## SOWING STONE ON ASHES: CONTRIBUTION OF MICROMORPHOLOGY TO THE UNDERSTANDING OF RITUAL PRACTICES

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## Résumé

Fire is arguably one of the tools most widely used during the Neolithic, for various purposes, from tool making and soil clearance to lightening and ritual performances. Most of the evidences of fire related archaeologically recorded features are agriculture related. However, there are few less reported cases associated to ritual practices and constructions, namely under megalithic monuments contexts. There are not too common and there is a scarce use of appropriate methodologies that may not only establish the natural or intentional causes of firing but also recognise the causes and effects of specific firing.

In the archaeological record of the Middle-Lower Tagus basin, in Portugal, evidences related to pigments heating (for rock art paintings), lithic debitage processes (namely pressure flaking) or transformed raw materials (e.g. ceramics, bronze) are abundant.

The study of Anta 1 de Vale da Laje had suggested, from the end of last century excavations, that fire might have been strongly used in the clearing of the surface on which the passage grave was built, as indicated by an enriched layer of phosphate, namely phosphorus, partially resulting from a likely slash-and-burn vegetation cover management. This hypothesis was also endorsed by the absence of evidence of any ditch, as a source for sediment materials for building the burial mound, thus suggesting a wider surface scrapping, itself requiring a prior clearance procedure. The use of fire was also considered a possible explanation for the fragmentation pattern of some of the stones associated to two sub-circular collapsed structures, built on top of the mound on both sides of the passage grave entrance, interpreted as ritual features whose main elements should have been made of wood.

Micromorphology is one the methodologies currently been applied for assessing fire and burning evidences in Archaeology. The Anta 1 de Vale da Laje megalithic monument, a passage grave in Portugal is one of sites that has been studied within the context of firing, using micromorphology analysis techniques.

Micromorphology confirmed and detailed the stratigraphic sequence of construction and usage layers of the monument, having confirmed the hypothesis of fire clearance of the surfaces, before the construction. Archaeobotanical studies has revealed a prior wooden cover, with a mix of shrub vegetation type. The need for total and fast vegetation clearance was possibly

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the reason leading to set a fire which allowed faster clearance through burning, an episode which is neatly recorded in the thin sections from the site. The paper details the assessment of these evidences and further presents the analytic methodology, both in the field and in the samples processing.

Mots-Clés: Fire, Neolithic, Micromorphology, Passage grave, Megalithic Monument