

Essay

Talking with Vault Builders: a documentary

MAFALDA BATISTA PACHECO
CHAM Centro de Humanidades
NOVA FCSH

The process of building a vault requires mastering knowledge of construction, technique and materials. It requires a learning process that mostly takes place at the work site, and which is then transferred from one generation to the next, mainly within the family. Building a vault poses several challenges, depending on the geometry, use and finish of the vault. Thus, it is a process which goes through several phases. The main character in the Portuguese historical novel *A Abóbada* (The Vault), by Alexandre Herculano (1851), was a blind, old master builder, who remained under the stone vault in the founder's chapel at the Monastery of Batalha for three days and nights after its centering (a provisional support structure used during the construction process) had been removed.

That character – Afonso Domingues – was inspired by a real master builder who had worked in that monastery at the turn of the 14th century, and whose action was proof of his trust placed in the structural stability of the stone vault as it had been conceived, after an acquired body of construction knowledge. The scene was based on a tragic episode which had taken place in the Monastery's chapter room: the collapse of the stone vault immediately after removing the centering, under the supervision of a foreign master builder, David Huguet. **[Fig. 1]**

This episode will raise questions to any reader curious about the subject at hand. How is a vault built? What causes it to collapse? Are vaults still built? As part of understanding the process and the technical issues surrounding the construction of vaults under the scope of the Vaulted South Project – Vaulted vernacular houses in the South of Portugal, two team members interviewed several *mestres aboba-*

ORCID: 0000-0002-1091-6325
<https://orcid.org/0000-0002-1091-6325>



Fig. 1 Drawings of the vaults in the Monastery of Batalha, Portugal. Source: James Cavanah Murphy, 1795.

deiros (vault master builders) from the eastern Alentejo region heirs of the local understanding of brick vaulting, a particular construction system that goes without the use of centering for their construction, and which has been applied in thousands of houses in south Portugal in a vernacular context, very different from the Monastery of Batalha.

The interviews were conducted by João Vieira Caldas and Mafalda Batista Pacheco in the scope of the *Jornadas Europeias do Património* (European Heritage Days), held in the Igreja do Espírito Santo, in Moura, on 23 September 2023, and promoted by the Câmara Municipal de Moura. They also took place at the worksite of a domical vault, in a house located in the surroundings of Baleizão, on 15 December 2023. The interviews were recorded and two documentaries created.¹

The documentary *À conversa com os mestres abobadeiros* (Talking with Vault Builders) is based on the round-table talk during the European Heritage Days in Moura. It features the vault master builders Manuel Fialho (b. Vidigueira, 1952) and Joaquim Agulhas (b. Amareleja, 1975), who, among other topics, addressed the building context, details of the construction process, nomenclature, and knowledge transfer and rehabilitation.

The partner documentary, *Na obra com os mestres abobadeiros* (On the Work Site with Vault Builders) resulted from monitoring the building of a domical vault in a house in Baleizão by master builders António Galamba (b. Serpa, 1960) and Hélder Ferreira (b. Serpa, 1958). The topics addressed were the same as with the other masters, but this documentary also focuses on the process of vault building step-

¹ Documentaries undertaken as part of the FCT EXPL/ART-DAQ/0171/2021 project, 'Vaulted South – Casas vernáculas abobadadas no sul de Portugal / Vernacular vaulted houses in the south of Portugal' (DOI:10.54499/EXPL/ART-DAQ/0171/2021), coordinated by Mafalda Batista Pacheco and Margarida Tavares da Conceição with the support of CHAM (NOVA FCSH/UAc), through its strategic project, sponsored by FCT (UIDB/04666/2020, DOI10.54499/UIDB/04666/2020).



Fig. 2 A master builder at work during the construction of a vault in Baleizão. Source: Mafalda Batista Pacheco, 2023.



Fig. 3 A master builder restoring the vault of a house in Serpa. Source: Mafalda Batista Pacheco, 2022.

by-step, the materials used, the differences between two main brick vault building techniques without centering, and the way bricks are assembled. **[Fig. 2]** This topic's cultural and emotional depth can be felt from the testimonials of the master builders, covering how they learned the trade from their relatives, how they built with their descendants in mind, and how they bemoan the imminent loss of their almost timeless know-how.

A five-minute teaser, **'Talking with Vault Builders'**, was also created to promote these fascinating contents, allowing prospective viewers to catch a glimpse of the ambience surrounding vault construction, while serving as an introduction to the mastery of vault-making and some of its technicalities. The first minutes are dedicated to the testimony of two builders from Amareleja and Vidigueira, during the round-table in Moura. At the end of the teaser, a 'choreography' of brick assembling shows two builders from Serpa carrying out the construction of a vault, combining gestures and the handling of tools and materials, in a scene full of textures, colours and sounds.

These documentaries aim to record the living memory of the art and knowledge of building brick vaults, to promote conservation and rehabilitation, and to draw attention to a specific architectural and cultural heritage about to be lost. **[Fig. 3]**