The Memorial Afterlives of Online Crowdsourcing: 'Lives of the First World War' at Imperial War Museums

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Keywords

Ahead of the impending First World War centenary commemorations (2014-2018), beginning in the late summer of 2014, Imperial War Museums (IWM) announced the launch of an ambitious partnership venture with Findmypast, a UK-based genealogy service company.[1] The partnership eventually manifested as 'Lives of the First World War' ('Lives'), an extensive digital database, a resource that became one of the pioneering achievements of the centenary commemoration period. The entire project ran from 12 May 2014 to 19 March 2019.[2] During this period more than 160,000 people collaborated 'to piece together the lives of people who experienced the conflict, through sharing anecdotes and digitising material that has been hidden away in attics until now'.[3] Individuals were able to upload digital copies of family relics and research the 'Life Stories' of family members or strangers. Altogether, approximately 7.7 million individual histories were collected.[4] Over its duration, nineteen thousand users followed the 'Lives' Twitter handle, whilst a further fifteen thousand supported its affiliated Facebook page. In March 2019 the website ceased allowing new uploads, at which point the 'Life Story' database, assets and stories transformed into a free-to-access, permanent digital memorial. One post-centenary report observed that 'Lives' was the best example of a crowdsourced output in showing what was possible at scale.[5]

A user and a volunteer interact with the 'Lives of the First World War' Database.
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This article argues that 'Lives' marked a significant contribution to First World War remembrance cultures when evaluating its success as an innovative public history project. But while we advocate that, for its scale and length of duration, the project was a remarkable undertaking operating beyond the physical boundaries of a museum, we want to query the extent to which it helped diversify and develop public understandings of the war more broadly. Shortly after the initiative launched in 2014, James Wallis suggested that 'Lives' would 'frame public memory of the conflict through personal stories'.[6] Now situated comfortably beyond November 2018, it feels appropriate for two First World War public historians to respond to that originally pitched notion by assessing how the initiative was delivered and advertised. Further consideration of what its legacy now is (or may yet be) represents an important gauge for contemporary digital organisation-led community engagement, beyond any impact fostered regarding cultural memories of the First World War.[7] The initiative's intersection across digital and family history suggest important ethical and methodological challenges associated with the history harvesting of data collections en masse. In particular, we want to suggest that, as a methodology, large-scale data collection will, on its own, inherently replicate collection bias, unless married with specific collection drives – something that has widespread implications for cultural memories of events reliant on large institutional datasets.

Family History, Museums, and the First World War

Over the past twenty years the development and sustained popularity of family history has been phenomenal. Sociologist Anne-Marie Kramer has posited how these practices have facilitated new relationships between identity and memory, arguing that people can construct identity-narratives based on their personal exploration of the past by tracing experience through the idiom of family.[8] First World War family history has been the way that many have engaged with their, and other people's, past. Numerous episodes of the popular BBC television series 'Who Do You Think You Are?' have reached millions of viewers, telling emotive stories about varied individual combatant experience and grief encountered over the course of the conflict.[9] The recent digitisation of war-era records has not only broadened accessibility to finding out more about the subject matter but has actively encouraged cross-user engagement to link up findings, facilitated through *Ancestry.com* and other online software platforms.

The fact that First World War bureaucracy left a relative wealth of archival material behind has allowed for a number of centenary projects to utilise these personal records. Ambitious initiatives came to fruition to offer new historical insights via digital means, such as 'Operation War Diary', a five-year partnership

operating between IWM and the National Archives.[10] Even before the centenary began, the Western Front Association's salvaging and subsequent digitisation of wartime pension record cards in 2012 was a decision made in the knowledge that these records held notable appeal in their ability to enhance existing historical understanding, delivered via the doings of existing communities of amateur or professional researchers.[11] For individuals engaged in family history or biographical research, the focus of the centenary provided an unparalleled opportunity to uncover the stories of their relatives or related individuals. Projects incorporated crowdsourced activities, from transcribing wartime diaries or letters, sourced from personal archives, for publication (sometimes via dedicated websites) to investigating the biographies of particular regimental or Pals battalions (men who enlisted in local groups to volunteer alongside each other). Many of the outputs from these were designed and presented in a way to showcase and evidence the impact of the First World War via a personal or local perspective, offering flavour to a familiar national narrative.[12]

This rise in interest in family history has been married with the 'individual turn' in both museum and First World War studies. Since the 1980s, curators in war museums have increasingly used emotional human stories to connect with visitors.[13] The individual turn is also evident within British First World War commemorative culture. As historian Jenny Macleod and archaeologist Yvonne Inall have argued, 'the memory boom that emerged from the 1980s gradually served to reinstall individual stories at the heart of collective remembrance.'[14]

