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Please cite as: Perry, Sara, Roussou, Maria, Mirashrafi, Sophia S., Katifori, A., and McKinney, Sierra (2019) Shared digital experiences supporting collaborative meaning-making at heritage sites. In Hannah Lewi, Wally Smith, Dirk vom Lehn, Steven Cooke (eds.), *The Routledge International Handbook of New Digital Practices in Galleries, Libraries, Archives, Museums and Heritage Sites*. London: Routledge. Pp. 143-156. https://doi.org/10.4324/9780429506765

Chapter 12

Shared digital experiences supporting collaborative meaning-making at heritage sites

Sara Perry, Maria Roussou, Sophia S. Mirashrafi, Akrivi Katifori, and Sierra McKinney

Introduction

A growing body of research testifies to the capacity for archaeological and other cultural heritage sites to generate wonder, attachment, personal transformation and restoration, family bonding and community building among their visitors. However, these aspects of heritage site visits are underexplored, especially in the design of digital tools and experiences. The social dimension of the museum in particular has received little attention. Even if it is well known that museums and heritage sites are primarily visited by groups of people rather than individuals, the digital experiences created for them are often inadvertently designed for the individual.

In the context of two related European Union-funded research projects, CHESS[1] and EMOTIVE,[2] we set out to develop mobile-based emotionally engaging digital stories for groups of visitors to diverse cultural heritage sites (Perry et al., 2017). The collaborative projects have brought together the resources of participating organisations from at least five different European countries in each case, and from different sectors (i.e. industrial partners, academia and research institutions, and representatives of the gallery, library, archive and museum sector), ranging from world-renowned museums, such as the Acropolis Museum in Athens (Greece), to United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage sites, such as the Çatalhöyük archaeological site in Turkey. Our evaluation studies feature detailed observations of visitors onsite, as well as post-experience questionnaires and interviews, providing us with rich data on several axes (e.g. in relation to interactive

story plot and narration, staging and wayfinding in the physical space, personalisation and social interaction).

This chapter focuses on shared experience and the impact that digital technology can have in promoting the cultural site as a social space. On the one hand, our findings testify that digital empathic stories can evoke narrative transportation, and in some cases, personal attachment and critical (self-)reflection. This leads us to consider how their enchanting capacities might be pushed even further into the building of broader, collective social conscience. At the same time, the findings reveal the challenges, both conceptual and practical, of designing a shared digital experience in which visitors engage with the site and each other in meaningful ways.

A critical next step in our ongoing and future work will be to develop even deeper means for visitors to meaningfully speak and interact with one another. Ultimately, it will also explore the broader global implications of enhancing meaningful shared digital experiences in museums by drawing out differences and similarities in the way social groups interact in different global contexts.

The museum as a social space

Visitor studies research confirms that visitors to most sites and museums come in groups (Dierking, 2011; Petrelli et al., 2017; Petrelli & Not, 2005) and that museum visits tend to be driven by a social agenda (Perry, 2012). According to Dierking (2011, p. 202), about 60–70 per cent of museum visitors in the United States (US), United Kingdom and Australia are families, and 25–35 per cent are school or adult tour groups. Only five per cent or less are individuals visiting by themselves. Even among these individuals, vom Lehn et al. (2001) underlines that peripheral awareness of other strangers within museums shapes how visitors move through an experience.

However, existing approaches to museum displays of information often do not seem to cater to groups, while very few studies explicitly attend to how people engage with museum exhibits in groups (Davies & Heath, 2013; Tolmie et al., 2014). Even in contexts in which sociality *has* been accounted for, it can often seem narrowly conceived, ignoring pre- and post-visit experience and the complexities of the visit itself, which may entail both shared and independent encounters (e.g. López Sintas et al., 2014). Indeed, visitors themselves may still hold expectations that prompt them to quietly absorb information individually, rather than challenge and engage with it as a group (Chang, 2006; Katifori et al., 2016).

