What is Transformation?

Science Communication Unit

Invisible Worlds is a new exhibition at the Eden Project opening in 2018, which will reveal the relationships between microbiology, earth systems science and human health. This ambitious and innovative exhibition will aim to both challenge and transform visitors' attitudes, beliefs and behaviours.

Transformation is a concept which is often used in relation to museum exhibitions¹, and the idea that visitors might be transformed by their experience is powerful. The Eden Project's strapline: "Transformation, it's in our nature", shows that it is deeply embedded in their practice. But what does it mean to be transformed in the context of an exhibition visit? Is transformation different to a more ordinary change in attitudes or behaviour?

While much of environmental communication and museums research has investigated attitude and behaviour change², transformation is an emerging concept which currently has little theoretical or empirical backing.



plan

produce and analyse data

Besegreh

Evaluate

Action Research

Science communication has been criticised due to its lack of demonstrable impact⁷, not least due to a large gap between research and practice. Action research is a collaborative approach to research which focuses on producing evidence-based change in practice. It is an iterative, cyclical process of planning, action, research and reflection (Fig. 2), where the participants are important in shaping the research as it develops. This project draws on a flavour of action research called "action Plan action and research. In the lement and months of the research. In the lement and months of the research. science"8, which builds on concepts of organisational learning9 and critically reflective

practice¹⁰.

Figure 2: Example action research cycle



Transformation

Traditionally, science and environmental communication assumed that increased public knowledge results in a change of attitudes and behaviours, but this approach has been shown to be ineffective³. Transformative learning, a theory from adult education⁴, has been suggested as an alternative approach⁵. This kind of learning is not a change in what, or how much you know, but how you know⁶ - it results in a profound change in world-view (Fig. 1). This research will investigate practitioners' conceptualisation of transformation. compare it with existing theories from other fields, and test it empirically through a process of action research.

Disorienting dilemma

Self examination

Critical assessment of assumptions

Recognition of shared discontent

Exploration of new identity, relationships and actions

Figure 1: The process of transformative learning⁴

Planning action

Acquiring knowledge and skills

Provisionally trying out a new identity

Building competence and confidence

Reintegration into life with new perspective

Aims and Methods

This project aims to:

- 1. Investigate the process of visitor transformation.
- 2. Explore the influence of a research intervention on exhibition development.

The aims will be approached by a two-layered research design (Fig. 3). Firstly, two action research cycles, one before the exhibition opens and one after, will explore transformation from a visitor perspective. The cycles will begin with a consensusforming exercise¹¹ around the theme of transformation to establish pertinent research questions. These will be used to design research with visitors. The results of this will feed into the exhibition design, and subsequent research. The second part of the research will approach the research aims from the angle of the people working on the exhibition, including the design team, artists and scientists. Structured interviews¹² and observation¹³ during meetings will be used to understand how these different collaborators conceptualise visitor transformation, and how this changes over the timeperiod of the project, in response to the ongoing

visitor research, as well as other

influences.

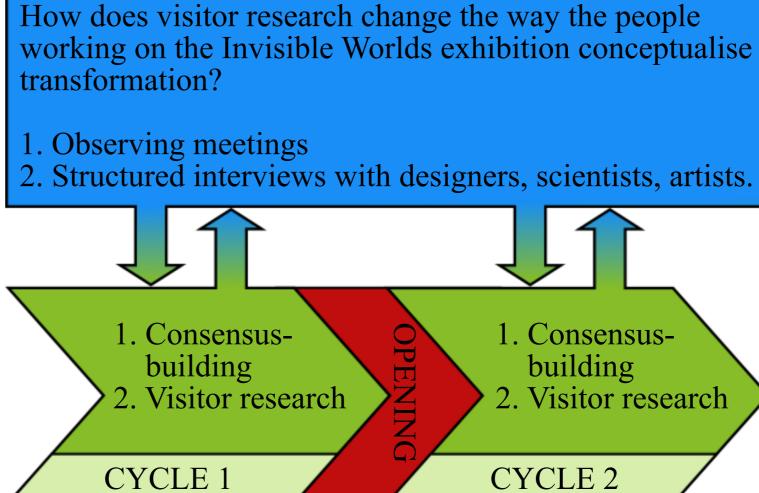


Figure 3: Research design

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