The popularity of family history and the individual turn have combined to produce interactive visitor experiences and face-to-face community 'antiques roadshow' collection drives. These 'history harvests' allow people with items pertinent to the event or community being investigated (such as the First World War) to visit a site with an object, which is then photographed and recorded for repository in a digital collection. The Oxford University-led 'Great War Archive' first began these community collection drives for wartime items during the 2010s, hosting affiliated crowdsourcing events at sites across the UK. They proved a popular tool for archives and museums to engage local communities during the centenary.[15]

The collection drive we are discussing here is an online development of 'history harvests' that enables people to upload images of their family mementos. These have become almost ubiquitous since the Covid-19 pandemic, something which forced many museums to think up new ways of interacting with remote audiences, although are a form of online crowdsourcing that constitutes a relative recent practice. The term itself is a slippery one - when online crowdsourcing is written about, it usually refers to members of the public volunteering to help with research tasks, such as transcribing written text or providing metadata for images.[16] What we describe here is the act of museums asking people to volunteer family items as a way of crowdsourcing knowledge.[17] The material created from these drives is called 'community generated content' by the Digital Preservation Coalition, which defines it as 'digital materials produced and shared in and by ad-hoc community art and heritage projects, typically through digitization, where the creation of digital materials was a significant purpose of the initiative.'[18]

When 'Lives' was initially conceived this was a relatively new element of museums' digital community engagement strategy. Previous large-scale projects which had asked people to donate personal items to form part of official datasets included the Digital Monument to the Jewish Community in the Netherlands (2005) and the IBCC Digital Archive based in the UK that partnered with institutions in Italy (2012).[19] Commenting on the former, Serge ter Braake draws attention to the tension within large scale digital projects which try to both provide a repository of 'factual information' while acting as a memorial for individuals and communities affected by the subject matter.[20] The two goals can be difficult to reconcile, because they are both doing different public work; the former appeals to people who study the past whilst the latter works for people wanting to remember the event in question, perhaps not in the complex way the data suggests. 'Lives' followed a similar ideological split – it tried to marry crowdsourced knowledge with remembrance initiatives, leading to an, at times, dislocation between the two objectives.

The creation of these datasets begs the question of their public reception. Digital humanities scholars and historians with an interest in digital methods have been wary of complacently accepting digitised materials into the disciplinary cannon. As historian Tim Hitchcock has noted, the digitization of nearly exclusively Western sources by the Global North was, in 2013, creating a new Western cultural hegemony of digital history.[21] This has been slightly negated by the digitisation of some collections in non-Western languages, and those based in the Global South, but there is still a global imbalance. Concerns about whose histories have been represented in the digital realm, and what this means for researchers, have been voiced by historian Laura Putnam, who has argued that the digitised turn has meant that historians, particularly in the Global North, can now write histories on countries they know very little about.[22] Similarly, digital humanities scholar Sharon Howard has voiced concern that in making certain areas of history available for mass study, it obscures archives in other locations which are only accessible in-person.[23] 'Lives' is now a static resource – meant as a research collection and permanent digital memorial, however, we worry that without a clear appreciation of the ways that the data was collected, or an explanation of its inherent bias, that any future work using 'Lives' as its sole source material will be in danger of reproducing hegemonic histories of the First World War.

Pioneering digital humanities scholar Lorna Hughes has advocated that the First World War now constitutes 'the most digitally documented period in history, thanks not least to the vast amount of material on community websites'.[24] These community websites are rich with historical material, often collected by historically othered groups, however, these are considered 'critically endangered digital materials' due to lack of funding and digital infrastructure.[25] All that will survive in the long-term are well supported collections such as 'Lives'. What we are concerned about is the deliberate obfuscation of historical material that is caused by uneven collection policies and the effect that this has on cultural memory more broadly. As digital media scholar Jenny Kidd notes, there is not yet a cohesive framework for digital museum ethics, nor does it always form a part of institutional introspection.[26] Work examining digital crowdsourcing is only beginning to scope the importance of digitally crowdsourced collections that gather material for collection. Using this case study of 'Lives', we reason that current models of crowdsourced large databases are not yet inclusive enough, and suggest additional areas of awareness that can feed into future project design ahead of planning for upcoming anniversary events.

Lives of the First World War

The premise of a large-scale database originated as part of IWM's overall ambition to lead the national First World War centenary commemorations. Pitched as their 'flagship digital centenary project', the intention was to enable a presence beyond the physical grounding of the newly-designed First World War Galleries at IWM London that would open in July 2014.[27] With an exhibition driven by a narrative of retelling the experiences and history of the conflict for a generation of visitors removed from living memory, 'Lives' constituted a re-engagement with broader public interest in the First World War as a subject; its key messages being to act as the 'official place' for discovering 'stories', to 'commemorate lives of individuals' and 'ensure people understand the impact of conflict'.[28]

What 'Lives' essentially did was meld official and unofficial sets of data, thereby creating an online integrated database of people who had participated in the First World War. It included records relating to the different military services such as the Royal Navy and Royal Flying Corps/Royal Air Force but also the Canadian Expeditionary Force, the Australian and New Zealand Imperial Forces, the Indian Army, conscientious objectors and workers on the Home Front. It featured people from British, Commonwealth, and colonial countries who served in uniform or worked on the home front.[29] Significantly, 'Lives' attempted to position the British experience of the First World War as a global one - it emphasised the relationship

between commonwealth and metropole, although bypassed the issue of British colonial troops, despite those of them who fought being included in the dataset.

