

Odyssee – explorations in mixed reality theatre using DirectX 9

extended abstract

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Abstract

In this paper we will discuss our experiences in developing a mixed reality application for a theatre production of the Odyssee. The Odyssee is a wellknown account of the travels of Ulysse leaving Troje, in 24 episodes ending in his return to Ithaca and his reunion with Penelope. The actual theatre production, which is performed in temporarily empty office buildings, takes 12 parts which are played in 12 successive rooms through which the audience, subdivided in small groups, is guided one room after another for about five minutes per room. The initial idea was to have a large number of see-through goggles and augment the actual performance with additional information using text and images. In the course of the project, however, we had to scale down our ambitions, and we ended up using simple LCD-projection goggles with a low-resolution camera, for which we developed a mixed reality application, on the DirectX platform, using video capture projection in 3D with text and images. What we will describe here covers our final application, the criteria and guidelines we used in our production, as well as what may in retrospect be characterized as our explorations of DirectX.

Keywords and phrases: mixed reality, digital story telling, DirectX technology, multimedia presentation