

The stone is limited. Make the most of it. Roman Wits in the construction process.

*González Barrios, Almudena
Department of Building and Architectural Technology
Upper Technical School of Architecture of Madrid
Madrid, Spain.*

It is intended to address the issue of the stone from the standpoint of the limitation of quarries.

Since ancient times, the stone was used by extracting the environment near the site that was to be used. Only unique and precious items were transported; as writes the second book of Chronicles, on Jerusalem.

At the time Rome was founded, began to be built with the closest materials and the Greek and Etruscan heritage teachings; later the Romans were adopting new techniques based on the shortage of these materials.

For construction, the Hellenistic tradition was based on the use of large blocks, thanks to the abundance of stone, but the Etruscan influence with the use of materials in a simple way, the cyclopean or megalithic way, left its influence in the Roman world, which it then used to develop its new skills to the scarcity of this essential building material, the stone.

Since the sixth century B.C. were developed various techniques: Opus Siliceum, Opus Quadratum, Opus Caementicium, Opus Incertum, Opus Quasi Reticulatum, Opus Reticulatum, Opus Spicatum, Opus Craticum, Opus Mixtum or Listatum, Opus Testaceum or Latericium, Opus Signinum, Opus Africanum, Opus Vittatum.

Passing the time of Augustus, Tiberius-Claudius, Nero, Flavian, Trajan, Hadrian, Antonine, Septimus Severus, Elagabalus, Probus, Diocletian, Costantine, Teodotico.

Various forms of treating single stone were passed, including fillers in the interstices, using binders and other ceramic materials, etc.

Unlike many abandoned quarries, in Rome was Apollodorus of Damascus, the architect who was commissioned to provide a solution to the open quarry wall, building the Trajan's Market, presenting a circular shape toward outside, to better withstand the pressures of the earth.

It will represent the chronological and geographical evolution with examples on the various techniques mentioned.

This work aims to appreciate value to abandoned quarries and extol the value of the stone.