Feeling through the screen: memory sites, affective entanglements, and digital materialities

Shanti Sumartojo, Matthew Graves

Feeling through the screen: Memory sites, affective entanglements and digital materialities

Shanti Sumartojo (RMIT University)

Matthew Graves (Aix-Marseille University)

Introduction

In this article we advance a geography of commemoration by focusing on digital screens, a common element of museum displays and other memory sites, arguing that screens are crucial in how people not only think, but *feel* in and about such places, and that this contributes to how such places stick with us. We speak to recent work that attends to the powerful affects that can circulate in such places and help bind historical narrative to individual visitor experience (Drozdzewski, De Nardi and Waterton 2016; Tolia-Kelly, Waterton and Watson 2017; Sumartojo 2016). These approaches rely on a longstanding recognition of the importance of the more-than-representational aspects of memory sites that also appears in heritage and museum studies, notably in relation to space, scale and sensory perception (Waterton 2014). We extend this, however, by drawing together scholarship on more-than-representational approaches to memory sites with new theorisations of digital materialities. We will show that, because of the multiplicity and nature of affects that encounters with them engender, digital screens constitute the embodied experience of official memory sites in ways that move far beyond the presentation or display of archival material, the function for which they are often intended. In doing so, we attend to the particular affective intensities that emerge by and through visitors' encounters with digital screens in a Second World War state-sponsored site, the Camp des Milles in southern France.

Hoskins (2007, 452) identifies 'the necessity of paying attention to texture as well as text when the material is not putty in the hands of human interpreters but a bearer of messages, not a passive container of social ideas and ideals or a transparent communicator, but an active mediator of social relations'. As a part of the 'texture' of memory sites, we will

discuss how understandings of the content displayed on digital screens can mingle with screens' material and immaterial qualities to constitute a range of powerful ways of 'feeling' this texture, in affective, material and sensory terms. By interrogating the experience of visitors to the Camp des Milles, we will consider how digital screens can thicken the experience of such sites by framing them as bodily and intimate - but also how encounters with such technologies can disappoint, disrupt or puncture the atmospheres of such sites, and draw out feelings of frustration or annoyance that might pull against the official aims of such places. In doing so, we attend to one aspect of how 'digital media shape our everyday experiences and political horizons of love, boredom, fear, anxiety, compassion, hate, hope' (Kuntsman 2012, p. 4).

Affect and materiality at official memory sites

Sensory encounters with and in official memory sites have been the focus of sustained attention (ie Peters and Turner 2015, Sumartojo 2015, Muzaini 2015, Drozdzewski, Marshall 2004), with recent work foregrounding the fleshy experience of such places, and the way our bodies compel us to mix banal but persistent sensory concerns with the discursive aspects of such places: 'sensory cues provoke remembrance; they install pauses and digressions in our normative thought processes; and they transport us, however momentarily, to different times and different places' (Drozdzewski et al 2016, p. 447). This work explores how the sound, smell, look, taste and feel of memory sites are central to how we make sense of and understand them. Accordingly, our sensory engagement can shape our stance and reaction to discursive content, and here Sather-Wagstaff (2017, p. 18) asks us to focus on the 'dynamic relationship between the senses, feeling, emotion, cognition and memory as continually in process'. In this sense, our means of co-constituting official memory sites as we engage with them moves beyond our discursive understandings to take in knowing them through how they *feel* to us, in both sensory and affective terms (Sumartojo and Graves 2018). Along these lines, Åhr (2008, p. 285) points to the immersive experience of Eisenman's *Holocaust-Manmahl* in Berlin as the model for a 'monument that is an experience unto itself' which cannot be reduced to its symbolism, but is designed as 'a proxy for the trauma of living in a concentration camp: to induce disorientation and claustrophobia'. Similarly, Waterton (2014, p. 824) has identified the importance of the

'situational affective contexts of heritage', focusing on the '*spaces* of heritage…that garner the affective and emotive values that shape the possibilities for our bodily movements and capacities.' Attending to the more than representational aspects of state-sponsored memory sites requires methods that follow Crang and Tolia-Kelly's (2010, p. 2316) orientation towards 'heritage sites as occasions for doing and feeling, of connecting different sensations, representations, and thoughts'.

Elsewhere, the *stuff* of memory sites has been shown to be important in understanding how people make sense of and feel the histories of such official places: their materials, objects and spaces all conjure particular affects – this is part of what they afford us when we encounter them. In studies of materiality and material culture, the role of things in memorial practices or in rituals of loss is well-established (see Miller 2009). Hodder (2012: 24), for example, explores the vital link between memory and materiality, arguing that 'humans depend on things' for all sorts of meaning making, including via memories that hold objects as a form of possession: 'things become possessed by us, but we also have become possessed by them, by their colour, beauty, memories, associations'. These objects then become central in recollection and memory, with humans and things deeply 'entangled'. Freeman *et al* (2016, p. 3) use similar language in their work on memory, pointing out:

> we rarely remember through ideas only, but rather through our encounters with
> things, and through embodiments and disembodiments collected in material
> traces and objects…In order to think through our pasts, as they are entangled
> with our presents, we must examine the intersections of sensation, experience,
> and meaning that arise through our interactions with material forms.

