

Scaffolding Possible Futures: Emergence and Intervention in Design Anthropology

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Introduction

Design anthropology is emerging as an academic field of study and practice between anthropology and design. While its potential lies in the intersection between the two fields, the challenges of how to intervene as anthropological researchers in this field are still highly unexplored. Often the focus remains on ethnographic or collaborative methods for understanding cultural practices, while less academic attention is given to the ways in which anthropologists engage with the complex challenges of emergent cultural forms, and with setting directions for possible futures.

In Otto and Smith 2013, we argue for design anthropology as a *distinct way of knowing* that incorporates both analysing and doing in the process of constructing knowledge. This approach involves defining and inventing the ethnographic field or design space, and even to an extent the ethnographic subject(s), as well as acting situationally to produce various cultural agendas through the research and design process. Smith (2013) nominates this an interventionist design anthropological approach: future oriented processes of inquiry and exploration which not only develop alternative perspectives or opportunities but function as *sites of cultural production and transformation*.

In this paper we explore some central epistemological questions concerning the creation and design of this kind of knowledge; knowledge which is created *in* and *through* action, rather than as a result of observation and reflection. We focus on

emergence and *intervention* as central concepts for design anthropology, and argue that these concepts are complementary in a dialectical movement of exploration and knowledge production. Our aim is to explore the possibilities of an ethnography that engages with emergent cultural practices as a way of producing knowledge that is part of transformative practices. In doing this we focus on the cultural patterns and prospects of the near and emerging future, rather than the ethnographic realities of the past present, which normally is in focus. The concepts of emergence and intervention can help us develop a grounded theoretical approach to understanding and knowing with situated interventionist practices and actions, addressing issues such as: How do we develop anthropological interventions that open up for perspectives on the emergent? How can design anthropological ways of knowing through action and transformation be ethnographically significant, valid and effective?

We use the case of *Digital Natives* to discuss the concepts of emergence and intervention and role of the anthropologist in design anthropology. *Digital Natives* was a research and exhibition project exploring the possible futures of cultural heritage communication in a digital era. The project was created through a collaborative process involving anthropologists, interaction designers, museum curators and a group of young people (aged 15-19), who grew up surrounded by digital media and technology, and according to the academic notion of “Digital Natives” (Prensky 2001) should be representative of a generational shift in relation to embodied technology use. The project ran over a period of 18 months between 2009 and 2011, during which Smith (first author) acted as design anthropologist responsible for the development and design of the project.¹ In the following we will describe how forms of intervention and emergence were central to both framing and outcome of the design anthropological process and the knowledge it produced.

1. Designing Culture: Anthropology, Design and Technology

The intrinsic relations between culture, technology and design are increasingly addressed by design researchers as well as anthropologists (Dourish & Bell 2011; Balsamo 2011). The central premise of these contributions is that design is not merely a site of technological production but an important process of cultural production and reproduction as well. As Anne Balsamo (2011) argues, technology and culture are

¹ Otto was linked to the project as the principal PhD supervisor.

inseparable and those who engage in technological innovation are engaged in designing cultures of the future. Following Bourdieu (1984) she writes:

Designers serve as cultural mediators by translating among languages, materials, and people, to produce – among other things – taste, meaning, desire, and coherence. Through the practices of designing, cultural beliefs are materially reproduced, identities are established, and social relations are codified. Culture is both a resource for, and an outcome of, the design process (ibid.: 11).

Similarly, Dourish and Bell (2011) describe how mythologies are agents in determining how digital futures are imagined and produced in the context of technological innovation. The authors address how the myths about ubiquitous computing animate and drive forward certain ideas of technological development "in much the same way that myths provide human cultures with ways of understanding the world and celebrating their values" (2011: 4). It is in understanding how these cultural imaginations and conceptions have material effects that we can begin to see design as an important part of cultural production and reproduction. In this perspective, technologies are not merely digital objects to be designed, but assemblages of people, materialities, practices and possibilities. "To transform them requires the employment of a framework that can identify the complex interactions among all these elements" (Balsamo 2011: 31).

The increased attention towards the cultural aspects of design is opening up spaces for critical reflection about the human experience more generally, and (re)introducing the complexity and messiness of everyday culture in the design process. These shifts call for new ways of anthropological engagement in design processes, beyond ethnographical "real-world" insights or brief collaborative or cross-disciplinary encounters. As Jamer Hunt (2011) argues, anthropologists need to overcome the historical ambivalence of intervention and to actively engage themselves in processes and practices of design beyond critical reflection. This involves the application of anthropological theory in extending the object(s) of design, and moves the anthropologist beyond interest in social change, to acting in complex roles as researchers, facilitators, and co-designers of possible digital futures.

