

The dry stone wall of “Paretone dei Greci”: an anthracological approach

Anna Maria Grasso^{1,2}, Girolamo Fiorentino² and Giovanni Stranieri³

1 Phd student, Università degli Studi di Siena, 53100 Siena, Italy; grasso_annamaria@libero.it

2 Laboratory of Archaeobotany and Palaeoecology - Università del Salento; 73100 Lecce, Italy; girolamo.fiorentino@unisalento.it

3 Centre d'histoire et d'archéologie médiévales, Université Lumière Lyon 2, 69365 Lyon, France; giovanni.stranieri@univ-lyon2.fr

Summary: Dry stone constructions are a common occurrence in many Mediterranean landscapes. One of these structures known as “Paretone dei Greci” (Taranto, Southern Italy) was subject to an archaeological investigation. Soil and sediment material within this wall, as well as those above and below it, were sampled and processed for archaeobotanical studies. In this manner it was possible to understand its building technique as well as giving it a chronological context. Through an anthracological analysis it was possible to insert the “Paretone” within the surrounding agricultural landscape, thus better highlighting its function in relation to the history of the territory.

Key words: dry stone wall, archaeobotany, Middle Ages, southern Italy.

INTRODUCTION

Dry stone and rubble structures are immediately characterized by problems in understanding of their function, chronology and classification (Hodges, 1991). These are a result of the technology employed in their construction, which remained similar throughout time, area of diffusion and patterns of use (Lewuillon, 1991). Generally, archaeologists limit themselves to descriptive investigative techniques when dealing with these kinds of artifacts. It is very rare for example that such structures are subject to a proper investigation of their stratigraphic contexts.

The present study aimed to evaluate the information potential of an archaeobotanical investigation applied to dry stone constructions. The context under investigation is an imposing dry stone wall structure (Fig.1), situated in the countryside of Taranto (southern Italy). The building is locally known as “Paretone dei Greci” (the great wall of the Greeks) and, prior to this research, it was dated to the Byzantine period or even earlier (Stranieri *et al.*, 2009).

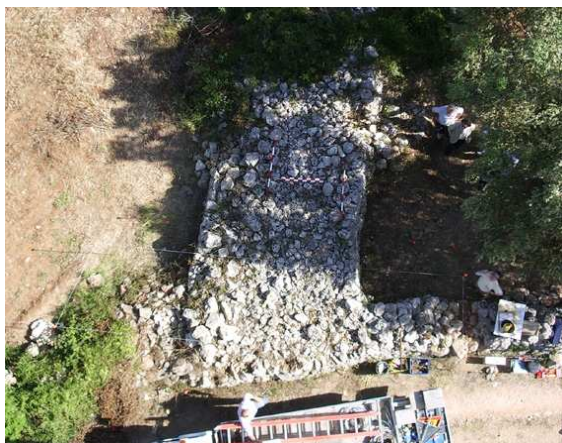


FIGURE 1. A section of the “Paretone dei Greci” (Taranto, Italy).

METHODOLOGY

In its current condition, the structure looks like a wall about 2 km long, consisting of two outer faces and a rubble filling in between, about 4 m wide and between 1 and 3 m high on average.

The excavated area was a trench of 3×8 m perpendicular to the wall, in which it was possible to remove all the components forming the wall itself and the earth strata that abutted it and those which were covered by it. In addition, three other trenches of 1×2 m were opened in the earth layers upstream and downstream of the structure. The stratigraphy of the wall was found and documented in the section, and then removed. Archaeobotanical sampling was done in each excavated stratigraphic unit (Fig. 2).

DATA AND RESULTS

The wall, which now appears as a single intervention, turned out to be, in the course of excavation, the result of at least two different building phases, separated by a period of use and/or degradation (Fig. 3).

The substrate on which the two external sides and the fill between them were set up (UUSS 17, 27, 29) is characterized by an overwhelming presence of *Erica* sp. (Fig. 3 Cfr. “Substrate”). The first structural phase (U.S. 20) gave charcoals related exclusively to *Erica* sp. Another phase, still belonging to this first structural phase can perhaps be found in the U.S. 8, which is primarily characterized by the presence of *Quercus ilex* L. (Fig. 3 Cfr. “I structural phase”).

The phase immediately preceding this implementation (UUSS 34 - 35) has been dated on archaeological basis to the 7th-8th centuries and is characterized by the constant presence of *Erica* sp. (and, unlike the stratigraphic units constituting the substrate, *Ostrya carpinifolia* Scop. and *Quercus ilex* L.). The

immediately following period (U.S. 15) as opposed to UUSS 34-35, was radiocarbon dated to between 670-880 cal. AD (CeDaD- Università del Salento). In this case anthracological analysis confirmed the same species found in the preceding phase to which is added to the conspicuous presence of *Olea europaea* L. (Fig. 3 Cfr. “ante I structural phase”). The second structural phase (UUSS 3-4-10-11) dates definitely later than the 8th-9th centuries and perhaps dates to the early 16th century.

