

‘I’ve never told anybody that before’: the virtual archive and collaborative spaces of knowledge production

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The creation of ‘virtual archives’ of community spaces has the potential to engage the community members who inhabit (or through some other form of lived experience, identify with) those spaces as active participants in the collaborative construction of knowledge regarding their cultural, historical and social significance. In the representation of community spaces using ‘immersive’ and ‘embodied’ technologies and the open dissemination of the resulting archival materials through online platforms, new ways of accessing, experiencing and reflecting upon the quotidian reality of such spaces are facilitated. With the addition of participatory features, the virtual archive is reconfigured not simply as a method of representing data, but as a dialogic platform with the potential to democratise the processes through which situated knowledge is produced. In this chapter, each of these arguments will be evaluated and problematised using a specific virtual archive project, developed by the author, and a specific community as an illustrative case study. The overarching intention is to explicate how new forms of virtual archive might challenge the power relationships historically associated with archives as privileged spaces of knowledge production, whilst simultaneously avoiding the many pitfalls associated with digitally mediated forms of experience and participation, both of which are well documented within the academic disciplines of new and digital media.

Experience Temple Works (Jackson, 2016) is a multisensory and participatory virtual archive of a Grade I listed building in South Leeds. The building, known as Temple Works, was originally constructed as a flax mill in 1840 and represents a significant stage in the development of the textile industries in the North of England and the wider industrialisation of the region (Elton, 1993). Possessing a stone facade inspired by the architecture of Egyptian temples and reputedly containing the largest single room in the world (at the time of construction), the building embodies a complex and contested history of economic, social and architectural problems. During the creation of *Experience Temple Works*, the building was no longer a site of manufacturing but rather the residence of a community of artists, makers and performers. This community, hereafter *Temple.Works.Leeds*, aimed to provide a space for creative and cultural activity within the city (and in particular, to facilitate exhibitions and events which might not find a place within 'traditional' cultural venues) whilst concurrently maintaining, promoting and advocating for the building itself. *Experience Temple Works* was conceived as part of a 30-month 'sensory ethnography' (see Pink, 2012 and Jackson, 2018) with the *Temple.Works.Leeds* community and was originally designed to communicate aspects of the sensory experience of the building through standard web browser technology. This new form of virtual archive was intended to facilitate an analysis of the relationships between the vivid sensory experience of the building and the creative and cultural activities taking place within it, answering anthropological questions about why a community of creative practitioners were so drawn to such a challenging and unconventional space in which to operate and how that space might have informed the artistic works resulting from their residency. However, as this chapter will attest, the project came

to attain much greater social and academic impact through its later reconfiguration as a community-orientated platform for collaborative knowledge production.

The first version of *Experience Temple Works* (released in 2015) integrated a range of features intended to facilitate the ethnographic analysis outlined above. These included interactive 360° photography (communicating aspects of the visual experience of being within the building), a navigation system of 'spatial hyperlinks' (facilitating movement and interaction), high-resolution 'macro' photographs of objects within the building (not only allowing those objects to be interrogated in great detail but also engaging the haptic sense through a process of artificial synaesthesia), interactive 360° binaural audio recordings (communicating aspects of the auditory experience of being within the building through an embodied and 'spatialised' type of sound recording) and a temporal navigation system (revealing how the sensory experience of the building changes over time and the extent to which the building was reconfigured for different purposes). The affordances of each of these features and, in particular the cumulative impact of their integration into a single unified platform, achieved the intended aim of opening up new ways of studying the sensory experience of the building. However, it also brought about two unexpected, but very welcome, outcomes: a method of engaging the members of the *Temple.Works.Leeds* community as active collaborators in the research and, in conjunction with the participatory features added in the second version of the virtual archive, a significant shift in the authorial processes associated with the study, allowing the community members to construct their own research materials and findings.

The production of the audio-visual materials that would later form the 'records' within the virtual archive necessitated working closely with the members of the *Temple.Works.Leeds* community, explaining the intentions of the study, gaining the permissions required to access private studio spaces, planning when the recordings could take place etc. Although this was a lengthy process, it quickly became apparent that the methods being employed were highly effective in co-opting the community members as engaged and enthusiastic collaborators. Throughout the fieldwork, the creation of the virtual archive was commonly referred to as something 'important' and when this pattern was investigated, it became clear that a large number of the community members felt that something of cultural significance was happening at Temple Works during this time and it was therefore important to document what was taking place. In collaborating with the artists, makers and performers in the creation of an archive which they felt represented their community, their achievements and the significance of the space in which these achievements had been made, it was not only possible to produce a range of research materials of great value to the academic study, but also for the community to establish and maintain a positive identification with the project. Members of *Temple.Works.Leeds* were eager to be 'present' within the archive and, following their inclusion, proudly utilised it to evidence and exhibit their association with the building. This demonstrates the efficacy of the project's approach in encouraging community engagement.