2. Emergence as a (Cultural) Approach: The Futures of Heritage

In design anthropology, anthropology and design meet in *practice*. They meet in collaborative processes of cultural exploration and transformation. In Otto and Smith 2013 we use the term *style of knowing* to describe design anthropology as a distinct type of knowledge production. Following Hacking's (1992) philosophical term *styles of reasoning*, our focus on knowledge indicates that the production of knowledge involves more than thinking and reasoning, "it also comprises practices of acting on the world that generate specific forms of knowledge" (Otto & Smith 2013: 11).

This paradigmatic shift emphasising knowledge as a key factor of change, takes the aspect of *emergence* in human social reality seriously (Mead 2002 [1932]; Marcus 2012). This means moving beyond basic notions of causality towards a more encompassing concern with the emergent character of the present. For philosopher Mead (2002 [1932]) the present is the true *locus of reality*, which is always in a state of emergence. He emphasises that the past and the present are not independent entities but only accessible as dimensions of the present. In the act of giving shape to the future, we thus evoke or realise a past that makes this future possible. He argues: "Given an emergent event, its relations to antecedent processes become conditions or causes. Such a situation is a present. It marks out and in a sense selects what has made its peculiarity possible. It creates with its uniqueness a past and a future" (ibid.: 52; Otto & Smith 2013: 17).

The aim of the Digital Natives exhibition was to explore new ways for museums in a digital era to engage audiences in experiences of cultural heritage. At once the project aimed to generate knowledge and experiences of relations between anthropology and design, in processes of research through design. As the design anthropologist in charge of the project, Smith played a central role in defining and laying out the conditions for the research and the explorative framing of the project, in ways that challenged both existing ways of curation in museums and the role of the anthropologist in design processes. Rather than focus on developing new forms of digital communication based upon existing conceptions of cultural heritage and curation inside the museum, the Digital Natives project took point of departure in potential young audiences and their everyday digital cultures outside the museum. This expanded the object of research from technology-enhanced heritage

communication to exploring connections and effects of "the digital" as an emergent cultural and social phenomenon.

