

Painted marks at El Mèdol quarry near Tarragona: observations on the logistics and organisation of a Roman limestone quarry

Maria Serena Vinci

This paper aims to present a set of painted marks and inscriptions on stone blocks from El Mèdol quarry (Tarragona), the limestone quarry which supplied the stone used to build most of the public edifices, including what is known as the Provincial Forum, in the nearby town of *Tarraco*, capital of *Hispania Citerior*. There are 16 marks in red paint and 3 written in charcoal, all linked to the phases of extracting and shaping the stone.

Painted inscriptions on building materials are rarely preserved, normally being lost with the shaping of the ashlar or due to weathering. Although quarry marks are often difficult to interpret and their meaning is not easily accessible to us, they are useful for approaching aspects of the work organisation that would otherwise remain unknown. The discovery of El Mèdol inscriptions provides basic information for study of the complex mechanism that was a building site and the organisation of the work from quarry to completed monument.

The study of the *modus operandi* and management of a *cantiere edilizio*¹ presents challenges caused by a lack of clear information regarding some of the working phases. The ancient sources and epigraphy often provide insufficient information on the logistics and management of both quarry and building site activities. This is even more true in the case of the supply of regular building materials such as limestone or *pozzolana*, by contrast with the better-known operations relating to prestige materials such as marble.² In some cases, however, quarry and masons' marks³ can be a useful tool for considering the organisation of the phases of work in the quarry and/or at the building site. Studying their use and function has potential for adding to our knowledge as they are a kind of tracking code, a communications system used by the ancients to record the material and working stages.

Graphic, numerical or alphabetic signs used in construction processes are found in structures as early as the Archaic Greek period,⁴ but the best-known cases are the Roman *notae lapidinarum* documented on Imperial marble. We are beginning to understand how they were used on marble in the different working phases of extraction, accounting, transport, storage, control and trade.⁵ The marks, or in some cases actual inscriptions labelling

1 For a terminological examination of the English equivalent for “cantiere edilizio”, see J. DeLaine, “Conclusions,” in S. Camporeale, H. Dessales and A. Pizzo (edd.), *Arqueología de la construcción I* (Mérida 2008) 324.

2 From as early as the end of the 1st c. A.D. the imperial quarries in the provinces were characterised by a complex organisational system; it became fully developed from the Hadrianic period.

3 The definition and terminology for signs or marks on stone is complicated. Bibliography for the Middle Ages has dealt with this issue more systematically, coming up with “signes lapidaires”: J.-L. Van Belle, “Les signes lapidaires: essai de terminologie,” in id. (ed.), *Actes du Colloque int. de glyptographie de Saragosse, 1982* (Zaragoza 1983) 29-43; id., *Pour comprendre les signes lapidaires* (Brussels 2014).

4 For the Greek world, see an earlier summary in R. Martin, *Manuel d'architecture grecque*, I (Paris 1965) 225-31.

5 The bibliography is vast. It includes J. C. Fant, *Cavum antrum Phrygiae* (BAR S482; Oxford 1989);