Digital technology in museums and archaeological sites, if appropriately designed, provides the potential to support groups and social interactions among their members. The social aspects of a mobile-enhanced visit have been explored by several researchers (Damala et al., 2008; Massung, 2012; vom Lehn et al., 2001), yet social interaction is an aspect that many mobile guide technologies fail to encourage (Othman, 2012; Woodruff et al., 2001). The design of digital applications for visitors has to date been geared towards the individual rather than the group, primarily because it is difficult to conceive and implement shared experiences with and around personal devices. This is evident in the wide use of headphones and small screens to learn from, plugging the visitors into their own individualised experience (Hindmarsh et al., 2002). Further, instead of connecting the visitor to the site, often mobile applications create more distance between the two, with 'little or no physical relevance' to connect them to the historical space (Perry, 2016).

When it comes to opportunities for human-to-human interaction, isolation between different members of a group of visitors when using electronic guides has also been cited as a disruption to the social aspects of a museum visit. Massung (2012) observed that such isolation seemed self-imposed by the visitor rather than the technology. Even when co-visitors have been made to stand side-by-side to listen to the same commentaries via mobile technology, discussion between visitors was rarely observed to occur.

In the early steps to bring digital applications to the world of heritage, the fostering of collaboration and dialogue was a main concern (e.g. Holtorf, 1999; McDavid, 1998). Arguably, however, their deployment through personal mobile media heightened the problematic qualities of such media by focusing users inward. To encourage external-facing social interaction, we argue for a prioritisation of the human-to-human experience. Herein, digital platforms are woven in to enhance the experience, rather than drive it.

Issues with group experiences

While there are many reasons social experiences in museums are beneficial, they come with their own challenges and problems. For instance, groups may not act like a single unit, with group members going through museums at their own pace, each with their own expectations and goals. Trying to preserve group coherence can be a challenge, as it is common for people to get 'dragged away' from exhibits or information that they find interesting (Tolmie et al., 2014, p. 1051). When constructing group experiences, a certain degree of flexibility must be considered.

Children often offer another challenge, breaking expectations of collaborative learning and ultimately taking on the role of decision-maker in a larger group (Hope et al., 2009). If a child is unwilling to participate, their parents will more likely than not compromise in the child's favour for the coherence of the group at large (Rennick-Egglestone et al., 2016). Conversely, children acting as the primary decision-makers in a group could be interpreted as an asset to experience construction, encouraging the accompanying adults to get involved.

Moreover, some visitors are simply not interested in speaking with each other. There is often an expectation of individual experience at a museum; to subvert this may not always be a welcome change. Forced interaction can hinder rather than enhance a visitor's experience. As an example, a follow-up to the CHESS project, which worked to take steps forward (with mostly positive effect) in the introduction of collaborative digital storytelling in museums, was not without its critics. One user of the experience pointed out the awkwardness in forced interaction with a companion, stating that it was not natural because conversation would have occurred after the experience, not during (Katifori et al., 2016).

While there is much work being done in shifting the perception of museums from a solitary to a group-centric space—thus, more accurately reflecting the demographic of people who visit—there is still room for improvement. Open-air museums and art museums make a distinct effort to encourage people to interact and question what is in front of them. As noted, a great many articles discuss the importance of collaborative experience in museums, while relatively few offer real ways in which to create them.

Previous work in designing group experiences with digital technology in cultural sites

Successful digital collaborative experiences must effectively work to enhance the space that visitors inhabit, rather than drag them out of it. The 'eavesdropping' technique, proposed by the pioneering electronic guidebook application of *Sotto Voce* at Filioli (a historic house in California), encourages group communication in a museum environment (Woodruff et al., 2001). Essentially, a synced device is given to each visitor with content they choose themselves, as well as a volume controller that determines the loudness of the audio from their companion. If one visitor chooses a clip, the other can either choose to hear what their companion selected or listen to their own. The team discovered that when visitors could hear their companions' audio guide, they were much more likely to engage with each other over objects, regardless of whether those objects were mentioned directly in the guide (Aoki et al., 2002).

Fascinatingly, the researchers found that the shared experience shifted the importance from the objects to the space around them, allowing visitors to self-navigate the museum rather than being led (Grinter et al., 2002). This is an interesting method to 'increase awareness' of the interests of other group members (Tolmie et al., 2014, p. 1053). Indeed, it is not uncommon for pairs of people to want to synchronise their experience, especially if the purpose of the outing is to spend time together (Fosh et al., 2013).

