

Interpreting Digital Heritage

Interaction, Dialogue and Multiple Perspectives of the Past

1. INTRODUCTION

'Heritage interpretation' is considered as an effective learning, communicating and management tool that increases visitors awareness and empathy to the site and artefacts. However, **there is no significant interpretation method or principles for interpreting 'digital heritage'** unlike other disciplines such as archaeology. This **lack of adequate literature** focusing explicitly on the theory and methodology of heritage interpretation is **leading the present trend towards 'descriptive interpretation'** (Affleck and Kvan, 2008; Tan and Rahaman, 2009; Rahaman and Tan 2010). As a result, **end-users fail to grasp the inherent significance of heritage**, such as place-specific physical artefacts or architectural monument and their relationship with much broader 'non-visible' cultural processes that they are part of.

This paper argues that, for better interpretation and experience of a digital heritage site, **a comprehensive interpretation method is required.**

2. UNDERSTANDING THE END USERS

Our experience and interpretation of prehistoric artefacts and landscapes largely depends on our own **embodiment, subjectiveness and cultural positioning** (Thomas, 2004). Hence, content without relating directly to how we perceive the world, does not impart any meaning rather it causes 'heritage dissonance' or 'disinheritance' (Tunbridge and Ashworth, 1996).

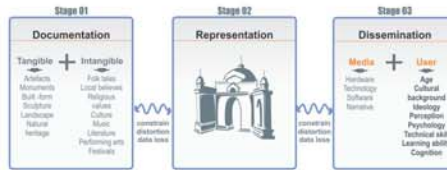


Figure 01 : Relationship between end-users and virtual heritage

3. LINEAR INTERPRETATION

'Interpretation' has always been understood as a linear process, "a single and universal viewpoint about the past" (Thornton, 2007) supposing everyone should learn and understand similarly. But in reality everyone's thought and reaction to action and situation are unique and it is not possible to reproduce events exactly as 'actual' in any sense (Kaptelinin, 2006).

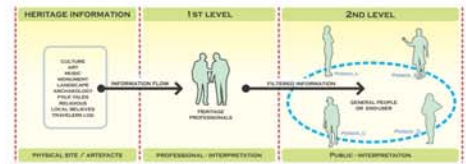


Figure 02 : Fitch's model of interpretation (based on information flow)

4. RESEARCH APPROACH

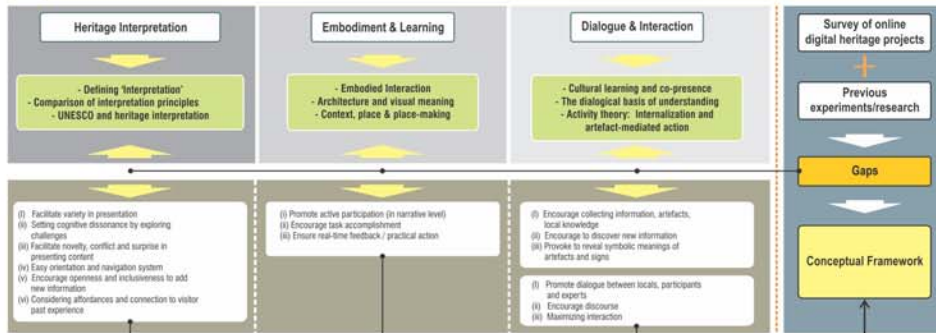


Figure 03 : Development of conceptual framework

6. EXPERIMENT

Our proposed model re-conceptualises the role of end-users and speaks for a more comprehensive way of overcoming the present limitations of digital heritage interpretation. As part of a research project, we have developed an experiment platform and user-evaluation is going on with 200 respondents in two different stages.