What made the project unprecedented in the UK, at least at the time of its conception, was its ambitious desire to amass records and information housed from various collections and locations into a single interlinked resource. The onus on collaboration across institutions and publics established a collective premise to bring 'material from museums, libraries, archives and family collections from across the world together in one place'.[30] Basic information was mined from seed record sets - predominantly wartime military records, such as Medal Index Cards or grave records - as a way of identifying individuals who were all given a profile ('Life Story') based upon that data. Members of the public then had the opportunity to supplement each individual's 'Life Story' by adding more detail to their wartime experience, presented as bite-size, engaging, historical narrative. This was typically information derived from either census records, military records or battalion war diary entries, alongside uploaded family photographs. The premise of an ever-expanding database over the centenary - in terms of new information being added or historical narratives being refined and worked on by its public users - chimed with an existing familiarity and appeal of family history as a long-term (arguably never-finished) pursuit. Meanwhile the user spectrum had to allow for those experts seeking specific or niche information alongside those exploring the site for the first time, curious to uncover wartime individuals sharing their surname.

The project relied heavily upon public input to populate the site. Language framed around the initiative accentuated a necessity for action over the commemorative period, encouraging contributors to 'save stories', to shape this 'permanent digital memorial' for preservation beyond 2018. The DC Thomson family history platform stated that IWM needed help from members of the public 'to explore documents, to link them together and to start telling the stories of those who served in uniform and worked on the home front'.[31] By the project's end in 2019, 161,141 contributors had helped to populate the 7,700,278 'Life Stories' with 3,175,052 'Facts'.[32] The most prominent example of sharing took place in 2015, when researcher Cyril Pearce donated the records of more than 16,500 men who refused to go to war on religious, ethical, political or social grounds from his Pearce Register of Conscientious Objectors list to the 'Lives' website.[33]

Volunteers helped to draw together 'Communities' of individual 'Life Stories' on the 'Lives' website, for instance, the 'Trumpington Men and Women of WW1' created by Trumpington Local History Group, as well as war memorial-based research conducted by a Library group based in Powys.[34] Individuals and groups were encouraged to create their own personalised areas of the website to remember a particular family, regiment, or event. Over 8,500 community groups were created, which have been kept as part of the digital memorial.[35] An international community of 29 remote volunteers undertook administrative tasks and answered user enquiries. One shared their motivations for their involvement:

> Within the group we have folks who have years of experience behind them in the fields of family, military and social history. We all share a two-fold commitment: the first is to ensure that information in Lives is accurate and evidence-based; the second is to help other members to get the very best out of it.[36]

In 2018, the peak of activity for the site, volunteers answered almost 2,900 enquiries which resulted in an additional 10,500 individuals being added to the site.[37] The platform also offered a means for existing researchers to either share or consolidate their findings, such as the 'Battle of Jutland' project which ended up featuring 2,500 Life Stories or examples of family historians who became inspired to uncover more about their relative's regiment or those named on a local war memorial.

The project also developed a schools-specific outreach programme. A dedicated Teachers' Hub went live in June 2015, offering free resources tailored to the Secondary Curriculum. These resources focused on engaging students with the project through individual 'Life Stories' - one example being a group of Key Stage Three pupils from The Mount School in York who used the 'Lives' database to research women

from a local memorial.[38] Between the launch date and March 2019, the Learning page was viewed almost 20,000 times.[39] Public events engaged approximately 1,500 students and teachers, with a further 61,000 schoolchildren were reached through participation in the online BBC Live Lesson on Remembrance in November 2018.[40]

'Lives' had to strike a careful balance between mass accessibility as a free-to-access online venture with the commercialisation of genealogy. It meant confronting a reality where access to digitised historical records had to be delivered via a subscription model, mirroring existing platform approaches seen on 'Ancestry' and 'Findmypast'. In total, 7.8 million records were made free-to-access but 10.5m military records and 469.5 civilian records (including census returns alongside Birth, Marriage and Death Indexes) required a £50 per annum or a £6 per month subscription package to view.[41] Financial costs for public users brought the debate over private companies and paywalls to the fore, not least because 'Lives' was an endeavour seeking to bridge a perceived gap between professional and casual users (though to what extent these restrictions may have limited accessibility, in terms of users paying for digitised historical data, remains unclear).