Experience Temple Works demonstrated the capacity to co-opt community members as active collaborators and this can, at least in part, be attributed to the way in which the academic knowledge it represents is communicated. One of the recurring challenges of research with communities is finding a way to communicate the resulting findings in a way that is meaningful to the people they are intended to represent. The translation of fieldwork encounters into language and writing (and particularly into the 'academic' diction often necessary for publication) has the potential to represent those encounters in a format that members of the community are unable to fully appreciate (Levack Drever, 2002). Similarly, the translation of fieldwork encounters into 'conventional' archival records might not engage the community or encourage them to utilise the materials that are produced. Both of these 'translations' commonly reside behind the 'paywalls' associated with academic journals and digital archives too. *Experience Temple Works* differs greatly with regard to these issues. From its inception, this form of virtual archive was intended to represent academic knowledge in a 'humanised' format, relatable to audiences outside of academia. Utilising embodied forms of audio-visual media (such as binaural audio), customary types of interactive functionality (such as interactive 360° photography, popularised by Google Street View) and standards-compliant web technologies (such as HTML, CSS & JavaScript) the intention was to make the archive accessible, comprehensible and meaningful to as wide an audience as possible. Through its exhibition at a wide range of public engagement activities (including the Digital Design Weekend at the Victoria & Albert Museum), the capacity of *Experience Temple Works* to present an academic research project in a relatable format, engaging the public in debates regarding 'immersive' technologies, the virtual archive and cultural heritage has been extensively evaluated.

Virtual archives such as *Experience Temple Works* do not simply possess the capacity to co-opt community members, they have the potential to facilitate new ways of collaborating with communities in accessing, experiencing and reflecting upon the quotidian reality of the spaces they represent. What follows is an evaluation of four different affordances of *Experience Temple Works* and the impact they had on the power relationships associated with the academic study. Quite distinctive from 'conventional' forms of archive, these affordances engendered a different kind of 'researcher-researched' relationship, disrupting long-established assumptions regarding ownership, expertise and authorial voice.

Whilst a conventional image archive is likely to contain photographs which represent a 'framed' abstraction created by a single, lens-based composition, the interactive 360° photography contained within *Experience Temple Works* encompasses a 360° field of view. This is significant as it represents a shift in authorial control over the visual records contained within the archive. The viewer is afforded the ability to reframe the environment in accordance with their own interests and intentions, rather than those of the photographer. The potential obviously exists to include a broader range of visual data within this type of image but it is of much greater significance that this data is communicated in a format that is more 'pre-reflective' in nature. Interactive 360° photography also has the potential to aid in communicating research comprehensibly to non-academic audiences. Not only does this mode of representation offer an engagingly 'immersive' and meditative visual experience, it might require less 'decoding' and interpretation regarding the intentionality of the

photographer and 'the predicament of the frame' (Favero, 2014). However, it is important to note that the photographer is still 'present' in this type of photography. Intentions that would typically be manifested in compositional decisions made through the lens are not removed, they are reconfigured into concerns regarding the positioning of the 'fulcrums' from which image will be experienced, which necessitates a different kind of spatial awareness.

The high-resolution 'macro' photographs of objects within the building are far more comparable to the visual records that might exist within a 'conventional' image archive as they are the result of single, lens-based compositions. However, the way in which these images are accessed is of great significance. Presented as records within a searchable database, the context and locality of the object might be lost. Within *Experience Temple Works*, objects are accessed from a representation of the environment in which they were originally encountered, not only providing locative data, but maintaining the spatial narratives created by their relationships with other aspects of the space. Accessing the archival records through an environment familiar to the community members might also make them more relatable.