Indeed, the past is often understood by way of objects, texts and symbolic artefacts akin to what Anderson (2018, p. 3) calls 'representations-in-relation'. By this he means how such things are unable to be disentangled from how we experience the world, and should be thought of as: 'representations as they are practised… how they are lived with in the midst of other events, processes and objects, rather than… how they express a representational-referential system.' In further examples that focus specifically on museums, Crooke (2017)

identifies different roles that objects play, such as mourning, evidence and memorial. She moves beyond simply identifying that memory and materiality intersect, instead starting to identify the work that these intersections do and how they relate to aspects of their social and cultural contexts. Alderman and Campbell (2008) similarly call for an 'artifact politics' that not only accounts for objects' impact on us, but also recognises that their curation and display is a form of 'cultural power' that has uneven effects on narratives about the past. The social context that they address is the presentation of the history of slavery in the American South, which is presented in material terms to museum visitors as they view everyday tools or cooking utensils, or handle chains and shackles. Here, the form of engagement with the stuff of the museum is as much affective and sensory as it is discursive.

However, curatorial intentions to shape visitor impressions through sensory and affective experiences (such as the example of shackles above, or increasingly common multi-media displays) can of course be subverted or thwarted by individuals' positionalities. This is what Crang and Tolia-Kelly (2010: 2316) touch on in their discussion of race and heritage, in which they discuss the 'differentiated affective energies' the emanate from the encounters between official heritage that is intended to 'fix, stabilise and store both things and categories' and bodies that may not sit comfortably within these boundaries. In attending to digital screens at the Camp des Milles we argue that we must similarly attend to the affordances of digital screens in terms of what they make possible to feel of and about a memory site. This is to treat them as 'things' (Brown 2001) in their own right as well as an increasingly commonplace means of display, a technology of curation, interpretation and public pedagogy that is a descendent of the glass case (Graham 2016). However, we argue that digital screens at memory sites go beyond this because they also conjure a range of affects related to their materiality and spatial contexts as visitors encounter and interact with them. Moreover, they allow ways of interacting with and reflecting on content that was not previously possible in the same way. As we will show, digital screens also help constitute ways of feeling about historical material that exceed curatorial intention and aims. This means moving beyond thinking of them as ways of displaying content, and instead identifying some of what their digital materialities might afford, as we discuss next.

Digital screens and memory sites

The small screen has been a longstanding area of study, from the highly personalised ways of using and understanding mobile phones (Horst 2016) to the cultures of watching or producing television (Lewis, Martin and Sun 2016) to the distancing affects of computer displays in military activity (Kuntsman 2012). This extends to work on screens in museums as integrated parts of displays that both present objects in new ways and also act as objects in their own right. Indeed, the use of such technologies in museums and memory sites is now a well-established practice, constantly opening up new forms of representation, engagement and encounter with historical content (Smith, 2013, Ciolfi and Banno, 2007).

Whereas the design intent to provide new ways for visitors to encounter and think about displayed material is well known, it is less common to examine how visitors perceive and understand these encounters. An exception is Witcomb's (2007, p. 36) account of museum design in which 'objects including multimedia installations, are able to engage emotions and in the process produce a different kind of knowledge – one that embodies in a very material way, shared experiences, empathy and memory'. In a critique of the treatment of multimedia displays as simply tools for interpretation, she argues that they should instead be recognised as 'installations or objects in their own right rather than as an interpretive layer that is added to the display of objects from the collection'. Of particular relevance to our arguments here, she pinpoints how multimedia installations might 'act as releasers of memory…through their power to affect us by "touching" us or "moving" us' (2007, p. 37). In this sense, multimedia and screen-based museum installations bear their own 'thingy' affordances (Brown 2001).

Witcomb's consideration of museum multimedia displays draws on and informs a body of work that explores the growing use of digital technologies in such spaces. In his discussion of new media and cultural heritage, for example, Malpas (2007) draws on Benjamin to argue that new digital technologies parallel previous analogue ones in making possible 'reproductive' uses, 'where the aim is to record or re-present heritage artefacts or sites' and 'productive' ones that 'create something new or supplemental' (Malpas 2007: 17). What is useful for our approach here is that digital screens can do multiple things, and that they

5

cannot be disentangled from historical 'content' because they are implicit in how people encounter and make sense of this material. Indeed, recent work on digital technologies provides valuable conceptual frameworks to make sense of what kinds of 'things' digital screens are, and how they might in some ways exceed ways of thinking about objects in memory sites as 'constituted by human relationships and …therefore imbued with memory' (Freeman 2016, p.4). Instead, digital screens' assembling of what visitors see can only occur because of particular technologies, as Rose (2016, p. 341) explains:

> What is visible on any one screen is a combination…of hardware (the screen, its casing, its other physical components), the software code that makes things visible (the image file but also, for example, the app through which that image is being seen and the operating system of the device), and how it is being looked at by its user/s.

Rose makes the point that our encounters with screens result from configurations of many visible and invisible elements that both shape and are shaped by the technology itself. Put differently, we cannot separate out screens' 'content' in memory sites (testimonial video, documentary film or historical re-enactment, for example) with the technologies that make viewing, hearing and engaging with it in particular ways possible. Indeed, the continuous development of these technologies and techniques constantly makes new forms of encounter possible, such as large screens depicting interactive landscapes or individualised content designed to speak to directly to each visitor. Furthermore, visitors' encounters with digital screens can also be shaped by their experiences of such technologies in other settings, so their familiarity with or ability to navigate, for example, a smartphone interface, are capacities they bring with them to a museum visit.

This accords with recent work on digital materialities that offers ways of thinking about how people experience the digital as part of everything else happening in their lives, a complex and contingent relationality amongst multiple, changing elements (Pink et 2015, Hjorth et al 2017). Here we must account for the sensory and perceptual alongside the representational, narrative, algorithmic or code-based aspects of the digital, and interrogating how they work together to shape the ongoing experience of the world. It also

means asking what the digital enables, what new ways of thinking about the world and of engaging with and being in it might be pulled into existence or made possible.