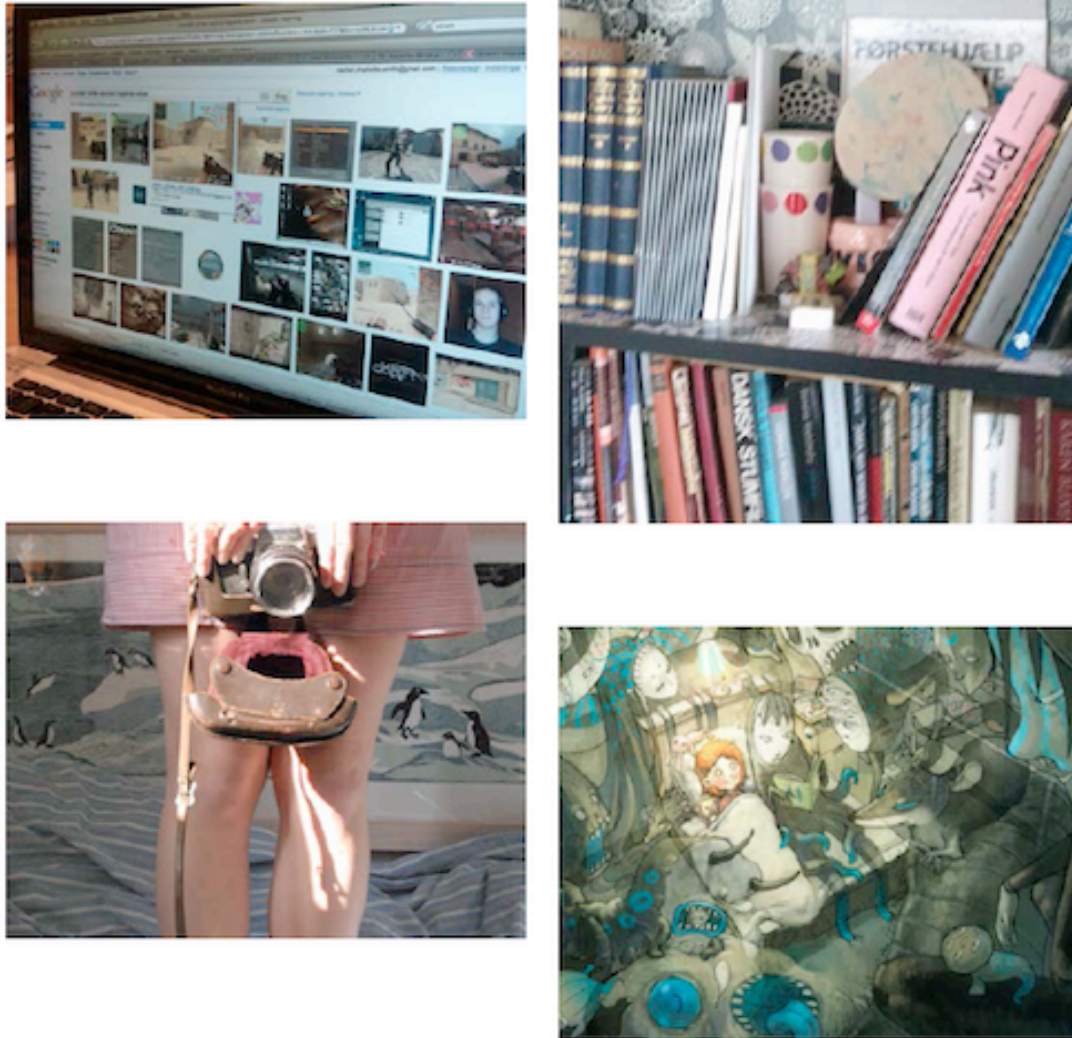


Fig. 1. Reflections of the teenagers' digital worlds

Against influential assumptions about tech-savvy youths (Prensky 2001; Palfrey & Gasser 2008) the ethnographic research and design activities revealed a more fragmented image. Firstly, the youngsters did not view themselves as digital natives, with particular practices or traditions. In fact none of them identified immediately with the concept. Nevertheless, their everyday practices and their involvement in the design process revealed a strong relation and attraction – both positive and negative – towards the technologies surrounding them. These relations were explored, negotiated and experimented with through the project, both in terms of fieldresearch in their own environments, development of a mock-up exhibition based on their own design

concepts, collaborative concept development and technological experiments with the interaction designers (see Smith 2013).

Rather than merely developing insights into the teenagers' "digital worlds" we actively explored and created expressions of these worlds together. The teenagers became aware of their positions as digital subjects in and of their own lives, through their collaborative engagement in the project. The designers and curators were prompted to engage with the youngsters' everyday cultures rather than technological artifacts or curatorial concepts. The particular design anthropological framing created our own ethnographic field. Not only did we gain insights into emerging digital practices of youth cultures and assumptions of digital technology in museums. Focusing on the emergence of digital culture extended the temporal scope of the project and allowed us to use the fluctuant character of the present to reimagine potential "futures of heritage". This theoretical (and curatorial) framework challenged basic assumptions, at once reversing the traditional temporal and material focus of cultural heritage, and opening up the field of possibility in the design project.



Fig. 2. The teenagers engaging in the design process

3. Scaffolding Dialogues: The Process of Intervention

Extending the object of design to include emergent and complex relations of people, everyday practices and technological artifacts, affects our ways of conceptualising the design anthropological process and space. Binder et al. (2011) make an important shift in conceptualising the *design space* from being a confined space in which

professionals design and create certain objects and products, to spaces created by the iterative movements and transformative representations of various stakeholders involved in the collaboration. This opens up for a perspective on the design space as extended and decentered – into various social, digital and physical contexts – in which the coming together of certain possible futures *emerges*. This represents a shift from predictability in the design practice, and taxonomical understandings of culture, towards *enabling* and *becoming* of potential futures that can be negotiated and performed through collaborative and material processes of design and intervention (Binder et al. 2011).

