

Digital 3D reconstruction of the building Sector A (“Storeroom of the Pithoi”) at Akrotiri (Thera) and its educational role for the visitor of the site

Demetra Kriga, *College Year in Athens, Greece*

Kostas Papaodysseus, *Athens Polytechnic School, Greece*

Demetra Ntafi, *Athens Polytechnic School, Greece*

Since the first year of uncovering of the prehistoric settlement at Akrotiri (Thera) in 1967 until now, the study of the archaeological material collected continues and there is still a lot to be found and studied about it, as the buildings get uncovered by the volcanic material they fill them. The unique state of preservation of the multistoried- buildings, which when revealed were found covered to the top with tons of volcanic pumice and ash after the huge eruption of the middle of 17th century B.C. makes the settlement that important. It was right after the beginning of the excavation that the need for protection of the site by covering it with a shelter was created and the site is roofed since then. Recently, a new bioclimatic construction was used in order to cover the site and when it will be completed it will turn the site of Akrotiri to a site - museum, since there will be raised platforms with educational material exhibited, which will allow the public to walk above and around the ancient buildings and see them from close.

The building Sector A or the “Storeroom of the Pithoi” lies in the northern edge of the excavated area of the settlement. In its three, axially arranged ground floor rooms there are many built installations found (enclosed bathtub in the wall of the antechamber, built hearth, mudbrick partition walls, built closets, floor of black pebbles and porphyry shells in one of the rooms, built niches for the storage of pithoi, etc) and at least 15 storage pithoi (jars) found in situ, that make the building of unique importance and of unique interest for the visitor of the site. This building might have been a kind of a shop - workshop- storeroom property of a private entrepreneur, who was actively involved in the trade interactions within the settlement. For the better understanding of the arrangement of the rooms of the building and its architectural form by the visitors of the site, along with the educational material (texts and photographs) which will be used in the raised platform that will run along its exterior, a three dimensional representation will be also useful and entertaining.

The creation of a three dimensional digital representation of Sector A needed group work. The archaeological evidence was used for that as well as the proper computer three dimensioning simulation model. Also a software program of proper capability was used. The model is enriched by texture maps corresponding to building materials used then, by virtual illumination and by a possibility of a virtual visit.