The types of movement and interaction which *Experience Temple Works* facilitates might also be of significance, depending upon the intentions for which the virtual archive is being utilised. The 'spatial hyperlinks' included within the interactive 360° photography offer a sense of traversing a space, creating ways of exploring the archive which are reflective of embodied perceptual behaviour. Not only are movement and perception inextricably linked (Gibson, 1986), but movement and

interaction also encourage engagement. Where a static, framed image might have the effect of 'distancing' the observer, the movement and interaction which *Experience Temple Works* facilitates goes some way towards recreating the active and exploratory nature of visual perception in which 'the subject derives information about the environment by continuously engaging it through attention, multisensory stimulation and behaviour' (Grasseni, 2004:46). Accessing the data contained within this type of virtual archive *necessitates* movement and interaction, in contrast to more 'passive' forms of media such as film, and it is through active and exploratory processes such as this that places become meaningful. All of these affordances could be very meaningful for any project which intends to use archival materials as a form of sensory elicitation, or in the context of any research methods in which the biographical encounters of place need to be recreated, or at least reimagined, away from the field of study.

The interactive 360° binaural audio recordings included within *Experience Temple Works* also represent an important shift in authorial control and another form of sensory elicitation for use with the collaborators. The hardware and software solution designed to acquire and present these recordings (created specifically for this virtual archive but now integrable within any other) allows for the 'immersive', embodied and spatial qualities of binaural listening to be experienced within a navigable 360° visual environment. This means that although the listener will hear a predetermined sequence of sonic events from a predetermined position within the environment, the act of listening to the recording is no longer a singular, unified experience. The listener can direct their attention through the spatial orientation they select, in contrast to 'standard' stereo recordings which typically embody a perspective

dictated by the recordist. Also, whilst visual media have the potential to result in a sense of 'distancing', listening is a haptic and auditory experience which both surrounds and penetrates, creating a sense of 'closeness'. Audio recordings therefore have the potential to be a highly effective aid in the context of sensory elicitation, achieving a 'reintegration of the listener with the environment in a balanced ecological relationship' (Truax, 2008:106).

As compelling as the inclusion of auditory media within any form of virtual archive might be, it introduces the necessity to maintain a critical awareness regarding issues of 'presence', intention and editing. Whilst photography and filmmaking clearly index the presence of the person behind the camera and are widely recognised to embody the compositional impulses of that person, there is a 'a common presumption ... that field recordings represent authentic, impartial and neutral documents' (Anderson and Rennie, 2016:222). Failing to acknowledge that compositional, selective, technological and intuitive processes (determined by the recordist) are present in every audio recording has the potential to mask the subjective and personal nature of the resulting files. Also commonly overlooked in the analysis of audio recordings is the issue of intent. The processes described above are all informed by the recordist's desire to communicate specific meanings and inevitably embody the ways in which they have approached these intentions. However, the 'directness' of listening and the personal, intimate and embodied nature of auditory experience has the potential to obscure these processes. Finally, whilst the concepts of 'presence' and 'intention' have direct correlates in visual media and can be interrogated in very similar ways, the editing of a sound recording must be conceptualised differently. In the seminal audio recording project *The Vancouver*

Soundscape, Schafer (1973) equates the selection of sounds to placing 'a frame around them ... [j]ust as a photograph frames a visual environment'. This contention suggests that the editing of sound recordings might not be any more problematic than the framing of a composition within visual forms of media, the process of abstraction simply takes place in the temporal, rather than spatial, domain. However, the temporal compression which this process introduces requires the listener to be made aware that the auditory experience offered by these edited recordings does not reflect the rhythm and pacing of the lived experience it is intended to represent.

The affordances of *Experience Temple Works* addressed above all illustrate the capacity for virtual archives to change the relationships between community members and archival collections. However, there are problems associated with using technological modes of representation as a method of co-opting and collaborating with communities. Digitally mediated forms of experience, such as those which might be presented by a virtual archive, can introduce troubling effects which must be acknowledged during the study and the analysis of the results. Virtual technologies have the potential to 'reify' aspects of experience, making them appear more explicit and concrete than the original ephemeral encounter, to obscure the significance of those aspects of sensory experience which current technology is not capable of communicating (such as olfactory and gustatory stimuli) and to create problems in identifying whether the meanings and emotions elicited by a digitally mediated experience are a response to the original encounter, or the mode of representation. Failing to acknowledge the possibility of these effects occurring has the potential to introduce misinterpretations, or even, of much greater concern, for the concept of using virtual archives in the context of community research to be

misappropriated. The solution is simply to ensure that when using any form of virtual or 'immersive' technology in dialogue with communities, both the researcher(s) and collaborators consider them a 'third space' through which knowledge might be produced, not as a simulacrum of experienced reality.

