Being there and then:

Introducing Cultural Presence in Virtual Archaeology

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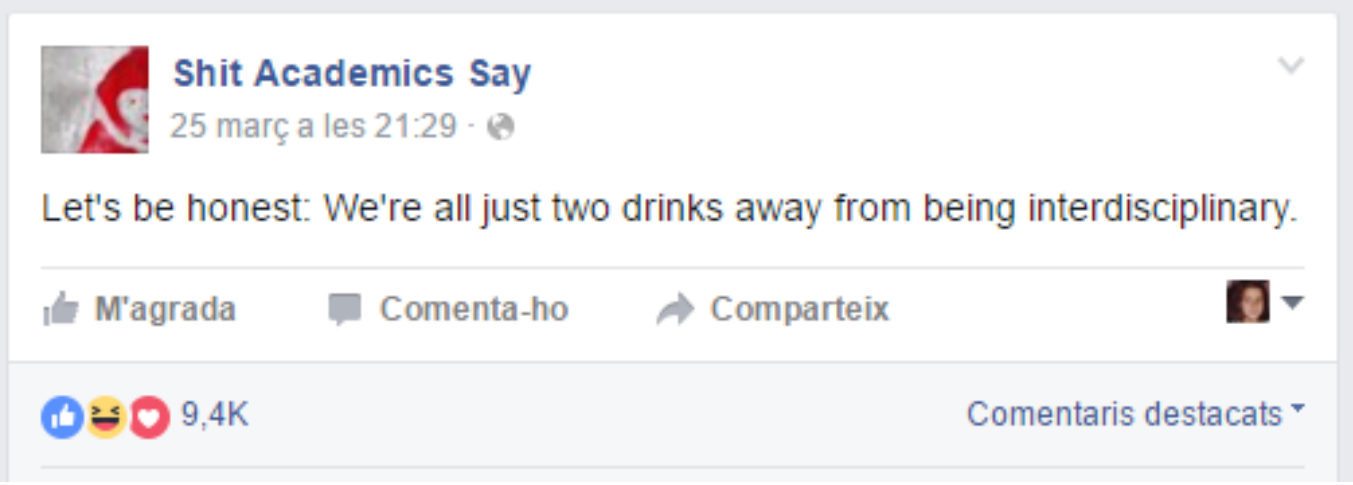
1. We don’t know if audio / visual realism is necessary…
2. Do you know of studies that have looked into…

WELL, WE SHOULD KNOW!



VR applications for archaeological dissemination

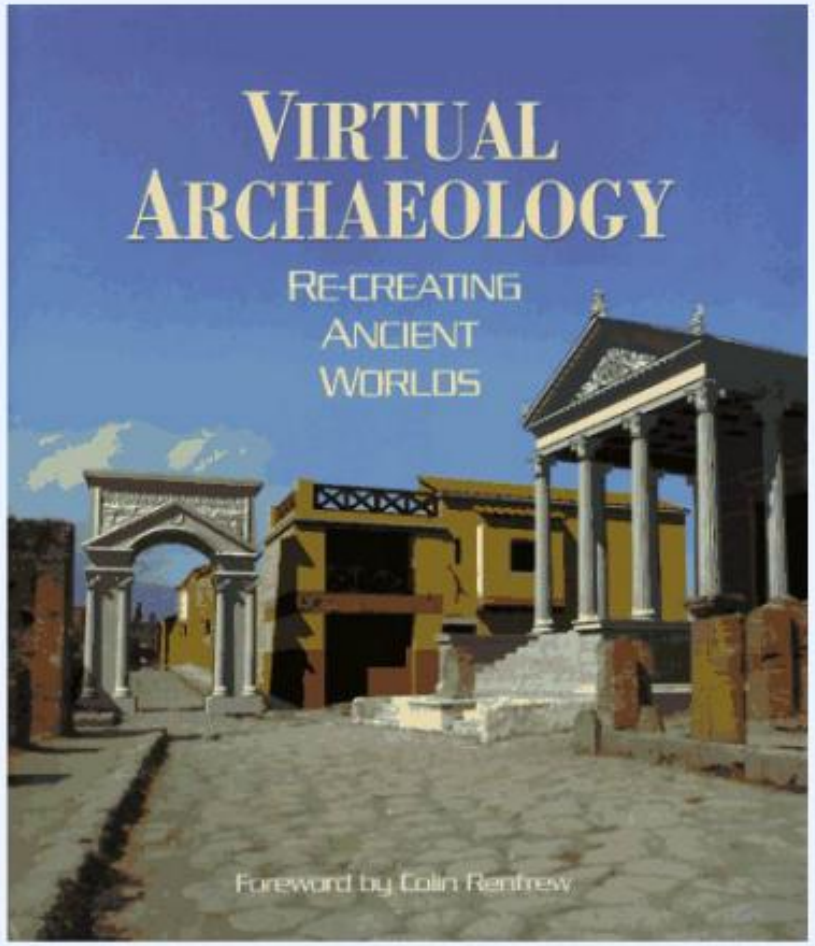
1. Aimed at showing the past / Empty
2. Lack of evaluation