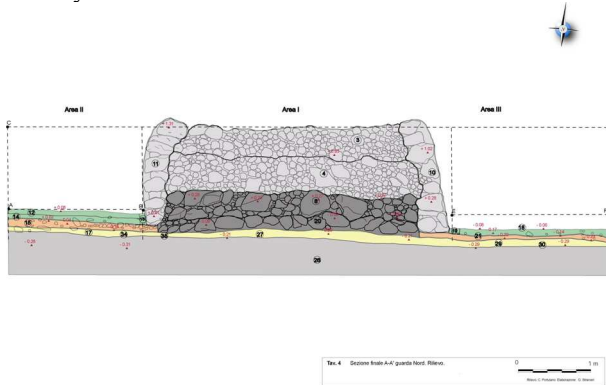


FIGURE 2. Final section of the “Paretone dei Greci”.

The soil from its foundation cuts and fills (U.S. 13-19) returned anthracological remains related to *Olea europaea* L., *Erica* sp., *Myrtus communis* L., *Cistus* sp., *Ostrya carpinifolia* Scop., *Sambucus* sp., *Prunoideae* and *Pomoideae* (Fig. 3 Cfr. “ante II structural phase”).

In the absence of diagnostic dating elements and given the very small number of anthracological remains found within them, the remaining stratigraphic units (not cited) pertaining to the accumulation at the East side of the *Paretone* (UUSS 18-21-28-32) do not allow for any hypothesis to be made.

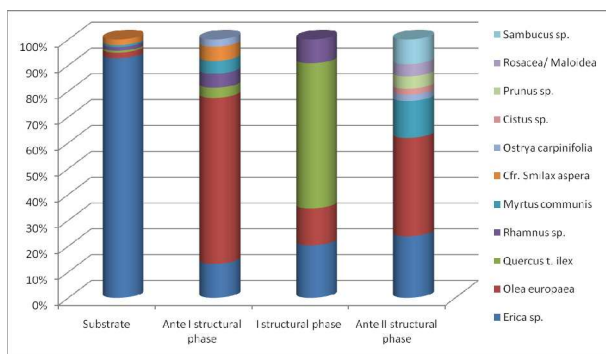


FIGURE 3. Results of the anthracological analysis (Total fragments: 460).

DISCUSSION AND CONCLUSIONS

The proposed approach necessitates a reflection on the peculiar dynamics of the taphonomy of the basin of deposition which contained the investigated plant macroremains (Leonardi, 1992). First, due to its inherent design features, this type of structure becomes from time period immediately following the implementation of structural elements, a basin of deposition that could be called “partially open”. The

spaces and interstices between a stone and the other allow the passage of sediment and of macro and micro remains of anthropic, animal or plant origin up to the floor deposition. This at the same time limits the processes of post-depositional removal. From a diachronic perspective, it can also be defined as “temporarily open”. The process of input and removal of “material” ends when the basin is full and/or when the construction of new structures seals the preceding ones.

The absence of any thermally altered elements near the structure indicates that the charcoal remains were transported into the context and then organized as a result of depositional and post-depositional actions by physical and biological agents. The potential basin of origin still would not have been very far from the place of discovery, because the charcoals do not present, after a comprehensive visual examination, a high index of rounding erosion. Consequently, since the charcoals are of a “dispersed” type, they indirectly provide information on the evolution of the paleovegetation of the area.

The phase preceding the building of the structure and the first structural phase are characterized by a landscape of low degraded scrub vegetation. The second structural intervention is placed in a vegetational stage moving towards a mature forest. Finally, the foundation fills of the third stage show, by the presence of plums and apples that the landscape had changed again as a result of increased human exploitation.

In conclusion, it can be said that the integration of the information given by the archaeobotanical investigation of a dry-stone structure has allowed it to be viewed within its original vegetation. This has provided a subject for further dialogue towards the understanding of the history and function of the artifact within the landscape.

REFERENCES

- HODGES, R., 1991. *Wall-to-Wall History. The Story of Roystone Grange*, London.
- LEONARDI, G., (Ed.), 1992. *Processi formativi della stratificazione archeologica*, Atti del Seminario Internazionale *Formation processes and excavation methods in archaeology: perspectives* (Padova, 15-27 luglio 1991), Saltuarie dal laboratorio del Piovego, 3, Padova.
- LEWUILLON, S., 1991. Les murs de pierre sèche en milieu rural. In: Guilaine, J. (Ed.), *Pour une archéologie agraire. A la croisée des sciences de l'homme et de la nature*. Paris, 193-221.
- STRANIERI, G., FIORENTINO, G., GRASSO, A.M., NAPOLITANO, C., 2009. Organizzazione e trasformazioni dei paesaggi agrari medievali nel Salento. Un approccio archeologico e archeobotanico allo studio di una delimitazione agraria in pietra a secco (Sava – Taranto). *Archeologia Medievale* XXXVI, 259- 271.