However, in terms of researching screens' digital materiality, the location of our encounters with them is crucial - Ash (2017) terms the timespace of this engagement the 'interface envelope', one in which human and non-human agencies entangle and bring new forms of experience into being; as Rose (2016, 341) insists, 'Not only is the agency of digital hardware and software at work at interfaces, but so too is the agency of the people using it, which is shaped by the soft/hardware of the interface but can also interpret it actively'. It follows that digital screens' affective affordances are no less powerful in comprising our experiences of them that their technological ones. In terms of memory sites, their capacity to enable personal engagement with narrative, testimonies, or images can have the effect of creating a sense of proximity to or distance from other places and times, albeit a heavily mediated one, as we will show.

Accordingly, in the rest of this article, we stay with the visitor encounter with the digital screen and think through the specific experiences and affects they might draw out at a site of official history. We will show how the charge of being in a place where our participants knew violence had happened was entangled with the mediation of aspects of the site's history and materiality through digital screens. However, the accounts show the complexity of this interface, which gave rise to a variety of visitors' understandings and feelings regarding the mixture of the narrative content of the displays with the spatial experience of the site itself.

Researching in the *Camp des Milles*

Situated about 9km from Aix-en-Provence, Camp des Milles is a former Second World War internment and deportation camp, one of the few such sites in France that has been made into a public memorial-cum-museum, and the only one to have survived in its original condition. The site was a tile factory until 1939 when it was repurposed as an internment camp for 'enemy aliens' (including German anti-fascists who had fled to France). In 1940 it was changed into a holding and transition camp for foreign nationals and other

'undesirables' who wanted to leave the Vichy 'free zone, and although processing could take up to two years, at this time it was still possible for people to leave France via the camp. By 1942, however, its purpose had changed again to the deportation of Jewish people, who were arrested and detained by French officials, and sent from the Camp des Milles by rail to Auschwitz via Drancy. Despite the deportation of more than 2,000 people, after the war this history was forgotten and by 1947 the site was again a tile factory. This continued until the early 1990s. After a decade-long fundraising and design process, however, in 2012 the site was inaugurated as a national 'haut lieu de mémoire Français' and a UNESCO Chair, and opened to the public in a national ceremony. The banality of the site, and its reuse after the war for its original industrial purpose, is framed in the displays as reinforcing the message that an 'ordinary' place can be the site of 'extraordinary' events, in this case the planned mass murder of civilians.

[Insert Figure 1]

Figure 1: An early section of the displays at Camp des Milles, showing a field of columns with digital screens positioned at eye level, with explanatory text and accompanying audio available by headphone. Photo: xxxx.

In the Camp's displays, its history is presented in three stages, beginning with the internment of foreigners resident at the outbreak of the war (1939-1940); its transformation into a transit and internment camp in the Vichy 'free zone' for people being processed for emigration from France (1940-1942); and finally, in the months before the German occupation, its use as a deportation camp (1942) for Jewish families, including children and adolescents, to Auschwitz. Throughout, it is made clear that the Vichy French administration was responsible for establishing and running the camp.

Visitor engagement is organised as a progressive trail through the building, starting with a short film explaining the history of the site, including the filmed testimonies of survivors. Visitors then move through a very text-rich historical section with displays on the Second World War, its national and local history, contemporaneous propaganda material and details of life in the camp and some of its inmates. This section includes the build-up to the

war, the history of the Vichy regime, and details of the detainment of Jewish people and other targeted groups in the south of France. The history of the camp itself is also presented here, partially illustrated by personal and individual stories. This section is where most of the digital content is presented, mostly on screens, some of which offer interactive features so that visitors can choose content or additional detail. There is also archival audio material available to listen to via headphones on the columns or through portable audio-guides (see www.campdesmilles.org).

The second section takes visitors through the building itself, on a signposted itinerary through four floors of apparently derelict (but still carefully designed) former factory areas with occasional explanation of their uses, such as who was housed where and what life there was like for internees. This includes the large kilns which were turned off during the period of the camp's existence, and where internees slept and socialised. In this section, the site is effectively presented 'as it was', with the implicit invitation to consider how it was experienced by internees, even though the material remains actually reflect its intervening use as a tile factory. As we have written elsewhere, visitors' sensory experiences help link them to previous occupants, for example, though cold temperatures, 'clair-obscur' lighting, the smell and texture of dust, the roughness of the stone, brick and wood building materials, and the overall industrial aesthetic of the building and its fittings (Sumartojo and Graves 2018).

[Insert Figure 2]

Figure 2: A section of the building used to house internees with some explanatory text of 'life on the second floor'. Photo: xxxx.

The final section is presented as the culmination of the previous two stages, and is explicit in its pedagogical aim to invite visitors to consider the banality of evil, the ever-present possibility of genocide and the personal responsibility to resist it, 'each in our own manner'. A video work, presented on three large concave screens that slightly wrap around the viewer in a small, purpose-built viewing room, gives the impression of immersing the visitor in the action depicted. It explicitly asks visitors to reflect on the history of the site in terms

of their own personal responsibilities in the face of racism, anti-Semitism, the prejudice that underpins them and the injustice that they beget. The accompanying information booklet makes the pedagogical aims of the site, and the way the progressive movement of visitors through the site is meant to reinforce it, very clear: 'the visitor is invited to move beyond the distance that separates us from the past to undertake a multidisciplinary reflection on the present and the future based on historical experience' (Camp des Milles, n.d.).