The ethnographic form in these collaborative processes of research is always dialogic, incomplete and transient. Marcus (2012) argues that the contemporary, understood as *the present becoming of the near future*, characterizes and defines the experimental properties of many ethnographic projects and collaborative experiments. The *emergent present* moves forward the ethnographic inquiry but also forms an imaginary basis for mutual and speculative concepts to emerge in the field. The ethnographic form or approach in these processes consists of improvisatory and reflexive interventions in which the temporality of emergence is of central importance. ”Anthropologists move in circuits, assemblages, or among relations – as working metaphors for defining the field – and they move situated discourses that they accumulate around them in un-usual configurations. This movement and posing of arguments out of the places where they are usually made, heard, and reacted to, are distinctive acts of ethnographic fieldwork that are political, normative, and sometimes provocative in nature and deserve their own designed modalities...” (Marcus 2012: 432).

The nature of intervention in design anthropology can be seen as a move from an abstract category deriving from academic reflection and speculation towards a concrete process of emergence. The Digital Natives project took its point of departure from Prensky’s speculations about a new generation, mentally rewired through digital technology, and moved towards a concrete process of emergence, in which future and past were defined in the act of co-creating an exhibition. This process of emergence was set in motion by the anthropologist’s intervention and framing, joined by the other actors and stakeholders. At the micro-level each research and design activity in the project had to be considered, anticipated, planned, reflected and acted upon. The

complexity of the process, centrally involving more than 25 people, meant that the participants' views on what was developing were always situated and incomplete. We did not aim to develop set thematic concepts for the exhibition based on ethnographic research into the youngsters lives. Rather, the strategy was to generate a dialogic process in which the youngsters and designers worked collaboratively in groups towards generating new perspectives and imaginations through the development of a series of interactive installations. We oscillated between large common design workshops, and work in the groups, allowing the multiplicity of interests and agendas to emerge but also to give direction to each other throughout the process. Inside the groups, Smith functioned as the mediator between the designers professional interests and the youngsters' personal perspectives. Between the groups her role was to shape and give direction to the exhibition and research process. Establishing these *third spaces* (Muller 2003) was a way to explore and create alternative expressions between the digital lives of the teenagers and the professional interests of the interaction designers. It showed for example how the digital in the teenagers' worlds was enmeshed in complex ways with situated relations with peers, interestes in artistic film, fashion, political work, etc., in which the technology was not in focus. In contrast, the designers conceived themselves akin to digital natives due to their expertise with advanced digital technology, which sometimes prevented them from seeing the significance of the teenagers practices for the design process.

The strategy of dialogue and circulation was at times both contested and political, but created an open-ended framework in which we iteratively explored and developed new perspectives. The nature of the process meant that Smith's role as a design anthropologist was to constantly define and respond to the unfolding events, using personal judgement and reflection to make interventions and give direction. This shifted focus to the scaffolding of dialogues, which were nested as webs inside the design process, thus facilitating and contributing to the interactions in which knowledge was generated. It was though these continuous dialogic micro-acts – of establishing points of anthropological discourse (Rabinow 2008; Kjaersgaard 2011) within the design process – that alternative relations between digital cultures, advanced interactive technologies and cultural heritage were created.

Maja Van der Velden (2010) refers to “*undesiging the design*” as a strategy based upon respect and ethical responsibility for engaging with the always

unknowable 'Other'. Through the invocation of ethics, rather than politics, in the design process, she argues, undesigning the design makes it possible to reveal what is made invisible in the design. We should not design for determining matter and meanings, ordering, and systematizing the world of the Other on the basis of our own being and needs. A central strategy for our dialogic design process hence is ethical as well as cultural: to complicate, rather than simplify our work, and confront us with our responsibility as subjects towards the Other, in taking their cultural positionings and epistemologies seriously. As Van der Velden argues, rather than make clear-cut decisions in the design process, "It slows us down. It makes us think and rethink. It makes us post-pone certain design decisions in order to keep certain possibilities open as long as possible" (2010: 6). Such movements are what Tunstall (2013) refers to as "decolonizing design", reintroducing human values and ethics that take seriously the cultural subjectivities of others, and what Gatt and Ingold (2013) refer to as "correspondence" with the people we engage anthropologically with. The dialogic nature of intervention makes the design process, and the anthropologists' role, highly situated and circumstantial.

4. Exhibition as Cultural Design

The focus in design anthropology is not merely on producing knowledge through observation and analysis, but through decentered processes of inquiry and experimentation that engage with the emergent quality of social reality, through intervention, reflection and reiterative action. Designing a possible future in this sense entails envisioning a possible past, hereby extending the temporal horizon both forward and backward. In the Digital Natives project, we argue, it was through scaffolding a concrete process of emergence through intervention that a future and a past were defined in the act of co-creating the exhibition.