Lack of explicit pedagogical goal / theoretical archaeological framework

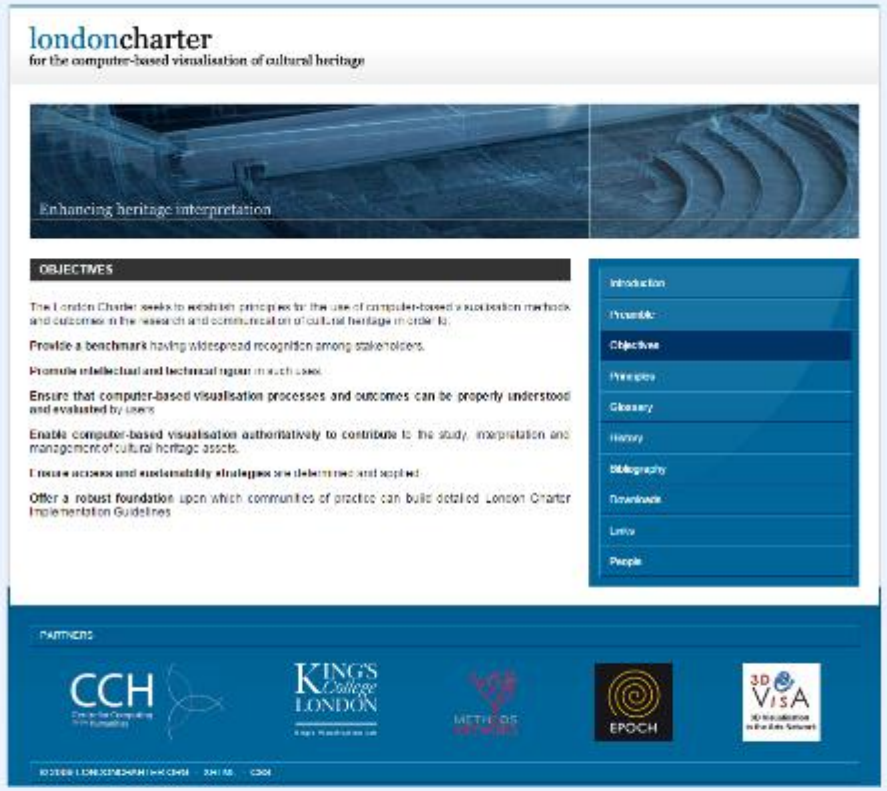
	Culture History	Processualism	Critical Theory
Content	Architecture	Environment/Landscape	Lived spaces (objects and people)
Focus	Monuments	Economy	Symbolism, daily life
Aim	Visualization	Analysis	Comprehension
Goal	Description of record	Explanation of record	Interpretation of record
User	Sight / awe	Intellect	Multi-sensoriality, empathy
Interaction	Navigation	Navigation / manipulation	Manipulation / alteration
Format	Closed model	Metadata	Game

(Implicit belief: objective, better for learning because immersive and "interactive" / evaluations show otherwise – e.g. Pujol & Economou, 2009)