Pitched to entice prospective users, initiative rhetoric emphasised the importance of individual experience situated within a broader collective. It was a task largely endorsed by its users; one external website saw 'Lives' as a way of '…remembering that such a great effort was expended, and victory achieved – bit by bit – by *individual* people with *individual* stories'.[42] Website users responded to this felt sense of emphasis:

> **By working together to uncover and tell these stories, contributions can be valued, comrades-in-arms can be connected electronically, and forgotten details can be woven into vibrant personal and family histories to be saved and shared for generations.[43]**

Using technology to forge links, contributions became pitched as individual acts, echoing a sentiment that sat neatly alongside ideas of dedication and commitment to a cause. Understandably, the emphasis over 2014-2018 pushed the message of content input, but the site's functionality encouraged users to explore individual experience too, through broad search categories of name, unit or and service number. Intention lay in not only emphasising the experience of individual combatants, but upon connecting these stories too.

Though 'Lives' had secured the authority of an Academic Advisory Board, granting it institutional credibility, the initiative still needed to accommodate differing levels of expertise, across sectors and backgrounds. This was most evident in the approach that all contributed 'Life Stories' were to be reviewed in-house by IWM staff. 'Life Stories' could also be open to challenge by external readers, if a lack of historical integrity was perceived. This went some way to gatekeeping the type of history that was perceived as acceptable to upload, and may have skewed data collection.

Overall, 'Lives' functioned as a large and ambitious GLAM-led public history project. It merged institutional records with private ones, linking commercially available datasets with material produced or sourced by citizen users. It likewise encouraged individuals to digitally donate items or oral memories to an institutional database, whilst allowing others to establish dedicated commemorative groups of the dead. A small group of volunteers provided administrative and customer-facing support, giving hours of their time towards the project. A curatorial team engaged with schools through activities linked to the national curriculum, and public events and advertising raised awareness of the project more generally. There is no doubt that this was a highly ambitious programme, not least in its future-proofing efforts to anticipate how the site would function successfully post-First World War centenary, before the centenary had officially started. What the initiative did was help to cement individual memories of the First World War in the minds of the public, but on the other hand, it existed as a top-down initiative with associated financial costs for its citizen historians who wanted to engage on a deeper level.

Interpreting 'Lives'

Given the sheer numbers of people the site reached, beyond the quantity of 'Life Stories' collected, we do not seek to question the importance, reach or significance of 'Lives', especially for individuals who dedicated their time, items, and personal histories. That withstanding, it remains imperative to determine how the initiative allowed for a broader understanding of the war. We suggest that, for complex reasons, the collection largely confirmed pre-existing collection biases. Geoffrey Rockwell, a humanities computing philosopher, argues that 'crowdsourcing should be structured to maximise diversity, not to flatten it.'[44] He also emphasises that these projects are 'processes not products' and that crowdsourced knowledge should not be kept in a static place, unable to be unedited.[45] 'Lives' has not only become a static resource, as it is no longer able to be edited by the public, but has had issues with the diversity of history it contains. 'Lives' does not appear to have meaningfully engaged with diverse communities, conceivably because it had to compete with pervasive public understandings of what constituted appropriate war material. This builds on historian Lucy Noakes and one of the authors (Wallis), whose research into the First World War centenary in Britain found that people were unable to break away from pre-conceived notions of who the war involved and what it was like, which, we argue, highly influenced the types of memory 'Lives' was able to collect.[46]

The memory of the First World War currently circulating in the UK is one that is white, male, and Western Front orientated. Addressing British cultural memory of the First World War, a 2014 report produced by the British Council highlighted that UK public knowledge of the war's international aspects and its aftermath were limited, recommending that the centenary offered 'an opportunity to share a fuller understanding of the war'.[47] British perceptions of the First World War at the start of the centenary often failed to address the global scope of the conflict, and of the troops who were conscripted or enlisted from British colonial and Imperial areas. A post-centenary report published in 2019 found that there was a rise in public knowledge about Indian troops participating in the war (rising from 44% or the British public knowing of their involvement to 71% in 2018), though there was still little public knowledge of Kenyan troops and their involvement (from 22% in 2014 to 38% of the British public being aware of this in 2018).[48] Despite these increases in the knowledge of global involvement, and Britain's role in this, general knowledge remains patchy, with the 2019 report recommending that awareness of the diverse background of soldiers needs to be increased in predominantly white areas.[49]

As memory studies scholar Astrid Erll notes, 'families serve as a kind of switchboard between the individual memory and larger frames of collective remembrance'.[50] Digitally donated family items were inherently linked to collective conceptions of the war. But how can family memories of their First World War relatives withstand strong memory cultures in an institutional setting? On an individual level, families can tell narratives that go against received cultural understandings of war, but when asked by an institution to donate wartime items, pre-existing biases come to the fore.[51] Given the broader centenary landscape 'Lives' was operating in, it seems important to query how inclusive 'Lives' was more broadly, or indeed could ever be, due to the prevailing potency of existing memory cultures. Whilst focus upon individual histories may have helped to diversify collections, other centenary outreach programmes run by Imperial War Museums were accused of centring white histories.[52] Without specific or targeted collecting initiatives, 'Lives' was always unlikely to be able to represent a realistic history of the diverse people involved in the First World War.

