

(350) Protect the walls

Author(s): Claudio Rufa, Massimiliano Forlani, Eva Pietroni

Institution(s): EVOCA, CNR ITABC, ITALY

Protect the walls! is a serious game that deals with the technology and tactics of siege of the IV century BC, the war machines and the strategies of attack and defense, the architectural characteristics of the towers and the city walls of Paestum (that was called Poseidonia before the Romans). It is an educational project involving the user in a multi-sensory experience. The issue is developed through a short but spectacular movie followed by a game using gesture-based interaction, suitable for a diverse audience, particularly young people.

The purpose of the project is to transmit educational contents, scientifically correct and plausible, not in a descriptive manner but, instead, arousing a strong conceptual and emotional involvement in the public, through a dramatic storytelling in first person. Visitors, in fact, are brought inside the action and live the scene of the siege. The introduction movie, lasting 6 minutes and 30 seconds, aims at creating the historical background, showing various weapons and tactics of siege and defense in the IV century BC with a spectacular 3D reconstruction of both environmental and movement of armies (crowd animation).

The game has been developed in Unity 3D. The field of view and the space of the game are constant: the user is on the top of the tower and sees himself represented by an "avatar" through a fixed camera that frames the scene.

From the top of the tower, he must contrast the advance of the besiegers throwing arrows, stones and flaming objects from the field below against the walls. To do this, the player needs to alternate and combine, in a strategic way, two behaviors: defense and attack.

The scientific implications of the project required an accurate 3D reconstruction of war machines and weapons on the basis of diagrams and drawings given by the experts of poliorcetics and siege techniques.