This is the context through which all our research participants (and ourselves) moved. Our study included ten research participants, all of whom were Masters level students at Aix-Marseilles University, and mostly in their early 20s. Many of them were local, although the majority had not visited the Camp des Milles before. We all visited the site together, although we were not guided through, and so did not move through as one large group. Instead, we explored the site singly or in small groups that formed, dispersed and re-formed as we went, meaning that as researchers, we were immersed in movement, discussion, reflection and sensory impression along with our research participants. This gave us our own experiences to reference in interviews, as we discussed the visit with participants and considered what they had experienced and how it had affected them. This 'going-along' was invaluable in helping us understand the context of the site that they referred to, as did our conversations with each other and the rest of the group whilst we were there. Our participants were free to engage with the site as they wished, without the presence of a guide, and none of them chose to use audio-tours. We did not seek to put ourselves apart from our participants – instead, this type of ethnographic approach enabled us to make sense of the site along with our participants, building up experiences that we could share with each other (Pink 2015).

We asked our participants to each take 10-15 photographs during their visit of their encounters with digital technologies, or of the aspects that most struck them, and did the same ourselves. By leaving their task open in this way, we invited them to attune to the presence of digital technologies at the site, but also left it to our participants to decide for themselves what the most notable elements were, and indeed the places they felt were important that may not have obviously included the digital. In this way, the digital was treated as a part of everything else they encountered, even if it was the aspect we were

most interested in focusing on. As discussed above, this ethnographic approach of entering our research participants' worlds by way of material they made themselves is a valuable method for non-representational approaches to geographical research, because it allows participants to define for themselves what is most important about the object of inquiry and explain this to the researcher in terms that they determine (Pink 2015).

Over the subsequent week, each participant was video interviewed with their photos, which they emailed to us before the interview, and were asked to explain what they photographed and why, how they were feeling when they took the photo, what sort of digital encounter was involved, if any, and what the experience of that encounter was (Pink et al 2015). The use of video and photography allowed us to 'share and access elements of everyday experience that would not be accessible through traditional verbal interviews or participant observation, that account only for what is said and is visible' (Pink and Sumartojo 2017, p. 7). The advantage of this technique was that participants were able to reflect on the entire experience of the visit through a series of photos, as well as the moment of the visit depicted in each photograph. This created a rich conversation with the researcher that could range across the participants' personal ways of understanding the site, and where themes could emerge that could be revisited throughout the interview if appropriate. The researcher who conducted the interviews had her own experiences of the site to draw on in this exchange, and had been with some of the participants when they took their photos; this allowed a form of empathy to emerge in the research setting that meant she could imagine the spaces described by way of her own experience of them (Pink et al 2017). The study received university human ethics approval, and the participants consented to having their images and interview transcripts used as part of published or presented research findings.

Accordingly, in the next section, we draw on three accounts that explain particular encounters with digital screens, and their affective, material and discursive qualities. Although other participants discussed aspects of the digital technologies at the site, these three accounts demonstrate most clearly how screens are implicit in how people understand and make sense of memory sites in both affective and spatial terms. They also show the complexity of these encounters and the entanglement of the 'representations-in-

relation' (Anderson <mark>xx</mark>) with technology, individual memory, and the spaces of the museum, exemplified in encounters with screens that our participants identified as significant.

Digital screens in the Camp des Milles

Each of the accounts in this section reflects a discussion of a photograph of something that participants felt was important. They each open up a way of thinking about screens that looks at what people tell and show us about what they actually do, rather than simply describing what they think. They allow us to explore what happens at the moment of encounter – without necessarily knowing about the technologies and structures that underpin that moment – and so attend to the materiality of the screen, its spatial context, its relationship to the actual object or narrative content, and how this contributes to the kinds of affects that make the museum experience stick to visitors.

Distancing screens

Mylena provides the first account. In her discussion with xxxx, she explained her photograph of a trace left on an interior wall of the camp by one of the internees, its image incorporated into the film that had begun the visit. The whole group had viewed this film introducing the site, sitting in rows on benches in a small room with a large screen at the end into which we had been ushered after paying our entry fee. The image in the film was much larger than life-sized, and the detail, patina and texture of the trace was clearly visible. It was edited together as part of a segment explaining life in the camp, and Mylena had taken a quick photograph during the film.

In the interview, she began by describing the photograph (see Figure 4):

> It's a picture of a heart, with an arrow in it and then you have the words [*la liberté, la vie, la paix*] written in it…[it's a carving] on the wall of the camp…just the words at first were very striking, I mean this is what we aim for in life. Everyone wants to have freedom, everyone wants to have life and peace in their lives, and these people didn't have that. And actually to carve the thing, you're struggling to do it, it's hard, it's not like just a painting where it goes smoothly. A

carving you actually really want to, you know…I can imagine these people kind
of fighting for this and this is a kind of way to show it…

It this passage we can discern that the image of the heart set up for Mylena a sort of
embodied empathy with the person she imagined carving it, struggling to etch the words
into the stone wall of the camp. This physical strain was important to the meaning of the
heart shape for her, demonstrating a form of resolve that she imagined internees needed to
fight for freedom and peace. As we talked, she demonstrated the effort she imagined had
been required to make the heart, a bodily echo of a previous exertion that appeared to
provide an immediate connection to the site's past (see Figure 3).

