Evaluating 'Tangible Pasts': A Mixed Reality Application for Cultural Heritage.

Angeliki Chrysanthi
University of Southampton
Avenue Campus, SO17 1BF
ac14g09@soton.ac.uk

Constantinos Papadopoulos
University of Southampton
Avenue Campus, SO17 1BF
cp5v07@soton.ac.uk

Tom Frankland
University of Southampton
Avenue Campus, SO17 1BF
tf4e10@soton.ac.uk

1. INTRODUCTION

In this paper we are presenting a tangible prototype interface for Cultural Heritage dissemination in Mixed Reality (MR) environments. Drawing from previous work on MR (Billinghurst et al. 2001), this study aims to explore alternative and interactive modes of engaging the public with archaeological information and suggests that early stage user evaluations can significantly inform interpretive design.

2. THE 'TANGIBLE PASTS'

The prototype combines text, 3D models and animations in a single tangible interface, enabling the user to experience the featured case studies in an intuitive way by seamlessly moving between physical and virtual content. While turning the pages of the interactive book, one can look at the pictures, read the text and watch the 3D virtual models appear out of the pages.

Figure 1: Potter's wheel 3D model popping out of the book's pages.

Low fidelity graphics accompany textual information, which enhances the archaeological storytelling and provokes interpretation without preconditioning it. These simple but simultaneously interactive tools not only inform visitors about the past; through participation visitors shape their own ideas about the archaeology and reach their own

conclusions. The audience is encouraged to construct their own images and narratives through rich interpretation, making sense of the past through exploration in different dimensions.

2.1 User evaluation

Conducting user evaluation tests from the early stages of the design's development (Petridis et al 2006) is central to this study, which focuses on novel modalities for the effective interpretation of the past and the user's experience (Wright & McCarthy 2010). In this paper some preliminary results of this first deployment are presented.

Table 1: User evaluation chart on the prototype's interpretative value.

3. REFERENCES

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