There was a racialised split in the 'Lives' database, with white men overwhelmingly dominating the detailed 'Life Stories' recorded. The 'Life Stories' of British servicepeople of colour are sparsely populated when compared to their white counterparts. To some extent this is due to recordkeeping – race was not recorded on enlistment papers, for example. However, there is the question of who the 'Lives' site was serving – it was predominantly the ancestors of white soldiers who fought who felt able to attach images of their ancestors, and more details about them. Very rarely, more detail is given for Black soldiers, such as with

the example of David Louis Clemetson, who is lauded as the first Black officer in the British Army, ahead of the oft-cited Walter Tull.[53]

The record sets mined for 'Lives' included British troops and Empire and colonial troops, which meant that there was an immense coverage in terms of the geographical and cultural backgrounds of the people whose lives had been recorded. This had implications for how individual histories were recorded. A gatekeeping element meant that contributed information had to be recognised through verification. This potentially posed problems for families of colonial troops, who may not have access to the type of information verifiable through the project. First World War historian Santanu Das has drawn attention to the different approaches needed to trace Indian troops, who may not have left as rich a family legacy of diaries, memoirs, and letters as Western troops, but whose memories exist in ephemeral fragments and oral histories.[54] In the 'Lives' database, anecdotes and information passed down orally through generations seem valued to a lesser extent than the archival records - subtly reinforcing a hierarchy of historical contribution, despite many family historians striving to dismantle this. As such, reliance upon external verification or provenance may have meant that some families wanting to contribute would have struggled to do so, simply because the required material did not exist in a format suited to a standardised database.

This lack of personalised information was a problem more broadly. The histories of Black soldiers mentioned on the site are drawn into communities such as the 'Black Poppies' created by user Yvonne27542, but it is striking how many commemorated individuals have flags representing their birth-countries, rather than photographs to identify them.[55] And though the names of Black, South Asian, and East Asian men (rarely women) who were in service during the war do feature on the site, their 'Stories' and 'Additional Evidence' sections are sparsely populated when compared to their white-soldier counterparts. To us, this suggests that the families of people with Black, South Asian, and East Asian heritage either chose not to engage with 'Lives', could not engage because of the type of ephemera present within their family archives, or were unaware of it (or indeed, their family connection) altogether.

There is also a gendered split in this histories offered on the site, which also falls along racial lines. Women who worked in munitions factories throughout the war numbered over a million, whose voices are rarely heard. A search of 'munition' shows records for fourteen women, and the feminised term 'munitionette' returns 3 search results.[56] No British women of colour who worked in munitions are mentioned, although it is known that they formed part of the workforces in Liverpool, Glasgow, and elsewhere in Britain.[57] There are communities for 'Munitions Workers', 'Wives and Daughters – Female Deaths' as examples, but again most accounts are sparsely populated when compared to their male counterparts. A focus on white male soldiers is another facet of the gendered understanding of war that continues to dominate British cultural history. Historian Lucy Noakes has drawn attention to this gendered nature of wartime memory, arguing that older women are likely to describe male accounts of war when prompted about family experiences, obscuring the roles that women played in wartime because of the cultural perception of war as masculine.[58]

Problems around the elevation of certain narratives appear pervasive within a number of First World War collection drives extended beyond 'Lives'. 'The Welsh Experience of the First World War', a crowdsourcing project run by the National Library of Wales, also found people tended to bring in information that largely focused on soldiers, despite their calls for information about the home front.[59] In many respects, the very nature of the 'Lives' project had to be self-selecting, given its premise of adding supplementary details to base information gleaned from military records. But the point becomes how this notion plays into ideas around *who* felt able to contribute personal details about any given individual, a thorny problem for an initiative designed as a collective memorial endeavour.

Gatekeeping practices were baked into the language of the project, not least in the chosen terminology of 'family stories' rather than 'family histories'. This common pattern existed across many European First World War collection drives and were certainly not limited to IWM's interactive offerings. One curator on the

Europeana 1914-1918 collection drive, another online initiative which married crowdsourced and archival documents, explained, 'the private contributions to Europeana 1914-1918 by private individuals should be regarded as stories… this is because of the difficulties that surround narratives which have been passed down through families and as such should be approached with care in terms of a historical source.'[60] This focus on archival and paper-based material is limited and limiting, given the wealth of nuanced histories written based on oral histories, family histories, and other non-official sources.

As various digital crowdsourcing specialists have argued, the practice of crowdsourcing has the radical potential to diversity and democratise knowledge. However, within that potential, there is also the possibility for existing hierarchies to be reproduced, with people excluded from these institutionally-based arenas of knowledge creation.[61] As with any public history project, power dynamics are usually embedded within the structure of the institution who is leading or funding the initiative. Due to these broader restrictions on content and the nomenclature of individual contributions, questions remain about how valued individual contributions to the site could really be in practice. For all that 'Lives' allowed members of the public to upload data relating to their chosen individual, these elements were tightly controlled by the museum; information had to be externally referenced before upload was permitted, though family anecdotes were permissible without external verification.