However, although the carving was still present on one of the walls, she explained that she
had not actually seen it there during her visit, only viewing it on the screen. The screen
introduced a sort of dissonance to her feelings about the heart: despite her quite powerful
description of how the carving brought her closer to the imagined experience of its creator,
at the same time its depiction on the screen worked to weaken this feeling, distancing her
from an understanding of its makers' experience:

I would have preferred to see it on the actual wall, because you get more the
sense of reality when you see it 'true'. When its displayed on the screen of
course you see it… but there's a sense of connectivity when you actually see the
thing and you're next to it rather than just watching it on the screen…[How does
it feel to look at it on the screen?] Its less touching, you feel more distant…for
some reason it has more impact to me to see it for real than on the screen.

[insert Figures 3 and 4]

Figures 3 and 4: Mylena mimics the physical strain of carving that she imagined was
required to produce the heart pictured on the screen in her photo in Figure 4.

Here, the displayed film allowed her to see a powerful element of the site that clearly
resonated with her and invoked a bodily echo of the feeling of carving (Figure 3), following

notions that multi-media displays can work to bring visitors and content closer (Witcomb 2007). However, instead, she explained that the screen introduced a sort of barrier between her and the carving, a distance related to the fact that she knew it was on the site somewhere, but had not managed to see it in situ. In Malpas' (2007) terms, the screen produced something new that exceeded its capacity to simply reproduce an image and thereby presumably make it more widely accessible. Mylena was still able to imagine and empathise with the body and feelings of the person who carved the heart, even though she felt the screen distanced her from the carving itself. Her encounter with it was mediated by the film, its digital depiction ameliorating its affective impact, even though she found the heart image 'striking'. This reflection emerged, furthermore, as an explanation of how the material, the digital, the affective and the embodied were all part of the same sensory and embodied experience of her viewing the film.

The carving was itself a form of testimony to the experience of former camp residents, its somewhat plaintive message reinforced by both the imagined effort necessary to engrave it, her empathy for them based in part on her own bodily experiences in the site, and, as a visitor, the knowledge of the potential fate that awaited its author. This resonates with Waterton's remark that 'affect is not confined to the individual body or people at all: it is transmitted, moves, circulates and flows outside and between bodies, incorporating a range of things, places and technologies' (Lorimer 2008 in Waterton 2014, p. 829). While a sense of this shimmered through the screen, in this case, the affective field was both intimate and distancing: Mylena felt the digital interface was a poor substitute for seeing it 'true', making the heart carving somehow less touching, and discouraging a sense of connection to the previous experiences of others in the site.

Rose (2016) discusses the friction of digital interfaces, when an interface with the digital does not work as expected, glitches, is lost or corrupted. This can work to draw attention to the presence or mediation of digital technologies, and engender frustration or even distress when something does not work as it should. However, in this instance, the 'problem' with the screen was not one of malfunction, but rather a type of *affective* friction as Mylena found it distanced her from the material environment of the memory site and its emotionally resonant displays. The screen pulled against the emotional tug of the heart

14

carving, complicating the museological view that such technologies might make objects or sites more accessible to visitors. The screen as an object was crucial in comprising how she thought and felt about the heart, contributing to a feeling of distance despite her embodied imagination of the carving.

This account asks us to attend to the subtlety of the affects that the screen conjured for Mylena because its affective affordances cannot be understood as uniform or predictable – it allowed her to see an image and empathise with its maker, whilst also prompting faint dissatisfaction with the encounter. It is this complexity of material-digital-bodily encounters that we argue should be attended to as we learn more about the more-than-representational aspects of museums and public memory sites. Indeed, we suggest that screens do not separate us from reality because they *are* reality, even if they may introduce tensions that become part of the museum reality. Mylena expressed this in terms of being distanced not just physically, but emotionally, from the carving she described. The point here is less that the screen introduces distance than it is that, in her terms, the museum was configured experientially via digital screens that introduced and co-constituted her affective encounters.

Touching screens

In contrast with Mylena's explanation of a distancing effect, Ben's encounter with a digital display worked to pull him closer to the material, in his case literally by a haptic process of touch. The screen that he described was located in a room with wall mounted displays and a small plinth with a digital screen embedded in it (Figure 6). The room was filled with artworks from former inmates of the camp and the tablet-sized screen could be approached and viewed by only one or two people at a time. Text explained (in French) that it was a 'touch screen' and that it showed the names of the Jewish men, women and children deported from the Camp des Milles.

Ben explained how, as he approached a digital display, he could see from the finger icon and the words 'ecran tactile' that he could interact with the screen. This engaged both Ben's

curiosity and his senses, even though he did not know what would happen when his fingers
brushed the glass :

> but when I saw 'touch screen' I figured that something like that would
> happen…it said the names are from the people who have been deported, but it
> doesn't say something is going to show, is going to pop up. I'm pretty sure that
> when I saw touch screen, I was like yeah, something's gonna happen, so I just
> gave it a try, and you can scroll up and down as well.

In describing his photograph of the screen, he explained how his encounter with it recalled
previous experiences of physical memorials: 'It reminds me of these plates you see on
memorials of the wars…except that [at Camp des Milles] you could literally touch them with
the finger rather than read the names.' Ben explained how he understood the display's
materiality in terms of previous encounters with older forms of memorialization that he had
seen. He told xxxx about an experience in which he had passed a memorial during a visit to
the US, and had noticed and was intrigued that the dead from all US wars were included, by
extension granting each conflict, and each death, an equivalent status. This struck him as
usual in the context of knowledge about memorials in his native France. However, on this
occasion his curiosity was frustrated by the lack of any information about the named
individuals, which diminished the affective tug of the memorial structure and left him
uninformed about what it was meant to represent. In recounting this experience, he
explained that he had quickly lost interest and moved away from the memorial.