1997: Forte and Siliotti

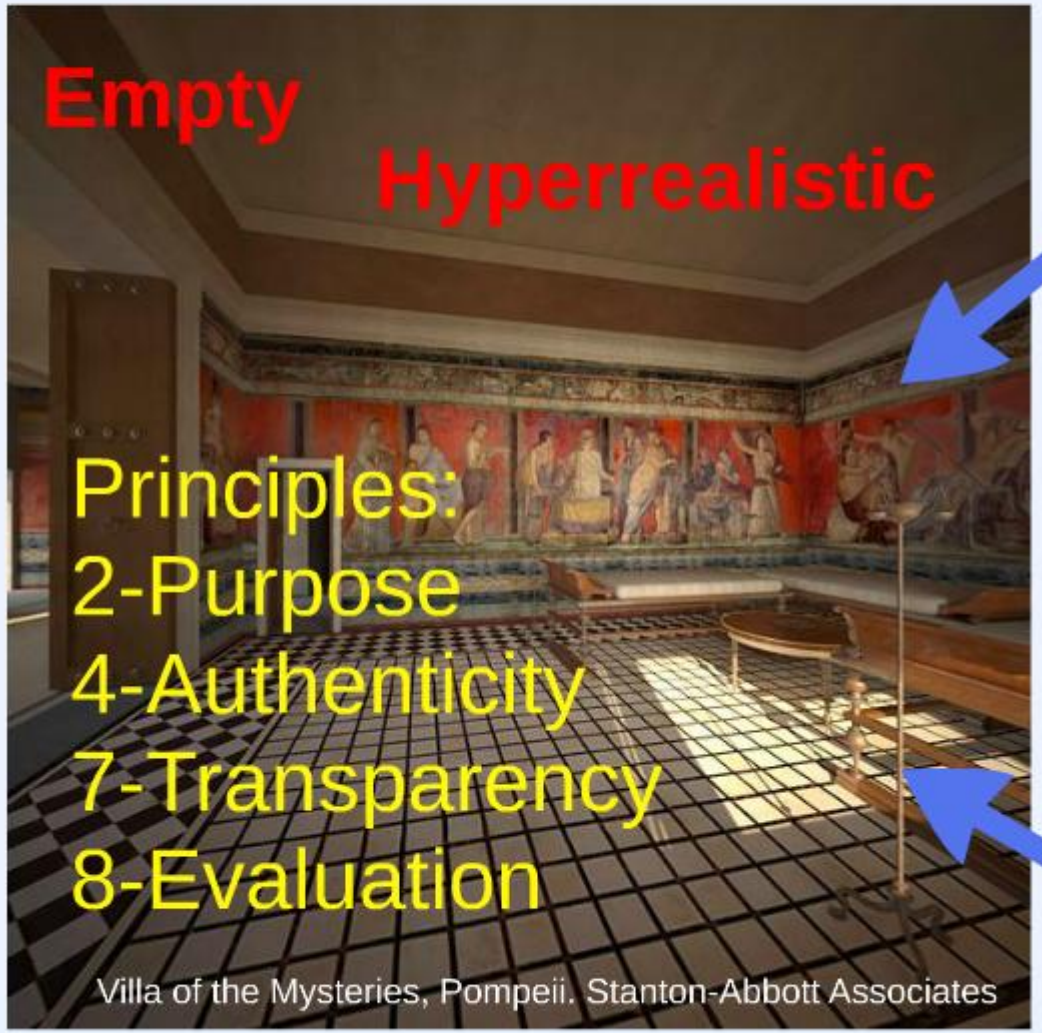


Guidelines...


londoncharter
for the computer-based visualisation of cultural heritage
Enhancing heritage interpretation
OBJECTIVES
Introduction
Objective
Principles
Glossary
Bibliography
Links
People
PARTNERS
CCH
KING'S College LONDON
EPOCH
3D VISA

PRINCIPLES OF SEVILLE
International Principles of Virtual Archaeology
Principios Internacionales
de la Arqueología Virtual
Principios Sevilla
www.arqueologiavirtual.com/carta/

...that are not followed!



Computer Visualization:
visual accuracy +
entertainment

Dualistic concept of reality:

- objective/subjective,
- mind/body,
- description/interpretation

Archaeology:
description of finds

Reproduction of spaces vs cultural understanding

Cultural Presence

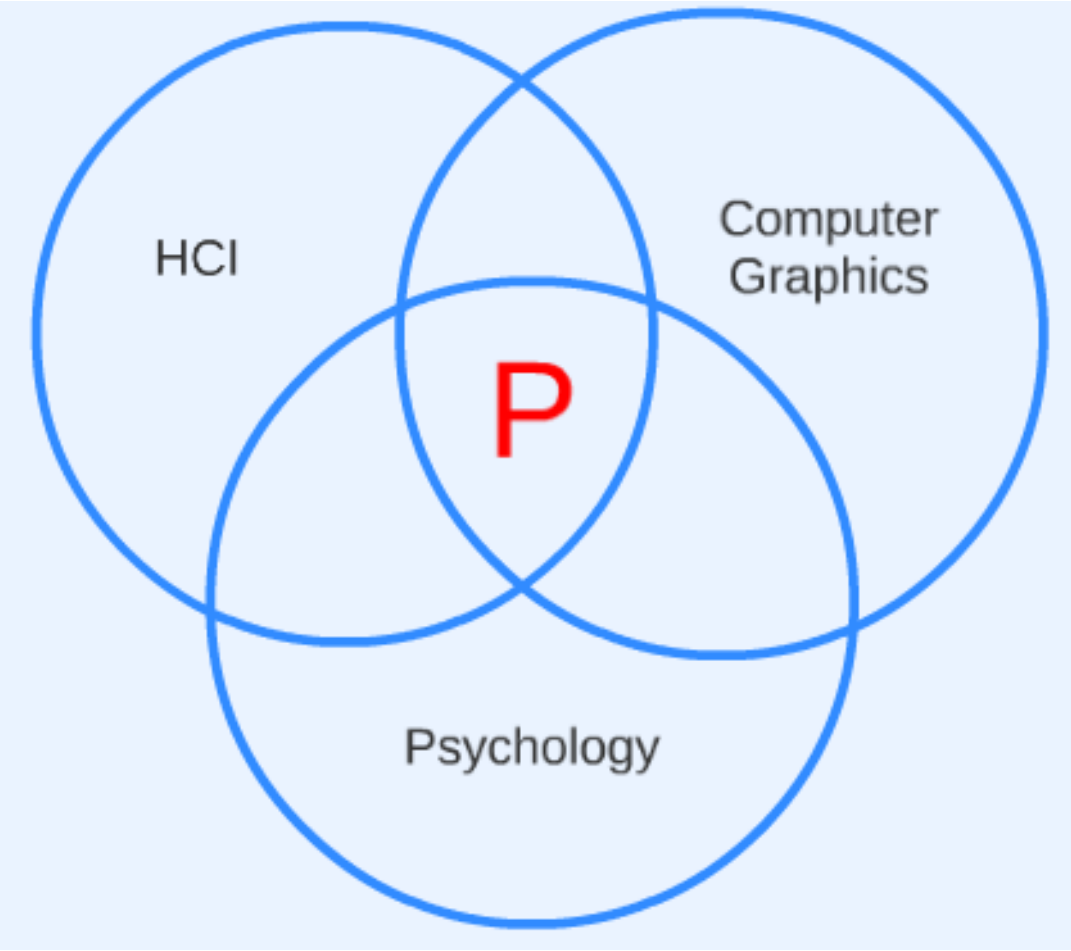
Presence

International Society

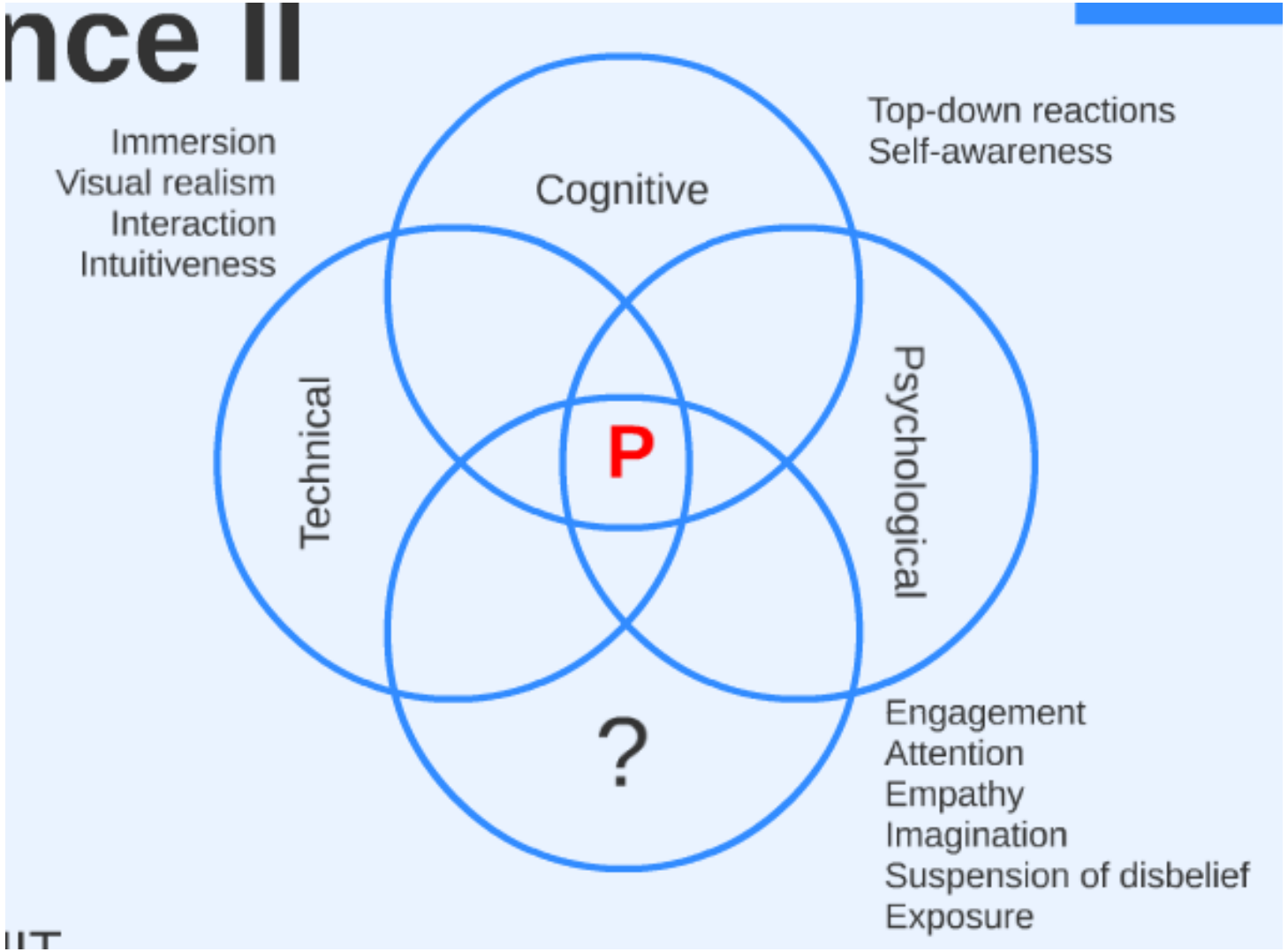
Journal

Conference

Presence



Presence


nce II
Immersion
Visual realism
Interaction
Intuitiveness
Top-down reactions
Self-awareness
Cognitive
Technical
Psychological
P
?
Engagement
Attention
Empathy
Imagination
Suspension of disbelief
Exposure

Presence

- 1980s: Telepresence.
- 1990s: Technical simulation capacity (immersion, visual realism, non-mediation) – Sheridan, Steuer, Lombard & Ditton.
- 2000s: Psychological state (attention, feeling, skills) – Slater, Witmer & Singer.
- 2000s: Cultural/social dimension (interaction, relevance) – Zahorik & Jenison, Mantovani & Riva.

Why is Presence relevant?

- Established theoretical & methodological framework(s) for design and evaluation.
- Investigated suitability for learning (constructivism, embodied interaction).
- Investigated underlying factors (interaction, immersion, realness, attention, emotional involvement…).

In one {LEAP]...

{LEAP]
{LEarning of Archaeology through Presence]

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Scientific Panel: Social Sciences and Humanities
Duration: 2014-2016

The {LEAP] forward...

General aim:

To research, implement and evaluate
a new conceptual and technological framework, *Cultural Presence*,