It is also important to mention the digital medium of the project. During the early stages of the centenary, some donors to the 1914-1918 Europeana project stated that they would have been unable to donate items without the existence of the in-person events, but more due to the fact that they did not have the sufficient digital skills knowledge, or access to required scanning equipment for digitisation.[62] Quite simply, we do not know how many people may have donated an item to an in-person event but did not to 'Lives' because of its digital focus.

Similarly, the website is not the best-equipped for users with accessibility needs, in terms of issues with site accessibility, though we acknowledge that this constitutes a broader problem across the museum sector.[63] For example, promotional videos contain only YouTube-generated captions, which are a poor substitute for human-generated ones.[64] Only some links within the site have audio description, whilst navigation using a screen reader is sufficiently confusing that the majority of those reliant on them would, we assume, give up out of frustration. Some letters have been transcribed, which is of great use, but in other areas, images lacking Alt-Text (Alternative Text) entries renders these visual additions void for any users reliant upon screen readers.[65] As of 2019, IWM is auditing 'Lives' against the Web Content Accessibility Guidelines (WCAG 2.1) and, as the legislation requires, has communicated that it will publish an accessibility statement which outlines how and when they will fix any access issues (as of Autumn 2021, that has still not been published).[66] While museums do not legally need to make heritage items, such as scanned manuscripts, accessible under WCAG 2.1 compliance, we suggest that an image uploaded as part of a database should integrate the addition of Alt-Text, situated within a broader understanding of improving museum accessibility.[67] These policies would help potential users interact with he site, be that in a casual, research, or donor capacity.

Widespread calls for participation within future projects should be married with specific collection drives, encouraging people to donate their items to help redress gaps in the collection. Collective guidelines, such as the ones published by the community and academic groups who built the Student Nonviolent Coordinating Committee (SNCC) digital gateway, should be looked to as 'best practice' examples of working with respect and care.[68] Naturally, not everyone will want to be involved or to give their personal collections to an institution, especially one which still retains the word 'Imperial' in its title. We further recognise that the constraints of funding, time and workloads remain in place across the board, but would posit that large grants could work to support skills-rich national institutions. In turn, this would do much to support local community initiatives keen to research different histories, and perhaps through the process, helping them create new archives that complement or enrich existing collections. Indeed, many community

archives created during the centenary designed to help promote future research into diverse and inclusionary histories of the war now fall at risk of digital death. Expertly researched histories of marginalised global majority communities in the First World War exist, but without the infrastructure and financial backing to keep them online, it is only large institutional datasets that will benefit from long-term preservation, which has immense repercussions for how this data is used in future histories of war.

Digital Remembrance and Legacies

The extent of widespread activities over the four-year centenary instigated an enhanced, unprecedented understanding of how large and small-scale history projects could be delivered online. Yet legacy planning was not necessarily a part of the plan for online initiatives, though IWM did offer support for digital legacies from the First World War centenary. Well before the centenary's close, focus had shifted onto this wider lack of planning around preservation, especially how to retain or maintain projects with specific digital components.[69] Following its period of active collection, 'Lives' became a permanent digital memorial, with the secondary goal of supporting future research. In constituting part of the modern memory of the conflict negotiated over the entire centenary period, planning for long-term legacy was categorised four distinctive phases. It included a dedicated period from June 2018 to June 2019 of cleaning and migrating data from the platform, in order to achieve preservation for future generations. The site now remains in situ as a 'permanent' memorial and database.

Digital remembrance subsequently lay at the heart of the 'Lives' project. Phrasing throughout placed notable emphasis upon individual experience, relatability, and understanding the varied experiences of individuals through an emotionally-led framework, one that bought into existing cultural memory of the First World War.[70] Ultimately, family histories could forge personal links to the subject matter. As Wallis previously observed, these emotional elements could transform from a personal connection to a memorial presentation, translated into the digital realm via the 'Lives' project interface.[71] Once the 'Lives' site had gone live, visitors were able to click the 'Remember' button on an individual 'Life Story' page to commemorate that individual. This function was disabled once the site was no longer open to additional contributions, so had an active remembrance phase of 5 years. This memorial interplay fed into popular digital remembrance initiatives for the recently deceased; web memorialisation is characterised by its social spaces that bring together family, friends, colleagues, and others to remember the dead in ways that they previously would not have interacted.[72]