Another approach involves goal-directed tasks in which the speaker and listener engage with each other to achieve a particular goal (Yule, 1997). An example of this was tested at the Mackintosh Interpretation Centre in The Lighthouse in Glasgow, where a group of onsite visitors shared their location and orientation to offsite partners (i.e. virtual visitors on the internet), communicating with each other via a voice channel. Through the audio channel, they 'navigated around a shared information space', learning and sharing different aspects of the site with each other based on their location (Brown et al., 2003, p. 577). The trials found that while much of the conversation between onsite and online visitors was devoted to reporting where they were, there were also instances of reading text aloud, sharing opinions and connecting the space around them to their everyday lives (Galani & Chalmers, 2003). These experiences utilise gaps in knowledge to encourage collaboration between individuals. Thus, the interconnectivity of the physical and digital surroundings can open paths of interaction between museum visitors.

The previous examples offer ways in which visitors can experience a curated exhibition together without interacting with it directly. Interactive storytelling could be another effective way of developing social engagement between visitors, while giving them a chance to participate in the narrative. Such initiatives have been of particular interest to our work in the CHESS project (Roussou & Katifori, 2018). A number of experiences were authored for the Acropolis Museum in the course of the CHESS project, each based around a central character who tells a story around a set of objects in the museum. Each experience is delivered via a browser-based interactive application run on a tablet. The content is largely communicated through voice narration, ideally experienced with a set of headphones (see Figure 12.1). Users are directed to observe objects in the museum that form part of the narrative. In addition to the narration, images and animations are shown at times on the tablet's screen.

Although not particularly designed to foster collaborative museum visits, the evaluation of the experiences revealed a group of challenges associated with the requirement to assist the predominantly social nature of visits. More than 50 visitors (including 12 pairs) were observed while using the mobile storytelling guide at the Acropolis Museum in Athens and were later asked for their opinions regarding

individual versus group experiences (see Figure 12.1). Their responses varied, depending on their personal visiting style; while some visitors preferred a mostly individual visit (with the possibility to exchange impressions at some points), others desired a constantly shared experience (Roussou & Katifori, 2018). Similar to other studies, our research found that practical encumbrances (e.g. the need to tie everyone together with headphones on a single device) limited conversation between members. Nevertheless, visitors adopted non-verbal techniques, expressions and body language strategies to communicate and share the experience.

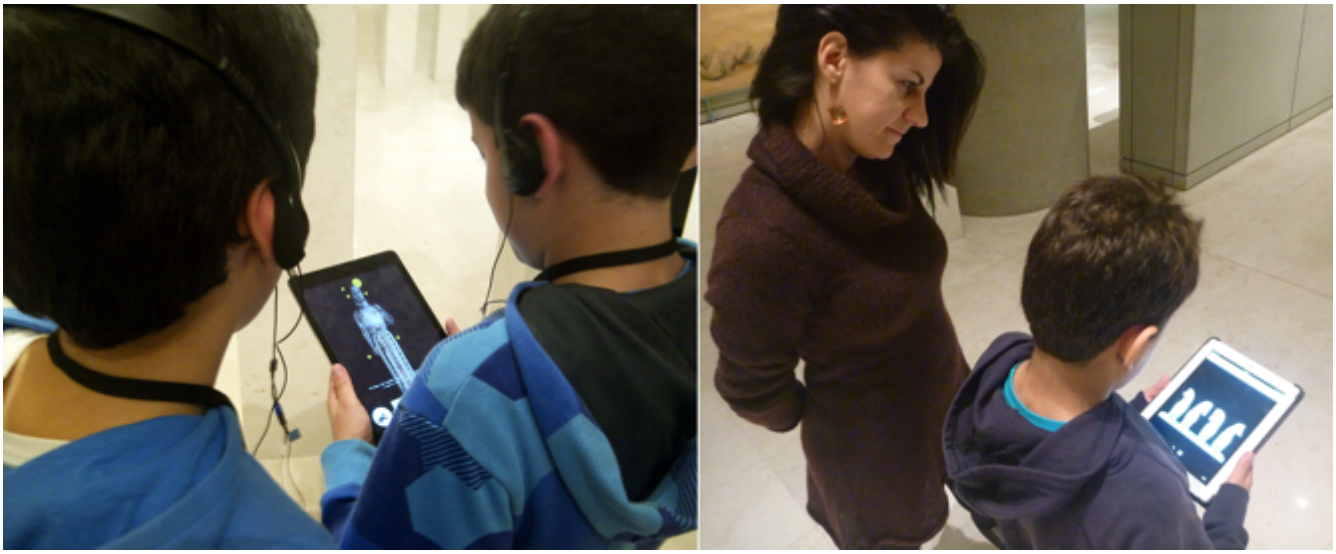

Figure 12.1: The composition of the pairs experiencing the CHESS stories varied. Here, peers and parent–child pairs experience stories at the Acropolis Museum. Source: Maria Roussou.

