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Short articles



ENGRAVINGS FROM THE EARLY HOLOCENE IN CUEVA EPULLÁN GRANDE (NEUQUÉN PROVINCE, ARGENTINA):

Latest Research

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The multi-component site of Cueva Epullán Grande is located in the south of Neuquén province (in the northwest of Patagonia, Argentina) and contains an archaeological sequence spanning the early Holocene to historical periods.

Initial research was carried out under the Rescate Arqueológico e Investigaciones Prehistóricas project in the Piedra del Águila area, following an agreement between the University of Buenos Aires and Hidronor S. A. In 2006, the area was incorporated into a binational project, following an agreement between the University of Buenos Aires (Argentina) and the University of Cantabria (Spain).

In this paper, we discuss the oldest engravings, which are found on the cave floor. These engravings were covered by a hearth, which has been dated using ^{14}C to 10 000 BP. We also present the latest work carried out to obtain comprehensive records using the current available technology.

Location and description of the site

Epullán Grande is located near to Cañadón del Tordillo in the middle basin of the Limay River at latitude 40° 23' 11" south and longitude 70° 11' 47" west. The cave has been carved into a tuffaceous Collón Curá formation. We found three other sites with rock art in this formation: La Oquedad, Cueva Epullán Chica and Paredón Sur.

Epullán Grande contained about 45 m² of sediment, of which about 39 m² have been excavated. The engravings discussed in this paper appear to be the first sign of human activity at the site and date to before 9 200 cal BC, according to the dating of hearth #32, which partially covered them (9970 ± 100 BP -LP-213; 9860-9220 cal BC). There are petroglyphs on the walls and roof of the cave, as well as on a tiny overhang located immediately to the west of the entrance, and all of them have been made in a style that is quite widespread in Patagonia, known as “*de pisadas*” (footprints). A stratigraphic level sealing the engravings indicates that some of them were made before 2 740 ± 50 BP (Beta-61146; 970-780 cal BC).

The engravings on the cave floor and their context

The incisions cover an area of around 16 m² on the floor of the cave, from about the centre of the cave to beyond the dripline and involve:

- Interior: a group that involves two types of incisions (figure):
 - to the south, there is a series of sub-parallel lines that lie on an approximately north-south axis and are 30 to 90 cm long and a maximum of 2.7 mm wide. Some of these lines branch at one end;
 - to the north there is a further series of short lines (on average about 20 cm long), which are narrower and which often intersect with each other.
- Mouth of the cave and antechamber: incisions similar to the latter.
- Interior: there is a small group of very thin, intersecting lines.



Engravings on the floor of Cueva Epullán Grande.

As well as these incisions, the bedrock has a series of hollows in it. Two of the largest of these had small amounts of burnt plant remains in them and six of the smaller ones appeared to have been made by burrowing animals. To contextualize the engravings, the oldest spatio-temporal approximation came from stratum #07. Hearth #32 was a part of this and covered the floor of the cave. It was formed between about 10000 BP and 7060 BP, which is the date of the overlying stratum #106.

The most common lithic tools found were scrapers. There was also a bifacial stemmed projectile point without barbs, two racloirs, and a range of other tools including notches, knives, denticulates and flakes that had been retouched. The predominant raw material was silica, which could have been obtained within 5 km of the site. However, debitage indicates that two non-local raw

materials tended to be used for the bifacial tools: dacite (which was used for two of the fragmented bifacial tools) and obsidian. Although there is a dacite quarry about 40 km to the west-southwest on the other side of the Limay River, it appears that it could be obtained a shorter distance away in the form of fluvial gravel. The obsidian appears to have come from distant sources about 100 km to the west-northwest.

Discussion

The question stands as to whether the lines observed on the floor of Epullán Grande could have been caused by a geological phenomenon or the action of plants or animals. We do not know of any geological processes that could have made these kinds of marks inside a cave however, and this has been confirmed by specialists in this area. It cannot be attributed to the action of roots or a hypothetical animal (for example a large edentate) that may have occupied the cave either, as some of the incisions are thin and intertwined, forming cross-hatching, while four thicker lines branch at their respective ends.

A technical explanation could also be explored: that the tuffaceous surface was used to scrape a striking platform or to polish tools. However, several of the incisions are over 90 cm long, which is somewhat excessive for such a task. Furthermore, the incisions are numerous, while the archaeological remains found in the sediment that covered the bedrock are relatively scarce. Nor have any other observations been made in the local area of tuffaceous outcrops having been used to prepare artefacts through abrasion. On the basis of these arguments, and despite the absence of figurative motifs, symmetry or obvious signs of organization, we are inclined to view these incisions as man-made and deliberate, in other words as a form of graphic expression.





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