Cave Art in Context: Methods for the Analysis of the Spatial Organization of Cave Sites

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Abstract Investigations of prehistoric cave art have long neglected the surrounding context: space, archaeological objects, and imprints. As a result, an integrative structural approach that analyzes cave art as part of an anthropomorphized landscape has not been available. This article draws on urban planning and the physiology of the human eye to provide an innovative archaeospatial analysis of cave sites. A set of relevant features from the caves of Bédeilhac, Fontanet, and Le Portel was selected and defined (light zone, chamber type, path network, mode of movement, and available space). An analysis of the prehistoric remains in the caves allows the reconstruction of different concentrations of human activities (cave art, archaeological objects, and imprints). The projection of these concentrations onto the structured map of the caves results in four types of locations: drawing location, supply location, drawing location with substantial activities, and drawing location with consumption activities. This approach opens new avenues for the archaeological perception of caves and their inhabitants: Upper Paleolithic humans were very familiar with caves and probably followed a master plan during their stay in the dark.

 $\textbf{Keywords} \quad \text{Prehistoric cave art} \cdot \text{Spatial organization} \cdot \text{Landscape archaeology} \cdot \\ \text{Use of caves}$

Introduction

Caves are "[...] natural cavities in the earth's crust that are to a large extent enclosed by compact masses of stone and rock; they are filled with either air, sediment, or water [...] and are large enough to permit entry by humans"

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