Further, our observations from previous ethnographic studies (Tolmie et al., 2014) were confirmed. In particular, the role that one group member takes can affect that member's, or even the whole group's, engagement with the content. For example, in the case of parents visiting with children, the experience was mainly led by the latter (who usually carried the device); parents acted mainly as content mediators, sacrificing their own experience for the sake of facilitating their children's (Rennick-Egglestone et al., 2016). In subsequent iterations, we made the interaction and navigation structures clearer so that adults could modify, assist and direct children's experiences to fit the immediate local social concerns, but also to facilitate synchronised experiences. Finally, adding a playful element to storytelling was viewed as another way to engage groups of people (Vayanou et al., 2016). Collaborative games in museums, where there are a mix of characters to manipulate and explore, allow the visitor to step into the narrative via a proxy (Klopfer et al., 2005). It is not difficult to encourage people to interact with each other when asked to play a game, as gaming brings with it the assumption of collaboration and questioning.

Based on the findings from CHESS, we have been exploring the design and development of applications that aim to engender engagement between groups of visitors at the archaeological site of Çatalhöyük in Turkey. Located near Çumra, Konya in central Turkey, Çatalhöyük is a UNESCO World Heritage-listed site, taking the primary form of two mounds, containing at least 18 levels of continuous occupation dating from 7100 to 6000 BC. Occupied by thousands of individuals 9,000 years ago with little evidence of social hierarchies or inequality (Hodder, 2011), Çatalhöyük sparks great interest in how these people may have lived.

To investigate how to author and evaluate digital stories that promote social interaction, in summer 2015 we restructured and extended a storytelling experience designed for individual visitors to the site (Katifori et al., 2016). Fictional characters narrated their stories in an interleaved way, providing two different perspectives on every main topic covered throughout the experience. Several interaction points for visitors, including information gap, reasoning and opinion gap tasks, were added and visitors were explicitly prompted to communicate or/and collaborate when an interaction point was reached. Our main purpose was to study user reactions and emotions towards such prompts, narrative variations and different types of interaction.

The experiment took place in late July to early August 2015 at Çatalhöyük with 16 participants, who evaluated the experience (see Figure 12.2). Interviews and observations with these participants indicated that they positively received the use of system-driven interpersonal interaction. Participants suggested that social interaction enhanced engagement, understanding and reflection. It also gave a feeling of active participation. Asking users to select an object for their companion's burial was one of the most successful and engaging activities. It fostered reflection on each other's character, guiding the selection of the most appropriate object, which led to a deeper understanding of the process of grave goods offering in the past.

Figure 12.2: Visitors pairing their devices during early evaluation studies of a group experience at the archaeological site of Çatalhöyük in Turkey. Source: Sara Perry.

One of the issues that the users raised was that, in some of the cases, the prompts for conversation did not feel natural; rather, they felt constructed and forced. This was especially true of the information gap prompts, for which users had to exchange information that was given individually to one of them.

As a general guideline, if social activities are to be included in a mobile experience, they should be explained to users from the outset. For example, introductory collaborative activities should be added at the beginning of the experience to 'break the ice' and familiarise the participants with the interpersonal interaction elements they will later encounter. As noted during the experiment, users seemed to appreciate clear instructions in relation to such interaction, even in cases in which the assigned task was to reflect about the content.

Our intent with this mobile-mediated experience was to help break down some of the interpretative barriers experienced (and often reproduced) by visitors at Çatalhöyük and beyond. The following section describes our latest experiment, implementing a more experiential approach to social interaction onsite.