The final exhibition comprised five interactive installations using advanced digital technologies that created various forms of engagement for the audience (see Smith 2013; Iversen and Smith 2012 for detailed descriptions of the exhibition). The dialogic process leading up to the exhibition was continued in the exhibition, now framed within the hybrid environment between the museum space, the digital installations and the audience. Rather than being a representation of the teenagers' digital cultures, the exhibition was a *manifestation* of and *reflection* on digital culture,

and a way of continuing the inquiry. The explorative nature of the exhibition, and its focus on engagement and social interaction, created a frame that people could position themselves within.

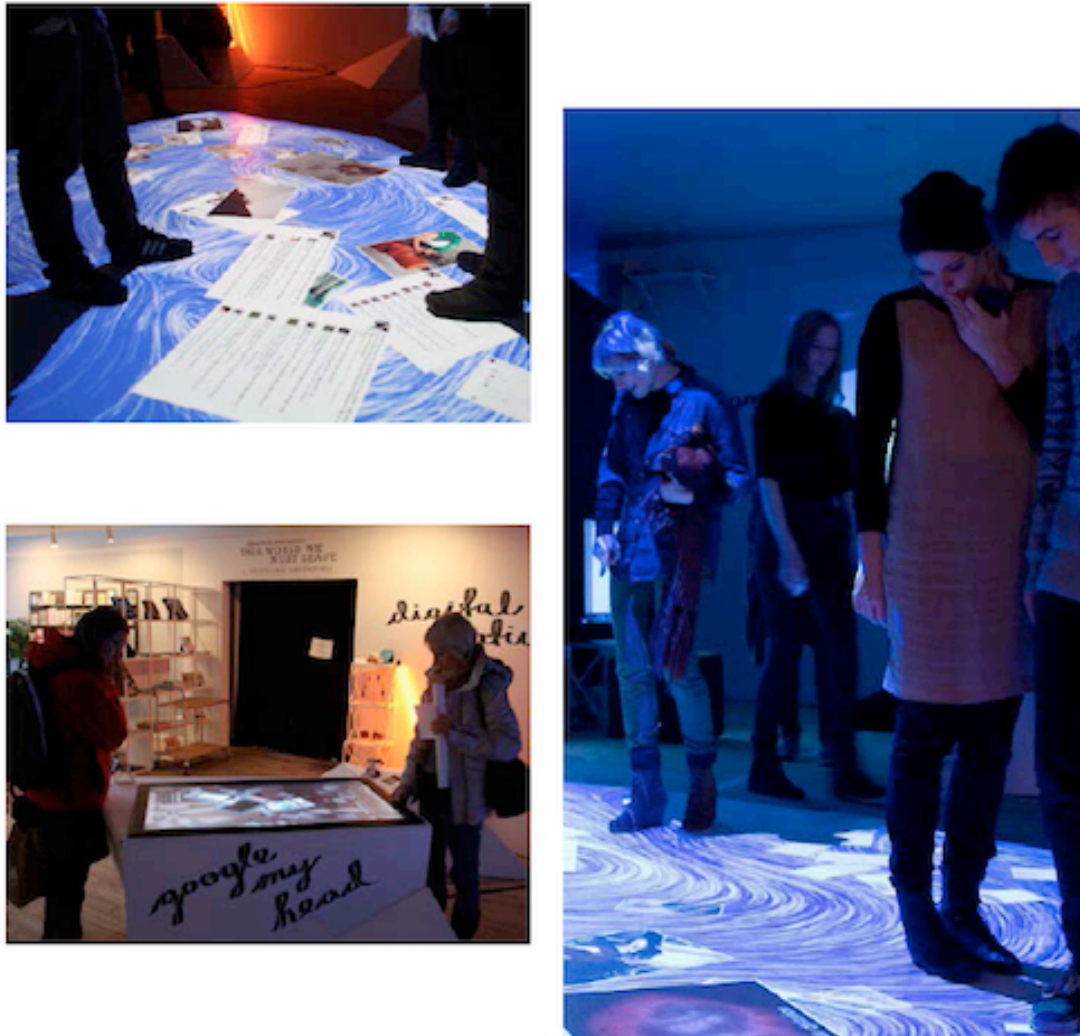


Fig. 3. Audiences in the Digital Natives exhibition

The acknowledgement by an active audience, from school classes to teenage friends, older visitors, and the press, confirmed the exhibition's existence and allowed new meanings and potentials to be actively negotiated. This changed the teenagers' role from being reflective participants in the design process, to being subjects and agents in the exhibition. Through this process of reflection and objectification, the youngsters came to realise themselves as a group or category; they temporarily *became* the Digital Natives, thus appropriating an agentic identity representative of an emergent digital culture. Simultaneously, the dialogic nature of the interactive installations transformed the role of the audience from reflective receivers of formal knowledge, to

