The Nuraghe Factory. A methodological approach to the analysis of construction processes

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Résumé

The beginning of the Middle Bronze Age (XVIII-XV century BC) up to the First Iron Age (IX-VII BC) is the chronological context in which the Nuragic Civilization developed in Sardinia. In this historical period, the Nuragic populations expressed their constructive vocation through the design and construction of unique architectural types such as the Nuraghi, the Wells and the Sacred Springs, the "Tombs of Giants". Considering the large amount of works carried out and spread throughout the island, it can be assumed that, in that specific historical period, the Nuragic people had at their disposal a wealth of acquired technical experience and consolidated construction practices. This study provides with a hypothesis about the methodology adopted in the construction of a tholos nuraghe with the aim of understanding its logical process, i.e. the planned and ordered sequence of coherent and coordinated activities, which are functional to execution of the work. From the graphic-dimensional analysis of some representative nuraghi, this study investigates the technical-dimensional characteristics of the walls and of the internal rooms with tholos vaulting, the development of the helical staircase that connects the different levels of the building up to the identification of the construction methods. In order to interpret and reconstruct in detail the construction site activities, the required manpower during the construction, a quantitative analysis method was applied to support the estimate of the construction works according to a methodology already developed by J. DeLaine. This methodological approach makes it possible to identify how the planning of the construction activities might have been conducted based on a theoretical elaboration of the intended design. This by dividing the activities into phases, allocating the roles and skills to the various workers involved, organising the construction site and the related layout of the spaces, managing the procurement of materials and their processing, up to the point of establishing, with reasonable approximation, the times of realization. From this study derives furthermore the observation that the constructive effort of this architectural typology is to be understood not only as the physical representation of a technological culture, but also as a representation of the organization of the territory, its rational and orderly use and optimization of the available resources. But, even more, it allows us to understand the social and economic organization of that large and choral Nuragic community, which was able to express such complex constructions.

Mots-Clés: Keywords: Nuraghi, construction process, Nuragic construction site

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