aimed at enhancing the understanding of past societies by experts and audiences
through the experiencing of immersive, populated, interactive reconstructions of sites.

By {LEAP]s and bounds...

Development

1. Research

- Import and expand the concept of CP:
  - Research on classical concept of P.
  - Theory of (Material) Culture.
  - What defines archaeological cultures (2 consultations with {LEAP] User Group).
- How to depict it (defining "Çatalhöyükness").

2. Implementation

Build a VR mediated experience of Çatalhoyük (B48):

- 5 POIs
- 5 versions: empty, objects, people, scenes, text/ narrators

3. Evaluation

Operational definition of CP: Term for evaluating the subjective experience of feeling one is aware of, appreciative of, learning more about or feeling themselves immersed in past believe systems (Pujol & Champion 2007)

P is a means and a measure

- Focus on outcomes of current models.
- More CP = More learning.
- Compare learning, engagement, understanding across different versions and correlate with P.

4. Dissemination

A {LEAP] in the dark…

Do learning and transparency requisites hinder Presence?

E.g.: Interaction and multisensoriality are not intrinsically positive (Salzman, Dede, Loftman & Chen, 1999)

Reproduction vs. enhanced simulation

VE as a playground

Cultural Presence: makes the rational experiential (advantages of visualization, role playing and embodied interaction).

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