Throughout the centenary commemorations social media constituted an important element in delivering historical and creative content that could be easily transmitted, shared and made outward-facing.[73] After the successful *Blood Swept Lands and Seas of Red* installation held at the Tower of London over five months in 2014, Historic Royal Palaces (HRP) set up an online dedication portal 'to enable people to get involved with the commemoration'.[74] This allowed members of the public to dedicate a digital poppy to someone involved in the First World War. After analysing a portion of the more than nine thousand online dedications, Creative Producer and HRP researcher Megan Gooch commented upon the 'richness and variety of family memory and brings to life the looks, achievements and sometimes even the personalities of those who are commemorated in a way that no official memorial ever could'.[75]

Critiquing interactions with the artistic installations held at the Tower of London in 2014 and 2018 respectively, Gooch observed that 'Technology is enabling us to keep our dead amongst and part of our daily lives and conversations' - underlining the point that not only was this online technology allowing individuals to search historical records to uncover either forgotten or unknown information, but platforms including Twitter and Facebook were essentially functioning as prompts or settings for us to visibly remember, in this instance through public-facing photographic tributes. Digital technologies researcher Shanti Sumartojo has similarly remarked on the role of social connections as participatory communication, in the sense that

'digital technologies make new forms of shared experience possible, including drawing together people from around the world in a collective, real-time schedule of events.'[76] Not only did this online technology allow individuals to search historical records to uncover forgotten or unknown information, but social media sites functioned as prompts or settings for people to visibly remember, in this instance through public-facing photographic tributes.

What feels most significant about the 'Lives''Remember' button is that it melded modern memorial techniques to people with whom those remembering had no living connection. This application of modern memorialisation techniques to the long dead is an innovative way of bringing the dead back into discussion with those alive today, though the treatment also forces an approach away from typical memorial patterns.[77] Individuals making up this collective of First World War dead have accordingly become elevated, far more recognisable than was ever possible before the advent of the internet. The capabilities of these technologies offered new, largely successful, modes of engagement for members of the public to interact with the legacy of the First World War, in a manner that placed as much (if not more) emphasis on presentation, imbuing what has become known colloquially as 'creative commemoration'. In essence, the 'Lives' project manifested as part of the first major commemoration of the historic First World War dead in the digital age.

Perhaps the most telling legacy of 'Lives' can be contextualised when reflecting back on the still-crystallising themes of the First World War centenary within Britain. Already, its oft-cited commonalities are those that were tangible, experiential or grounded in their representation; many being artistic-led installations, including the poppy display at the Tower of London in 2014, the 'Pages of the Sea' tribute held across beaches around the UK on 11 November 2018, and two high-profile feature films showcased soon after that period, 'They Shall Not Grow Old' (released 2018, Dir: Peter Jackson) and '1917' (released 2019, Dir: Sam Mendes). Instead, 'Lives' operated in a more ethereal, and out of sight, digital space. It acted more as a means for hosting than producing content, feasibly because the subject matter was being applied onto the technology. That drove a central concern of preservation, that whatever was generated had to be stored and maintained, if at a cost of enhancement or utility (understandable given the perpetuity remit of the organisation responsible for its upkeep). Conversely, the impact of 'Lives' could not match the visceral nature of an individual hand-crafted blood-red clay poppy, nor the cinematic magnitude of colourised historical footage - both centenary re-imaginings of the First World War that relied on the conflict's perception within existing cultural memory.

Conclusions

IWM's 'Lives of the First World War' clearly picked up on numerous trends - the surge in family history, the rise of digital memorials, and an interest in datasets related to the conflict all merged into this crowdsourced endeavour. But its premise was innovative volunteer engagement, inviting individuals to populate the site as they chose. There were sure intentions of wanting to diversify cultural memory, especially through highlighting the Home Front, lesser-known theatres of conflict and colonial and imperial contributions – themes that all coalesced over the course of the centenary.

Inevitably though, as a digital legacy of the centenary, 'Lives' speaks to the modern cultural memory of the First World War in Britain. A transition from active to passive platform signified a broader interest in the subject now that its major commemorative anniversary has passed, with the site itself now a forum of presented histories linked to bigger datasets. Though the resource offers unparalleled future researcher value, in terms of identifying individual actors within broader communities of war experience, it also reflects traditions of white male centred conflict. The platform had originally sought to avoid perpetuating or reinforcing dominating cultural narratives and tropes. But its now-static nature invites concern about reinforcing understanding, because the drawing together of different narratives or engagement of diverse communities was not fully fleshed out during the collection-phase. Without keen awareness of this, future

work based on this freely available data set are at risk of perpetuating highly specific narratives of war, which have been encouraged as the accepted public and family history worthy subjects of history.

Ultimately, we wonder if laudable ambitions were set too high. By the time of launch, 'Lives' had already needed to foresee and anticipate the tone and content driving the upcoming centenary, before then operating over a period of notable longevity. That day-to-day operation was happening on many different levels, being aimed at various user-groups including those with family ties to the war, local researchers, community groups, academic researchers and those teaching in schools. It was, at once, trying to be national, local, and familial, thereby risking confusion or limiting the potential success within each category. The sheer number of records preordained users having to carve their individual own pathways through the data, so it cannot be a surprise that this manifested in familial or local community narratives they felt affinity to. Moreover, that cannot be uncoupled from the powerful popular remembrance of the conflict within Britain.