Virtual archives also implicate a number of debates regarding the concept of 'immersion'. Many of the technologies integrated into *Experience Temple Works* (including 360° photography, binaural audio recording, interactive environments) are commonly proclaimed to offer an 'immersive' experience in popular vernacular, journalistic media and academic publications. However, the use of this term should be rigorously examined, not only because it should not be assumed that a sense of immersion has been achieved but because the concept of immersion is itself problematic, implying types of human computer interaction which are potentially misleading. Although the creation of any virtual space 'implies the possibility of immersion', describing the experience as such without qualification has the 'ability to articulate what are often fictional scenarios' (Dyson, 2009:1-2). With regard to the concept of using virtual archives in research with communities, arguing that the experience of accessing the archive is 'immersive' has the potential to mask the impact of analysing the materials away from the field of study and to imply that they have a direct evidentiary power, rather than simply bringing the sites of observation and interpretation closer together (see Poole, 2005 and Pink, 2012).

Whilst the first version of *Experience Temple Works* proved effective in instigating notable changes in the processes associated with using archives in the context of

community research, the second version (released in 2016) introduced new functionality with even greater potential to impact upon preconceptions of archives as privileged spaces of knowledge production, disconnected from the communities they are intended to represent. A participatory system was integrated allowing members of the *Temple.Works.Leeds* community (and, in fact, anyone from around the world with access to standard web browser technology and an internet connection) to contribute to the archive. Within any of the interactive 360° environments, or the high-resolution 'macro' photographs of objects, users were now afforded the ability to post text, images and (via third party hosting platforms) audio recordings and videos of their own creation. With this system in place, the ownership of the archive was disrupted and it was reconfigured not simply as a source of primary data, but as a collaborative platform through which knowledge might be co-created.

The impact of this development in the virtual archive will now be illustrated through the analysis of a number of contributions by one specific member of the *Temple.Works.Leeds* community: stained glass artist Zoë Eady. Zoë enthusiastically embraced the participatory functionality implemented in the second version of *Experience Temple Works* and her contributions reveal a number of ways in which new collaborative practices were instigated by it, all with the potential to generate new knowledge within the archive.

Atop a display cabinet in the main reception of Temple Works, a photographic portrait of a man was presented in a plastic leaflet holder. Unaware of his identity, I

often considered asking a member of the *Temple.Works.Leeds* community about his relationship to the site, but the opportunity never seemed to present itself. Following the introduction of the participatory features into the virtual archive, Zoë quickly revealed that his name was Brian and that he used to help with the maintenance of the building. This textual contribution took the form of a deeply personal narrative in which Zoë described a day spent with Brian, engineering a new door for her studio space:

We spent a fun day together scavenging round the site trying to find a door that might fit my toilet-studio... Brian came to this project with an endearing ferocity. The most terrifying part culminating with an axe and some rusty hinges that he refused to be defeated by. I had fun that day, I was so pleased with my new door! He left his safety goggles and some tools in my room because we were going to finish it off later in the week, but I never saw him again. A few days later we heard how he'd died. No-one ever claimed his things and I wasn't sure who to give them back to, so I kept using them. I still wear his goggles most days and I often think about him. I've never told anybody that before.

This contribution illustrates the capacity for the participatory virtual archive to become a space for collaborative knowledge production with community members. However, potentially of even greater interest, is the concluding sentence: 'I've never told anybody that before'. *Experience Temple Works* had motivated Zoë to share something that she had never previously communicated in any other form, revealing the extent to which it had induced an unconventional relationship with the archive, opening up in a space in which intimate and previously unspoken information might be shared.

The inclusion of participatory functionality within the virtual archive also has the potential to alter the dynamics of power associated with the creation of archival records. During her residency at Temple Works, Zoë regularly produced timelapse videos in her studio, utilising the temporal compression of this format to reveal how a stained glass project comes together over a long period of time. During the production of the 360° photography and binaural sound recordings of her studio, Zoë also created these videos and then contributed them to the archive. This act not only illustrated how engaged she was in the co-creation of the archival records related to her space, it also revealed a significant change in the balance of power. By indexing my presence within the virtual archive through the creation of her own materials, I was no longer the 'author' and she was no longer the 'subject'. We were both implicated in the authorial processes and present within the resulting archival records.