An emotive shared digital experience at Çatalhöyük

The layout of Çatalhöyük paints a detailed picture of how tightly knit the community must have been. A variety of evidence suggests little to no social hierarchy, implying an egalitarian sociopolitical organisation. Such an egalitarian structure offers a fascinating contrast to many current societies,

including those of the main visiting audiences to Çatalhöyük (Turkish nationals followed by Japanese, US and Australian visitors, among others), offering an opportunity for a group experience to be developed echoing this Neolithic mindset. Below, we present an overview of the conceptualisation and implementation of this experience, highlighting the main findings from its first evaluation with visitors. A more detailed report on methodology and collected data can be found in Mirashrafi (2017).

When setting out to design a collaborative experience at Çatalhöyük, we considered it critical to develop an approach that enables the rich conceptualisation of users, both as individuals and members of touring parties, who engage socially with cultural sites before, during and after a visit. Therefore, we began our experience design by identifying and describing our visitors in the form of personas. A method utilised in the design and evaluation of digital products, personas are essentially fictitious individuals constructed by designers to represent a typical end user (Roussou et al., 2013). Traditionally, the persona is an individual with a unique combination of characteristics. However, as discussed, research shows that people visiting museums usually do so in groups; using a singular persona in these situations ignores the social complexities of their experience. Over 15 years of observational and demographic data from visitors to Çatalhöyük show that most fall into the three categories: local parents with children, international and local families or a mix of the two, and larger bodies of people like school or tourist groups. Thus, we extended the model of the 'persona', introducing group personas to better reflect the group-based nature of most visits to the site, and the synthesis of the visitor groups we were targeting.

Overview of the experience

The primary aim for this collaborative experience was to allow visitors to Çatalhöyük to explore what it might be like to exist in an egalitarian society, encouraging them to collectively reflect on their own socio-economic practices in the present, while also considering the everyday lives of past people from this Neolithic town.

The onsite experience provides visitors with three-dimensional (3D) prints of selected Çatalhöyük artefacts that they personalise as their own, before a mobile application guides them through four of the site's replica houses, where they are prompted to swap and, eventually, leave those objects behind. By physically exchanging and leaving behind artefacts, visitors are asked to question modern assumptions around material ownership and community. Central to this experience is the underlying goal

of sparking empathy in the visitor. Wolfe (2006) suggests that this kind of hands-on learning is more likely to be emotionally engaging and memorable to a visitor.

Before arriving, the pre-visit phase of the experience asks visitors to establish an online profile wherein each visitor is assigned (via a form of personality quiz) a different role relevant to life at the Neolithic site (a hunter, storyteller, artist etc.). Each role corresponds to a small set of artefacts, of which the user is asked to select one. Consequently, the visitors arrive at the site with a ticket containing the information about their role and the artefact they chose. This is delivered to them as a 3D-printed object once they arrive and check-in at the Visitor Center. (Note that for the formative evaluation, we were required to use laminated cards as proxies for the 3D prints.)

Along with the objects, visitors receive a mobile device to use in small groups. Currently, the application is designed for two companions (although we are extending it for three users) and introduces them to how egalitarianism may have operated on a daily basis as they make their way through the houses together. The application first guides them to 'personalise' their object through painting it or attaching stickers, ribbons and other decorative elements, thereby making it 'their own'. They are then prompted to use the near field communication (NFC) tag glued onto their object to register it in the application. Given that the object is related to their visitor profile, as they are prompted to swap, take and leave behind these artefacts in each house, the items slowly become layered with the profiles of different participants every time they change hands (Mirashrafi, 2017). At the end of the onsite experience, visitors are asked to decide among themselves which object to leave behind for good. This means one of the party leaves their experience with nothing at all. The pair, however, takes home a single object that they may keep as a souvenir. However, asking one of the participants to leave behind an object altogether reinforces the theme of fluid ownership in Çatalhöyük.

Finally, the third, post-experience phase seeks to connect strangers digitally through layers of profiles embedded on NFC tags used throughout the experience. The users are able to log in with their profile and view the itinerary of the objects they held during the onsite experience, as well as the web of past and subsequent visitors that may have taken these objects home.

Throughout the experience, users are prompted to reflect on their decisions and feelings. Such reflection allows 'an opportunity for emotional engagement' within the experience itself (Sakr et al., 2016, p. 63). The script aims to encourage discussion over the course of the experience, provoking understanding through movement and conversation. In this way, visitors not only connect with the past

people of Çatalhöyük by going through the motions of their lives, but so too with people participating in the present.