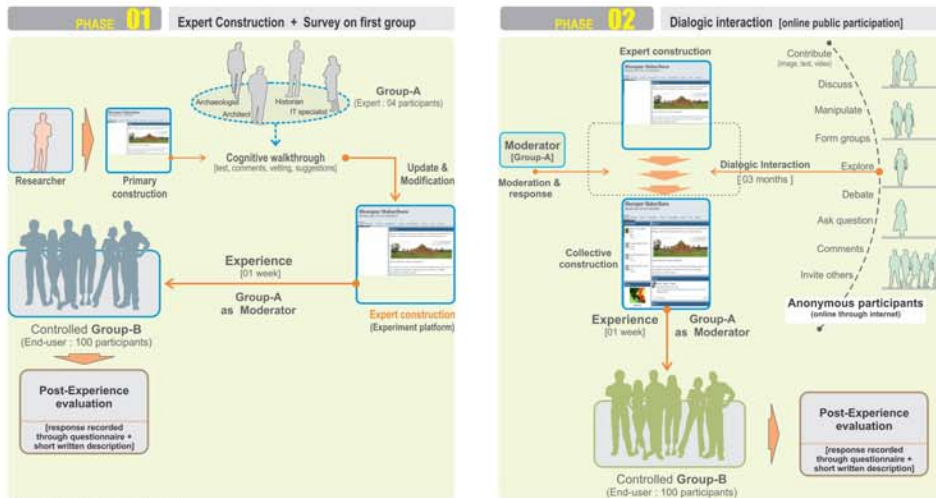


Figure 06 : Experiment design

7. SCREENSHOT OF EXPERIMENT PLATFORM



Figure 07 : Screenshot of experiment platform

5. CONCEPTUAL MODEL

'Interpretation' should ensure three aspects i.e. (i) learning, (ii) provocation and (iii) satisfaction (Rahaman and Tan 2010). As digital heritage has the potentials of facilitating 'dialogic interactivity' and creating multiplicity in content, this research suggests that interpretation framework should also consider 'multiple views of the past' as another aspect. Therefore to achieve a comprehensive interpretation of digital heritage, the process must consider four aspects i.e. (i) embodied interaction, (ii) cultural learning and (iii) an effective presentation (or communication) – within an environment that supports (iv) dialogic interaction among participants and experts to generate collective knowledge-base through cultural disposition of common spatial experience.

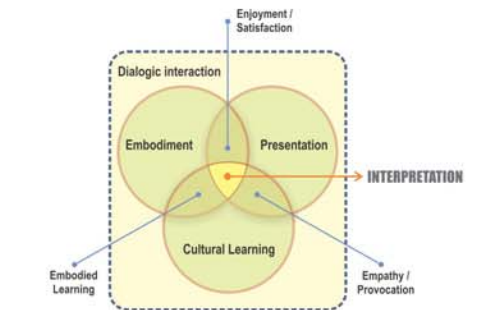


Figure 04 : Proposed conceptual model for interpreting digital heritage

We believe, 'popular participation' in the interpretation process as reflexive embodied interaction through dialogue and interaction may overcome this linearity and subjectiveness of the past reconstruction, hence will enhance interpretation. Furthermore, dialogic interaction can also promote social activities to evoke awareness on heritage conservation.

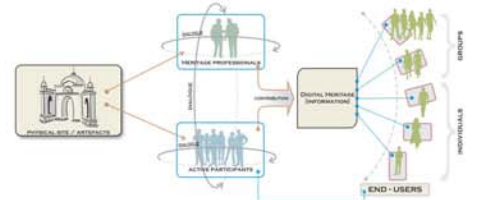


Figure 05 : Dialogic interaction as a tool to enhance digital heritage contents

8. CONCLUSION

This paper has set out to investigate the importance of end users' perception of digital heritage. It argues that in order to minimize heritage dissonance and enhance understanding of inherent significance of cultural heritage, we need to consider end-users as a multicultural phenomenon; i.e need to present the past from various perspectives while considering heritage interpretation as a continuous process.

At this point, this paper proposes a conceptual model for interpreting digital heritage for future prototype development. The proposed model allows active participants in discursive content creation (through collective disposition of common spatial experience) and promotes dialogic interaction to leverage multiplicity in viewing the past cultural heritage. This way, our proposed model re-conceptualises the role of end-users and speaks for a more comprehensive way of overcoming the present limitations of digital heritage interpretation.

This paper is part of an ongoing research project, the next step of this research will be to implement and evaluate the 'perceived interpretation' by testing end-users with the prototype developed and discussed in section 6.

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