Conceptualised as part of a 'sensory ethnography', *Experience Temple Works* was also intended to open up discussions with the members of the *Temple.Works.Leeds* community regarding the sensory experience of the building. A number of the contributions submitted by Zoë are reflective of this intention, suggesting that the participatory virtual archive has the capacity to facilitate particular types of discussion and analysis. Textual contributions such as the following illustrate that Zoë was actively reflecting upon the vivid sensory experience of particular locations within the building and connecting the sense memories formed by those experiences with specific meanings:

In the springtime tiny fluffy flakes from the decaying ceiling plaster in the Top Floor Canteen would drift down like snow. The damp would damage it during the winter and then it would peel off as it dried out. It was both disgusting and beautiful. Sometimes I would sit and watch it. During Brian's memorial service in spring 2012 it snowed constantly for an hour.

A particularly poignant example of these 'sensory reflections' came about when the virtual archive was later used for the purposes of sensory elicitation. Zoë vacated the building during the creation of *Experience Temple Works*, relocating to a new studio space. This presented the opportunity to produce 360° photography and binaural audio recordings during her residency and after she had departed. The temporal navigation system built into the virtual archive made it possible to quickly 'transition' between these two different configurations of the same space. Whilst most people accessing this transition commented on how interesting and engaging it was to so vividly interrogate the impact of Zoë's presence and absence on the sensory experience of the space, I was surprised to discover that Zoë found it emotional. Witnessing her disappearance from Temple Works in such a temporally compressed format brought back evocative memories regarding how difficult a decision it was for her to leave. Through this discovery, another way in which *Experience Temple Works* has the potential to generate intimate and subjective knowledge was identified.

Whilst the illustrations above demonstrate the collaborative potential of virtual archives, technologically mediated forms of participation also present a number of problems regarding power and control and the 'digital divide', the significance of

which must be acknowledged during the analysis of the community-generated content. Rather than democratising the production of knowledge, participatory media platforms might replicate the systems of power and control present within the community. Although these technologies might be 'used across lines of gender, class and other differences, the way they are used continues to reflect socioeconomic disparities' (Zoettl, 2012:210). The researcher must therefore avoid any assumptions regarding online participation as a 'great equaliser', providing a 'voice' to all members of the community, and maintain a critical awareness of its potential to mirror the inequalities present offline. It is also important to note that the virtual archive platform itself will exert power and control, imposing 'structures [which] enable and constrain the actions of media actors' (Sandoval and Fuchs, 2010:145). Consequently, whilst participatory media might be 'an agent for social change, culture development and democratization' (Servaes, 1999:269), the contributions that users are able to make are restricted by, presented within and potentially, reflective of, the frameworks dictated by the archive. Due to potential issues regarding access to technology, it should also be noted that using participatory media in the context of community research might not be an effective way of co-opting and building relationships with community members, but rather introduce another barrier by which they are excluded from, or misrepresented by, the study.

In conclusion, *Experience Temple Works* illustrates the capacity of virtual archives to engage community members in the production and utilisation of archival materials. In the creation of an archive which communicates academic knowledge in a format

meaningful to the communities it is intended to represent, members of that community can be co-opted as active collaborators in the research, shifting preconceptions of the archive as inaccessible, 'distant' or disconnected from everyday experience. Even before the participatory functionality was implemented, the affordances of this virtual archive proved effective in engendering a sense of identification and ownership amongst the *Temple.Works.Leeds* community, evidenced by the extent to which many members wished to be 'present' within the archive. With the addition of participatory functionality, the relationships between the community and the archive were changed to an even greater extent. The production of the archival materials was opened up to a much wider audience, shifting the dynamics of power commonly associated with archives as privileged spaces of knowledge production. However, all of these claims must be tempered by a critical awareness of the problems associated with technological modes of representation and digitally mediated forms of participation. Of particular concern are the extent to which engaging and meditative forms of sensory media might mask the issues of 'presence', intention and editing associated with their production, the potential for 'immersive' technologies to be incorrectly situated as having a direct evidentiary power and for participatory platforms to replicate the systems of power and control present within the community.

The future of this research lies in two key areas: the implementation of the methods within other community contexts, further testing the efficacy and impact of their use, and a commitment to continually revisit and update the theoretical and methodological arguments which have been presented here, not simply in response to developments in virtual archive technologies, but with the intention of informing

them. In interdisciplinary collaborations between communities, archivists and scholars engaged in critical debates regarding virtual and 'immersive' technologies, the potential exists to contribute to a number of emerging debates regarding the place of archives in community research.

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