In the context of this previous experience, for Ben a list of names at a memorial was a form
of representation which then gave rise to a curiosity to know more about the individual
victims. His interaction with the digital screen display went beyond merely reading text,
instead invoking a comparison with lists of names carved onto memorials he had
encountered in the past that were non-responsive to touch.

> That's a touch screen, that's people's names on it, and you could just press their
> name and a window would pop up with their name, their age, the place they
> were from…the interesting thing about it is that the names are listed in

alphabetical order so you would see sometimes 6, 7 or 8 names in a row and that was whole families in the camp and sent to Germany afterwards. You could see people being born in the late 1880s or 90s and people being born in the 1920s and you would figure out their age, it was kind of powerful.

At Camp des Milles the process of exploring how the display functioned drew him closer to the identities of the victims and set up empathetic relationships as he imagined the different ages of the family members and their possible relationships to one another. Witcomb (2007, p. 41) describes a similar process of 'a physical reaction to an object [that] involves an emotional response that leads to a greater degree of understanding'. In Ben's case, the screen worked to knit together knowledge about particular individuals to a better understanding of the history of Camp des Milles through the experiences of its victims, an example of Anderson's (2018) 'representations-in-relation'.

Even beyond this, however, was the particular embodied encounter Ben had with the digital display and the unexpected affects that arose as he discovered the individual information that he could access. These emerged from both the content, but also Ben's gestural engagement with them, recalling Kunstman's (2012) notion of the 'cybertouch' that dissolves the boundary between the body, the content depicted on the screen and its affective properties as a form of digital materiality. Moreover, Ben's somewhat uninspiring previous visit to a memorial overseas, where the names offered no further information, also formed a reference point for his encounter at the Camp des Milles.

[Insert Figures 5 and 6]

Figure 5 and 6: Ben gestures as if he were tapping a touch screen to explain his encounter with a display of names and (Figure 6) his image of the screen that prompted his explanation.

Ben's hand as he tapped the screen was therefore 'touching' in two, entangled ways: affective *and* manual, with both aspects brought together in a digital interface and working together to engender curiosity and empathy as he lingered at the screen. This relied on an

implicit comparison with previous experiences of more conventional forms of name memorials without the digital interactivity of the Camp des Milles display. His previous experience with listed names on a memorial brought a poignancy to the encounter with a digital screen, triggering his memory and prompting a powerful experience. In other words, Ben already had a way to think about this form of memorialisation that was then reconfigured and extended digitally, and that resulted in a new bodily and affective encounter that was brought into being by way of the digital materiality of a memory site. The screen's interactive capacities made possible ways of understanding the stories presented at the Camp des Milles for Ben, and indeed could not be separated out from them. In this sense, as an object, or the stuff through which we make sense of the past, the touch screen in Ben's account opened a new route to understanding that built on his previous experiences but was distinctly different from the material affordances of a bronze plaque or stone monument. It was the screen's capacity to touch and be touched that allowed Ben to make a powerful connection to the history represented on its surface.

Moving screens

Our final example is drawn from an interview with Gilles, who was particularly attracted to a series of video testimonies from survivors of the camps, and who found the experience of watching them very moving. In part, this was due to how he discovered the screens and was able to watch the videos in relative solitude. He began his discussion of his photograph by recounting how he accidentally discovered the screen as he was taking a photograph of another feature, its placement in a hidden corner giving him 'a feeling that I had a special [relationship] to that man [on the screen]. It was not everybody that could see it. I had to get lost, in a way, in the memorial in order to have access to this story'. The screen that Gilles showed us was small and designed to be viewed by one person at a time, which was also implied by its slightly hidden siting. It was mounted at about eye-level and its out-of-the-way location worked to encourage a deeply personal encounter that also allowed him time to absorb and reflect on the displayed content.

The testimonies that Gilles described watching were highly personal and he found himself at moments able to almost place himself in the scene. For example, he recounted the part of one film that moved him the most, describing in detail the story that it told:

It's a blessing, 'God blesses you and protects you, may God spread his grace on you and give you peace'. He was saying it in Hebrew, that's why its subtitled. He was a Frenchman, he spoke French except here. This is one of the biggest emotions I had on that day…he's a survivor of the camps, he was 13 or 14 when he was in the camps with his parents. And there was a lady he says that came and that was allowed to take children to save them…he was not obliged to go…he said he was a bit of a rebel, at 13, and I wanted to stay with my parents so I said no I don't want to, so the lady didn't insist and the parents didn't insist…when they called my name I started to climb in the bus and my dad grabbed me, from behind, he put me down, he turned me in front of him and he said 'now my son, you're not coming with us' and he blessed him…so, this [subtitled text on the screen] is the whole blessing in Hebrew. And the conclusion was that he never saw his father again.

What he said of the story I could visualise it, I could see the bus, I could see him wearing shorts as a young man [although this was not visually depicted on the screen]. And I remember then, he just stopped, he said this was the last time I saw my father and the last time anyone had blessed me in such a way. And he stopped, put his hands down and he stopped, and the camera continued to film, didn't move, phew! The rest is silence…really, really powerful

 [insert Figures 7 and 8]

Figure 7 and 8: Gilles hands echo the 'blessing' gesture of the screen-based testimonial that he photographed in Figure 8.

