internal environment with an aquifer, clay deposits, calcitic floors, and diverse speleothems that will be studied by a team of geoscience specialists from the universities of Bordeaux 1, Bordeaux 3 and Paris Sud. In addition, inside the cave there are impressive remains of its occupation by cave bears (dozens of hibernation nests and millions of claw marks in the clay and on the walls), all anterior to its occupation by humans;



Cussac Cave (Dordogne), Downstream sector, panel of the discovery (close-up): engravings of a bison and a mammoth. Graphic trick where the stomach of the bison is melded with the tusk of the mammoth (photo: V. Feruglio).

- the parietal art, which is mostly engraved and sometimes monumental (Great Panel), places Cussac among the major sanctuaries of European Pleistocene art. In this art, rare associations, a style of representing animals and known conventions (deformed bodies, limbs with few details, rarity or absence of fur, anatomical details, “twisted” perspective) assimilate Cussac with sites attributed or dated to the Gravettian period (34 500-25 000 cal BP). A preliminary inventory by one of us (N. Aujoulat 2001-04) permitted the identification of 150 graphic entities. The animals (bison, mammoths, horses, cervids, ibex, aurochs and rhinoceros) represent two thirds of the provisional corpus, followed by undetermined lines, most made with fingers, and an equal number of anthropomorphic signs and representations, each of which equals approximately 9%. Among these, there are several female profiles that are isolated or associated with animals – especially mammoths – and the Great Panel recalls a theme present in the iconography of the cave of Pech Merle (Lot), also attributed to the Gravettian. Finally, there are a few representations of geese, a theme that is very rare in Paleolithic art.

Using 3D photography, a test recording was begun in 2009 on the Panel of the Discovery and this method will be applied to the entire site.

In 2009, we began an inventory of the remains left by anthropogenic activities preserved in the sectors of the gallery that are sometimes very far from the decorated panels (Upstream branch). These included deposits of a red colorant material on the wall or the floor, torch smears, charcoal marks made when passing, footprints, and broken stalagmites and stalactites. On the floors, which have not been touched since the last full glacial period, there are a few objects left there by the Gravettians: a worked reindeer antler fragment, a possible lamp and flint blades.

Finally, and this is what has already made Cussac an exceptional site, in the same gallery as the parietal art, there are several bear hibernation nests (Loci 1 and 3) that contain the human remains of at least six individuals, including 2 adolescents. A ¹⁴C date of a bone sample from Locus 1 (25 120 ± 120 BP, Beta-156643) indicates that these remains may be contemporary with the parietal engravings. The state of preservation of the human remains, as well as their location and the supposed presence of ochre, support the hypothesis that they were intentionally deposited by the Gravettians. A team of physical anthropologists has been constituted to begin a non-invasive study using appropriate methods (photogrammetric recording), including DNA identification.

At the same time as the first field sessions in the winter of 2009-2010, we sought to further develop the project and add to its scientific team or open it to other disciplines (topography, new generation 3D recording/photogrammetry, magnetic survey of the ground, the application of diverse dating methods, paleogenetic isotopic analyses of the cave bears, ...). There is no doubt that in the coming years Cussac will become a fascinating research laboratory in an exceptionally well preserved site.





 **P@LETHNOLOGY**
Bilingual review of prehistory