Physis and Techne on Thera: Reconstructing Bronze Age environment and land-use based on new evidence from phytoliths and the Akrotiri wall-paintings.

Andreas Vlachopoulos  
University of Ioannina  
Akrotiri Excavations

Lefteris Zorzos  
Institute of Archaeology, UCL  
Akrotiri Excavations

The paper aims to reconstruct the Bronze Age environment and land-use of Thera before the volcanic eruption of the early Late Bronze Age. The long-term excavations at Akrotiri have produced a well-studied and varied body of evidence for plant, animal and mineral exploitation and consumption, while the well-preserved wall paintings provide insight into some aspects of the islanders’ own perceptions of their environment. A multi-disciplinary approach is utilized presenting new iconographic evidence from the Akrotiri wall-paintings, mostly the recently restored ones from Xeste 3, and the study of phytoliths in exposures throughout the island of Thera. The analysis of phytoliths and diatoms that are preserved in the pre-eruption soils provides new perspectives and insight on theories and issues about the environment and landscape exploitation in the Bronze Age Aegean. There is clear evidence that the environment was wetter than the modern one and that a significant part of the island was agriculturally exploited.

The imagery of the wall-paintings and pottery at the settlement of Akrotiri has been well studied and the importance of the well preserved murals has been emphasized repeatedly by many scholars. The wall-paintings are particularly significant as they depict what the local inhabitants viewed as important about their landscape and environment. At the same time, we must be cautious about what the artists are trying to depict and whether it is of the ‘real world’, something symbolic and imagined, or simply very selective.

The current paper challenges past preconceptions about the natural scenes depicted at Akrotiri and discusses stereotypic scholarly terms such as ‘nilotic’. The majority of the plants depicted in the murals are thought to have grown on the island of Santorini. This is because of the ‘Theran’ context where they are depicted, on archaeological evidence and on the modern presence of such plants in the Aegean. Several plants that require wetter conditions have been traditionally considered as depicting ‘exotic’ or North African flora. The phytoliths provide direct evidence for the presence of palms, reeds, dicots and several sedges throughout the LBA landscape of Thera. It is not suggested here that all the murals are depicting ‘local’ natural scenes because of the presence of these plants in the pre-eruption landscape. Detailed analysis of the
way the plants are depicted and now the palaeobotanical evidence suggest that the painters had first hand access to the plants and landscape that they were illustrating. The evidence from macro-botanical remains, pollen, wood charcoal and now phytoliths enables us to challenge the preconceptions that have been created about specific wall-paintings and what they are depicting.