At the root of Gilles' moving experience of this film was a direct engagement with the content in which he went as far as to identify with the speaker in the film. He seemed to have been drawn into the story, almost as if he had witnessed the events himself:

> He's looking down…the video as you said was at [eye-level], so when he talked to us there was an eye contact sort of …he was looking at the camera directly. But then here he is representing his father who is looking down on the son who is thirteen and so this is why he is looking down, but I'm sure I could feel unconsciously that I was the little boy and he was blessing me.

The displays that Gilles described included first-hand narratives spoken by those who experienced them, and video that created a sense of eye-contact between the speakers and visitors. The digital screen made possible not only an emplaced affective response, but enabled Gilles to relate directly to the survivor's poignant account of his boyhood experience, his relationship with his father and his own close call with death. Gilles of course was aware that a careful process of video production and design lay behind the display, with the speaker looking into the camera, and the purposeful decision to continue filming when even when the speaker stopped telling the story. Despite this, the out-of-the-way location of the screen, the content of the story, the direct and engaging mode of storytelling and Gilles' ability to so clearly imagine the described scene combined in a powerfully moving encounter.

While such objects and spaces tell us part of the story, our encounters with them are inevitably subjective and carry the influence our own perceptions and memories (Sumartojo and Graves 2018). Waterton (2014, p. 828) remarks that we should conceptualise heritage as a combination of 'elsewhere and else-when' that draws in our own previous experiences to make sense of our encounters with memory sites as 'a visitor's capacity to be affected by heritage is qualified by the experiences inevitably and already encoded in their person, as well as their responses to its already circulating representations'. This inter-relationality between place, narrative, video screen and Gilles' own memory and imagination is evident in how he describes the photograph and the affective encounter with the screened testimonial. As with Mylena, in the background of Gilles' account is the fact that as visitors

they encountered the digital screens in the location where the subject of the testimonial – in these two cases a carving and a spoken narrative – occurred or were still located. Knowing that the events that were represented on the screens happened very close to where they took the photographs, thickened and intensified the encounter with the historical material, and this was reflected in how they described their physical responses and the affective intensities in their accounts. Moreover, the screens' locations, materiality and displayed content brought forth particular affects that were part of how the research participants *felt* about the site and its history, and through these feelings came to understand it.

Digital geographies of memory sites

These accounts show some of the different ways in which digital screens were important in how our research participants encountered and interacted with the stories, images and texts at the Camp des Milles. It goes beyond this, however, to also show how the screens mediated their engagement with this material in terms of how they made sense of and felt it in ways that were distinct, but also varied according to the content displayed, the relationship of this material to the space of the site, and how the screen was positioned within it, and the individual feelings and experiences of each visitor. As Waterton (2014) insists, the ways that we engage with heritage are highly contingent upon our histories and memories, as well as many other material and immaterial aspects of sites such as Camp des Milles.

As we have been arguing, digital screens are an important part of this constellation of elements that make memory sites meaningful and help them linger in the imaginations of visitors. In part, this is because their capacities to enable encounters between visitors and historical material that are inflected by their unique materialities, sensory qualities, physical contexts, interactivity and various formats of presentation. However, they are by no means uniform in how they manifest and co-constitute such moments of engagement. Indeed, the encounters our participants describe in this article each generated their own unique intensities: the distancing effect of an image rather than the 'true' carving, the poignancy of discovering family relationships amongst victims, and the powerful sadness and empathy

prompted by filmed first-hand testimony. These encounters brought the research participants closer to the site, its history, its victims and survivors and its local significance, and the digital was an important element designed to purposefully reinforce the experience of 'being there'. This troubles the possibility of 'contain[ing] the future by anticipating its needs' by way of the digital archive (Fairclough 2012, p. xv) because of the contingent and unpredictable ways in which we might engage with this digital material. Accordingly, the focus on digital screens in this paper has shown how such technologies help constitute the affecting mix of factors which shape the unpredictable and contingent 'feel' of memory sites for visitors, but that this emerges in relation to many other factors. Their role extends far beyond the mere presentation of archival content or even as display objects in their own right. Instead, digital screens must be understood as making an important contribution to how memory sites feel to visitors, and as affording distance, proximity, empathy or disengagement by way of their 'interface envelopes' (Ash 2017) and unique 'frictions' (Rose 2016) that powerfully shape the experiences that people have in such places.

Accordingly, these accounts show that digital screens are not neutral objects that simply communicate content decided by curators. Nor are they uncomplicated means of encouraging particular types of interactions with the past or with the stories of others. Instead, they carry their own affordances, related to a mixture of their placement, content, production and forms of sensory or manual engagement that carry affective resonances for visitors and intensely shape how state-sponsored histories are encountered, understood and felt. In this sense, they help us advance a geography of commemoration by attending to the specific and intimate encounters that visitors to official memory sites experience through and because of their interactions with digital screens.

References

Åhr, J (2008) 'Memory and Mourning in Berlin: On Peter Eisenman's "Holocaust-Mahnmal" (2005)', *Modern Judaism*, 28, 285-305.

Alderman, D and Campbell, R (2008) 'Symbolic Excavation and the Artifact Politics of Remembering Slavery in the American South: Observations from Walterboro, South Carolina'. *Southeastern Geographer* 48 (3): 338-355.

Anderson, B (2018) 'Cultural geography II: The force of representations'. *Progress in Human Geography*, DOI: 10.1177/0309132518761431

Ash, J (2015) *The Interface Envelope: Gaming, Technology, Power*. London: Bloomsbury.