Evaluation process and participants

A formative evaluation of the pre- and onsite experience was conducted in Turkey in the summer of 2017. Six pairs completed the evaluation, both international and Turkish (see Figure 12.3).

Figure 12.3: Pairs of users touring Çatalhöyük's replica houses as part of a collaborative digital experience centred around reflecting on egalitarian ways of life. Source: Sara Perry.

The data collected during the evaluation included: audio recorded through dictaphones, lapel microphones and in some cases, video cameras; standardised observational notes produced by a researcher during each tour; and 30–60-minute audio-recorded interviews conducted with each pair immediately following their tour.

Summary of findings

Broadly, the user feedback collected during the evaluation can be divided into two categories: process (usability and functionality of the mobile experience) and experience (emotional and social engagement). With respect to the former, users found the application to be immersive, with the few identified distractions lasting only short periods. However, users were split regarding the role of the mobile experience in connecting them to the environment. Some indicated it limited their interactions, prompting

them to focus more on the device than they did the room. Others identified multiple instances of engagement with the physical environment through their visual and physical examination of the space.

With respect to experience, users developed feelings of attachment to the items used in the activity. These items were commonly referred to as 'mine', 'my' or sometimes by a given name (i.e. 'Grandma'). Users also discussed reluctance in parting with the objects, and their connections to what the objects represented. Their comments (see below) indicated a strong personal bond with the items, which was key to their overall experiences. The concept of personal attachment was also discussed in the context of personalisation or ownership of belongings.

Many users connected strongly with their assigned role in the pre-visit stage. Users referred to their role multiple times throughout the interviews, often as a defining characteristic of themselves (i.e. 'I am a storyteller'). This was also connected to periods of self-reflection, as users discussed whether the role accurately or non-accurately reflected how they viewed themselves. The experience promoted social engagement, both immediately between the two participants and with the larger global community through the users' expressed interests in engaging in the post-site experience. (Note, however, that at the time of the formative evaluation, the post-site experience had not yet been implemented.)

The true impact of this can be observed most strongly in the frequency of visitors' comments indicating self-reflection and being affected or changed by the experience. Many users were prompted to engage in self-reflection. This included direct statements about being compelled to become self-reflective, but also through descriptions of connections to personal experiences, both real and imagined. Most positively, there were frequent statements identifying that users related to the space in one way before and another after participating in the experience, including expressing higher levels of empathy with the people of Çatalhöyük.

Sharing emotive experiences

Of particular interest to our team is the frequency with which users reported to have experienced strong feelings (of various forms) during their participation in the onsite experience (87 per cent of participants), and their positive views of the shared, collaborative nature of the experience (100 per cent of participants). 'I'm amazed. I feel [long pause] emotional. It was a lovely thing for me', one Turkish user offered after completing the onsite portion of the experience. 'It was the [most] perfect thing I have ever [felt] in these houses' he explained. 'I mean I left my [object] over there, and if I see someone else from

some other part of the world [has] that object it means just, you know, you feel it.'

Some users described very specific emotional reactions in relation to certain aspects of the experience, including a final revelatory moment wherein it becomes clear that Çatalhöyük's residents would have likely also communally raised their children. As one British participant noted, 'It made me realise the gravity … of their family life.' Her teammate agreed with how the experience encouraged the participant to step into the minds of past people, stating 'because obviously you can have all this talk about how they used to share, but until you're actually doing it yourself, you don't really put it into your own personal context'. Another US user noted 'I do feel like I understand them more as actual people now.'

This connection to past individuals was articulated by several pairs in their interviews:

> I feel in touch with the people … like, you can actually begin to imagine what their life was actually like … The whole purpose of archaeology is to connect to the past, but now I do feel like I can almost imagine what their day-to-day life was.

She went on to describe the overt bond she had developed, not only with the people of the past, but with her object in the present (to such an extent that she anthropomorphised it):

> Giving away one of ours [objects] it was like, Ah! But then it was like, Oh, somebody else might come along and pick that up later so they'll be fine.

