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ROCK ART, MOBILITY, AND CLIMATE CHANGE IN SOUTHERN PATAGONIA IN THE HOLOCENE

Why the Change?

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This paper argues that many of the changes observed over the course of time in southern Patagonian rock art can be explained not so much from an exclusively “cultural” perspective, but also in terms of changes in the systems of mobility and shelter in hunter-gatherer societies that resulted from the climatic and environmental shifts that took place in the Holocene.

The far south of Argentine Patagonia is characterized by a semi-desert of shrubland and grassland steppes and has always been occupied by hunter-gatherer populations. During the Holocene, a series of significant climatic changes took place in the region, particularly changes in the west winds (Southern Westerlies), which over time gradually lead to a drier climate and lower levels of humidity. This was most notable in the extreme droughts that were experienced in the late Holocene during the so-called Medieval Warm Period. The decreasing levels of humidity, which were particularly marked in the late Holocene, were an important factor in the need for greater mobility and expansion to new areas (plateaus), regardless of the location of permanent settlements and shelters. The increasingly dry regional climate resulted in a more extensive area of shrubland steppes and, together with the basaltic plateaus, they came to form a new regional landscape.

In this context, what factors can be considered to have caused the changes in techniques and designs (paintings) that had lasted throughout the previous millennia? Why did the remarkable diversity of painting that had existed in the early and middle Holocene disappear in later times? Was this simply a cultural shift? On the basis of a regional discussion on the evidence provided by rock art, we would suggest that such significant changes were the result of shifts in the movement of hunter-gatherer populations, arising from a combination of climatic and technological factors.

Rock art, in the form of both paintings and engravings, has always been characteristic of Patagonian hunter-gatherer populations. The techniques, styles, and spatial distribution of the art have varied however, in line with the climatic changes that occurred in the region during the Holocene. In the early and middle Holocene, the availability and location of caves and overhangs appears to have conditioned the movement of hunter-gatherers, serving as shelter and refuge at a time when environmental conditions were more extreme than in the late Holocene. Furthermore, the greatest quantities and diversity of rock art, particularly of paintings, has been found on the walls of these caves and overhangs. The aforementioned climate process can be considered to have subsequently increased hunter-gatherer mobility, resulting in expansion to new open areas in which the shrubs of the steppes were used to develop new techniques for open-air shelters, and which already at the time involved using animal hides as a form of “awning”. In this way, rock art extended to all available open areas, making particular use of the basalt rock

on the plateaus, which had become fully assimilated as a result of new conditions of mobility. At the same time, as caves and overhangs were no longer essential as shelters, conditions arose for alternatives to the cave paintings which, for millennia, and since the beginning of the Holocene, had dominated this type of regional rock art. In this way, the friable walls of the caves and overhangs ceased to be the main surfaces for the production of rock art, and the basalt rock faces and boulders found in open air sites – which lent themselves better to rock art – meant that engraving techniques became far more predominant than they had been earlier in the Holocene.



Engravings at Meseta del Strobel.

The information available on the macro-region (*sensu* Dincauze 2000), which includes the Meseta Central, the area around the Pinturas River, and the Meseta del Strobel and its surroundings (all in the province of Santa Cruz), opens this hypothesis up to discussion. In the first two areas, as a result of geological “mountain” formations characterized by large numbers of rock shelters, the majority of rock art is in caves and overhangs. In the “basaltic plateau” formations, such as at the Meseta del Strobel, the rock art mainly involves engravings. In other words, there is a relationship between the geological formations where the art was located and the techniques used (painting or engraving). In turn, this relationship coincides with the chronology of the rock art, in which painting techniques were predominant in the early and middle Holocene and engraving techniques in the late Holocene.

We believe that the arguments presented here can contribute to discussions about the factors that caused the changes and diversity in rock art over time in the Patagonian region.





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