engaged subjects using their situated positionings inside the hybrid space to generate experiences and narratives of the digital world(s) at hand. For example the *Digital Sea* installation (see Fig. 3) allowed visitors to browse a floating repository of digital materials from the seven teenagers' lives, and to create connections between the fragments through their own physical interaction. These physical and social modes of interactions allowed people to explore and cocreate unique meanings of the exhibition *in situ*, which for many was an empowering way of experiencing the exhibition through their own engagement.

The exhibition was not meant as a design solution, but the coming together of fragmented elements, people, temporalities and practices. The exhibition and the knowledge it generated was no less real, or authentic, than other representations of culture. In Mead's understanding, its meaning and existence was actualised through the engagements between people, technologies and materialities in the present. This temporal focus on the emergent present moved forward the process of inquiry through new formative interactions, in which the ethnographic subjects were not merely explored but actively (co)created and transformed through the process of intervention and design.

5. Emergence and Intervention in Design Anthropology

Intervening into social realities with the aim of change, we argue, prompts anthropologists to actively engage in processes of emergence, dialogue and co-design. This kind of culture making, of actively constructing and designing aspects of culture and technology, is central to the type of interventionist design anthropological approach we have sketched out. It can be seen as actively engaging with people's worlds, and imaginations, to connect and contribute to processes of emergence through collaboration and intervention.

In the Digital Natives project the anthropological framing of the design process and exhibition was a way of exploring aspects of an emergent digital culture, and to create connections between these emergent characteristics and conceptions of digital cultural heritage in broader societal context. The exhibition at once created a manifestation of digital culture, and was a co-created object of research for experimenting with possible alternative futures. These anthropological encounters are not mere sites of cultural and material inquiry, but they become sites of cultural

production and transformation. They are dialectic and transitive processes shaped within and between technology, people and culture, that both produce and transform cultural experiences and conceptions. The complexity of the collaborative design process makes it difficult to neatly discern traits of *what is* and *what could be*. The knowledge that is produced is neither stable nor complete, which raises important questions about the nature, validity and effectiveness of this kind of knowledge.

Intervention is not about pre-planned and fixed intrusions into a "real-life setting", but an approach to creating assemblages of connections, materialities, and potentialities that allows us to actively work with the emergent quality of social life. These transitive processes do not lead to systematic understandings or stable cultural "wholes", but generate their ethnographic significance as scenarios and relationships contextualised "to a known and carefully conceived incompleteness" (Marcus 2012: 28). It is through these situated processes that connections and guiding concepts emerge, creating the distinct style of knowing through practice.

Firstly, in the case of Digital Natives, the intervention and collaboration of the anthropologists led to an exhibition, that is a real-life event that engaged an impartial or "real" audience. As such the knowledge created in the event was an authentic manifestation of an emergent reality that involved digital technology and culture. Part of this emergence was the appropriation by the youngsters of a concept of digital nativeness that informed their identity in reaction to the affirmation by the audience in the particular setting of the exhibition environment; An identity that both orientated them towards a future of "digital living" giving space to individual life styles and one that summed up a collective albeit shallow past. Secondly, the exhibition created a hybrid environment of new connections and expressions of culture and technology. The audiences' experiences revealed potentials for developing modes of engagement based upon dialogue, interaction and of exploring emergent, rather than formalised, perspectives on culture and heritage. These imaginations hence challenged basic assumptions about temporality and knowledge production in heritage communication.

Of course the exhibition was just one event, but as such it was a valid realisation of a potential future, and a way of using design anthropology to discern emerging cultural meanings and forms. Whether the specific form will have wider applicability and can be generalised to represent a trend, this single intervention cannot inform us about. As with other design interventions, the effect of the knowledge lies in its future

use and implementation. What the Digital Natives case does demonstrate convincingly is that it is a *possible* future, one which allows us to explore alternative cultural imaginations by actively engaging in processes of intervention and social change.

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