
The light of the paleolithic artists

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Abstract

The discovery of Paleolithic rock art gave rise to multiple questions regarding its meaning, its location, the procedures in its execution, as well as the problematic regarding the type of lighting that the artists could have used for the execution of the works inside the caves.

Thanks to the data the archaeological record has provided, different types of supports and fuels have been identified as possible lighting systems inside the caves with rock painting. In the same way, the various analytical systems have revealed the presence of soot and organic particles on its surface, which is related to the possible use of animal fat (marrow).

The use of this type of lighting systems raises a series of questions about their direct influence on the way of looking at rock art. The documentation and the existing record of the numerous decorated panels of the Prehistory, has been based on the use of what we call "daylight", that has a color temperature of 5,500°K. However, the lighting systems used for the execution of these painted panels in Prehistory, are far from the lighting used nowadays to document them. The fat based lamps generate a dimmer lighting in constant movement, which increases the volumetric features of the support and favors them as an integral element of the works. In addition, the color temperature of this type of lamps, much lower than the so-called standard, directly conditions the nuances in the color and the creative characteristics inherent to its execution.

Taking into account the differences of the lighting systems used in Prehistory and the lighting systems used nowadays to document Palaeolithic art, we intend to generate a new way of looking at rock art, taking into account the importance of the color given by the luminaries used during the execution of the paintings and the possible color variations according to the different types of fuel. This way, we would be able to obtain valuable information about the color generated by the light of these lamps that will give us a closer approach to the way these decorated panels of Prehistory were created and visualized by their authors.

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