A British participant also spoke (unprompted) in anthropomorphising fashion about her object:

> I didn't expect to get such a connection to either [of our] objects and feel that possessiveness. Nor did I feel the want to leave her [the object] behind afterwards because I didn't want her to be taken away from the site … And I didn't expect the experience to make me feel that way, but it does … which is surprising.

Comparably, a Turkish participant, reflecting on his original object, described that 'The bear stamp made me feel powerful.' He later noted, 'I was really committed to the bear stamp' because he drew something on it and it became his own, leaving him regretful to say goodbye.

There is no question that the shared nature of the onsite experience was critical to its success. Sometimes collaboration was mentioned explicitly by users. For instance, in one case, a pair specified

that they were learning together 'but not like a classroom environment … it was like we were bouncing off each other'. In other cases, this is implied, as pairs regularly had to compromise to decide which of their objects to leave behind. The tactics deployed to reach such compromise (from games of 'rock-paper-scissors' to more nuanced debates over attachment) are in themselves worthy of further research.

While our formative evaluation was constrained by many factors, including a small sample size, use of printed cards in place of 3D prints and lack of a fully operational post-visit experience, the results hint at several opportunities as we move into the next stages of design and development. First, digital media were fundamental to the connectivity (personal and social, to the past and the present) at the core of the experience, yet their implementation was incredibly straightforward, necessitating only basic web design, NFC tags and simple authoring (text-only) of the application via the EMOTIVE project's Storyboard Editor (developed for the most novice of users).

Second, the experience relied on a relatively simple set of strategies to facilitate group-based meaning-making, which are arguably replicable in other contexts. These include (1) the pre-visit quiz, which profiles visitors, linking their present day personality to one of the past; (2) the visitor-selected object, which is connected to users' personalities and is personalised by them via physical modification/decoration; (3) embodied group exploration of a concept (in this case, egalitarianism) while onsite, where the purpose is not to force factual information on participants, nor to demand that they explicitly imagine themselves as inhabitants of Neolithic Çatalhöyük, but rather to collaboratively perform actions in the present in ways that may seem unfamiliar to them. It is through reckoning with this unfamiliarity as part of a group that meaning-making and connectivity come about. Indeed, as one participant noted in interview:

> [I] felt it was more about us, … placing us in the situation, and making us think about each other and our opinions and our thoughts. I didn't really think factually. I didn't think archaeologically … I felt, like you [her partner] said, like I was exploring myself in that situation.

Conclusions

The possibilities for developing meaningful, shared digital experiences in museums and other cultural contexts are tremendous and still mostly untapped. Although our research is in its early phases, the data hint at levels of emotional impact and potential for personal transformation that are highly encouraging. It is worth considering, however, that our results indicate that the better participants know each other,

the more they derive from their experience. Studying this relationship between known and unknown visitors—and developing means for strangers to meaningfully speak and interact with one another—is a crucial next step in our studies. Not only would such research address a major gap in the literature (vom Lehn et al., 2001), it would also help these types of shared digital experiences reach their full potential. Herein, networks of people could be joined in fostering a larger collective conscience or, at a minimum, in reflecting on their own assumptions and taken-for-granted beliefs around 'normal' ways of life. As one participant described, 'I connected with a human being on another level, that I'd never met before and I also appreciated people a lot differently.' Such collaborative digital experiences can encourage participants not merely to identify with the past, but to rethink their place in the present and future, imagining the world and its inhabitants in a more complex and malleable fashion. To conclude, in the words of one user:

> Having to actually force myself to give something away, having to negotiate with someone about what we give and the reasons why we give away, it increased my connection to the object … I felt like I had been taken to the past, and sort of really made to connect with the object and connect with the people in a way that isn't knowledge … In terms of immersion, in terms of feeling, that is one of the best experiences I've had.

Acknowledgements

This research has evolved across multiple projects funded through various grants, including two research grants from the British Institute at Ankara (2014, 2015), the European Union Horizon 2020 Research and Innovation Grant EMOTIVE (no. 727188) and the FP7 CHESS (no. 270198). We are indebted to Katrina Gargett for her assistance in many aspects of data collection and transcription at Çatalhöyük in 2017, including observing and interviewing participants. We extend great thanks to all who graciously agreed to participate and share their views on the experience at Çatalhöyük.

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