Brown, B (2001) 'Thing Theory', *Critical Inquiry* 28, 1-22.

Camp des Milles, http://www.campdesmilles.org/. Accessed 10 January 2017.

Ciolfi, L and Banno, L (2007) 'Designing hybrid places: merging interaction design, ubiquitous technologies and geographies of the museum space', *CoDesign* 3, 159-180.

Crang, M. and Tolia-Kelly, D.P. (2010) Nation, race, and affect: senses and sensibilities at national heritage sites. *Environment and Planning A*, 42, 2315-2331.

Crooke, E (2017) Memory politics and material culture: Display in the memorial museum. Memory Studies, 1-13. Online First DOI: 10.1177/1750698017727805.

Drozdzewski, D, De Nardi, S and Waterton, E (2016) 'Geographies of memory, place and identity: Intersections in remembering war and conflict', *Geography Compass* 10/11, 447-456.

Fairclough, G (2012) 'Introduction: Reframing heritage in participatory culture', in E Giaccardi (ed) *Heritage and Social Media: Understanding Heritage in a Participatory Culture*. London, Routledge.

Freeman, L, Nienass, B and Daniell, R (2016) 'Memory | Materiality | Sensuality', *Memory Studies* 9, 3-12.

Hjorth, L, Horst, H, Galloway, A, Bell, G (eds) (2017) *The Routledge Companion to Digital Ethnography*. London: Routledge.

Hodder, I (2012) *Entangled: An Archaeology of the Relationships between Humans and Things*. Chichester: John Wiley.

Horst, H (2016) 'Mobile intimacies: Everyday design and the aesthetics of mobile phones', in Pink, S, Ardèvol, E and Lanzeni, D (eds) *Digital Materialities: Design and Anthropology.* London: Bloomsbury.

Hoskins, G (2007) 'Materialising memory at Angel Island Immigration Station, San Francisco', *Environment and Planning A* 39, 437-455.

Kuntsman, A (2012) 'Introduction: affective fabrics of digital cultures' in Karatzogianni, A and Kuntsman, A (eds) *Digital Cultures and the Politics of Emotion, Feelings, Affect and Technological Change.* London: Palgrave.

Lewis, T, Martin, F, Sun, W (2016) *Telemodernities: Television and transforming lives in Asia.* Durham, NC: Duke University Press.

Lorimer, H (2008) 'Cultural geography: non-representational conditions and concerns', *Progress in Human Geography* 32, 551-559.

Malpas, J (2008) Cultural Heritage in the Age of New Media in Kalay, Y, Kvan, T and Affleck, J (eds) *New Heritage: New Media and Cultural Heritage*. Abingdon: Routledge.

Marshall, D (2004) 'Making sense of remembrance', *Social & Cultural Geography*, 5, 37–54.

Muzaini, H (2015) 'On the matter of forgetting and 'memory returns'', *Transactions of the Institute of British Geographers* 40, 102-112.

Pink, S (2015) *Doing Sensory Ethnography*, 2nd edition. London: Sage.

Pink, S, Ardèvol, E and Lanzeni, D (eds) (2016) *Digital Materialities: Design and Anthropology.* London: Bloomsbury.

Pink, S, Horst, H, Postill, J, Hjorth, L, Lewis, T and Tacchi, J (2015) *Digital Ethnography: Principles and Practice.* London: Sage.

Pink, S, Sumartojo, S, Lupton, D and Heyes LaBond, C (2017) 'Empathetic technologies: digital materiality and video ethnography', *Visual Studies* 32(4), 371-381.

Pink, S and Sumartojo, S (2017) 'The lit world: living with everyday urban Automation', *Social & Cultural Geography*, DOI: 10.1080/14649365.2017.1312698.

Rose, G (2016) 'Rethinking the geographies of cultural 'objects' through digital technologies: Interface, network and friction' *Progress in Human Geography* 40(3), 334-351.

Sather-Wagstaff, J (2017) 'Making polysense of the world: affect, memory, heritage' in D.P. Tolia-Kelly, E. Waterton and S. Watson (eds) *Heritage, affect and emotio : politics, practices and infrastructures*. London: Routledge.

Smith, RC (2013) 'Designing Heritage for Digital Culture' in Gunn, W, Otto, T and Smith, RC (eds) *Design Anthropology: Theory and Practice.* London: Bloomsbury.

Sumartojo, S and Graves, M (2018) Rust and dust: Materiality and the feel of memory at Camp des Milles', *Journal of Material Culture*. DOI: 10.1177/1359183518769110.

Turner, J and Peters, K (2015) 'Unlocking carceral atmospheres: designing visual/material encounters at the prison museum', *Visual Communication*, 14, 309-330.

Tolia-Kelly, DP, Waterton, E and Watson, S (2017) 'Introduction: heritage, affect and emotion' in D. P. Tolia-Kelly, E. Waterton and S. Watson (eds) *Heritage, Affect and Emotion: Politics, Practices and Infrastructures.* London: Routledge.

Waterton, E (2014) 'A more-than-representational understanding of Heritage? The "past" and the politics of affect', *Geography Compass* 8, 823-833.

Waterton, E and Dittmer, J (2014) 'The museum as assemblage: bringing forth affect at the Australian War Memorial', *Museum Management and Curatorship* 29, 829-30.

Witcomb, A (2007) 'The materiality of virtual technologies: A new approach to thinking about the impact of multimedia in museums' in S. Kennerdine and F. Cameron (eds) *Theorizing Digital Cultural Heritage: A Critical Discourse*. Cambridge, MA: MIT Press.