Future mass calls for participation therefore need to align with direct calls for information from targeted groups, or direct support, including legacy hosting, for the research that is often done at community level by groups who may have reason to distrust large national museums. We recognise that this is not an easy challenge, and often taps into wider community relations and concerns about exploitative history practices. Public history professionals should be encouraged to proactively refine the benefits and challenges of public engagement initiatives from a venture's outset, rather than pursue easier retrospective criticism.

We wrote this article as a way of beginning the conversation around how big databases which solicit items from the public might look, and how we might - as users, researchers, and website creators - build on these experiences working towards other large anniversaries. Despite writing about a national collection, we do not necessarily advocate that history should be collected through institutions such as this – rich community-based archives exist outside of traditional structures and British cultural history would be all the richer if they were supported long-term. However, what we are concerned about is the deliberate obfuscation of historical material that is caused by uneven collection policies and the effect that this has on cultural memory more broadly. This piece is intended to be a starting point for discussions in organisations who wish to build these kinds of sites, where diversity of information and parity of historical evidence is considered at the outset. We hope that these reflections will spur deeper research into what are, for all of us, relatively new digital ventures.

Acknowledgements

Endnotes

1   The project was a partnership venture with brightsolid, the parent company of the 'Find My Past' and the 'Genes Reunited' websites.

2   House of Commons Digital, Culture, Media and Sport Committee (DCMS), 'Lessons from the First World War Centenary: Thirteenth Report of Session 2017-19', House of Commons, London, 2019, pp69-70.

3   About the Lives of the First World War (Online), [2018]. Available: https://livesofthefirstworldwar.iwm.org.uk/about (Accessed 5 January 2021).

4   DCMS, op cit, p18.

5   Lucy Noakes, Catriona Pennell, Emma Hanna, Lorna Hughes and James Wallis, 2021, 'Reflections on the Centenary' Project Report, p108 (Online). Available: https://reflections1418.exeter.ac.uk/wp-content/uploads/2021/10/Reflections-on-the-Centenary-of-the-First-World-War-Learning-and-Legacies-for-the-Future.pdf, (Accessed 18 December 2021).

6   James Wallis, ''Great-grandfather, what did *you* do in the Great War?' The phenomenon of conducting First World War family history research' in Bart Ziino (ed), *Remembering the First World War*, Routledge, Abingdon, 2015, p31.

7   Digital community engagement (DiCE) is a term created by Rebecca S. Wingo, Jason A. Heppler, and Paul Schadewald in *Digital Community Engagement: Partnering Communities with the Academy*, University of Cincinnati Press, Cincinnati, 2020, pp7-8. They define DiCE as a blend of 'established digital humanities, public humanities, and community engagement practices.'

8   Anne-Marie Kramer, 'Kinship, Affinity and Connectedness: Exploring the Role of Genealogy in Personal Lives', in *Sociology,* vol 45, no 3, 2011, p381; Anne-Marie Kramer, 'Mediatizing Memory: History, Affect and Identity in Who Do You Think You Are?', in *European Journal of Cultural Studies,* vol 14, no 4, 2011, pp428-445; Katie Barclay and Nina Javette Koefoed, 'Family, Memory and Identity: An Introduction', in *Journal of Family History,* vol 46, no1, 2021, pp3-12.

9   See also Maggie Andrews, 'Mediating Remembrance: Personalisation and Celebrity in Television's Domestic Remembrance', in *Journal of War and Culture Studies,* vol 4, no 3, 2011, pp357-370; Michelle Arrow, ''I just feel it's important to know exactly what he went through': In Their Footsteps and the Role of Emotions in Australian Television History', in *Historical Journal of Film, Radio and Television,* vol 33, no 4, 2013, pp594-611; Carolyn Holbrook and Bart Ziino (ed), 'Family History and the Great War in Australia' in Bart Ziino (ed), op cit, pp39-55.

10   Operation War Diary n.d. (Online), https://www.operationwardiary.org/ (Accessed 02 June 2021).

11   Ancestry Pension Records n.d. (Online), https://www.westernfrontassociation.com/ancestry-pension-records/ (Accessed 02 June 2021).

12   For expansion on the subject of war legacies and gender, see Lucy Noakes, ''My husband is interested in war generally': Gender, family history and the emotional legacies of total war', in *Women's History Review,* vol 27, no 4, 2018, pp610-626.

13   Barton C. Hacker and Margaret Vining, 'Military Museums and Social History' in Wolfgang Muchitsch (ed), *Does War Belong in Museums? The Representation of Violence in Exhibitions*, Transcript, Bielefeld, 2013, p42; Simon Jones, 'Making Histories of Wars' in Gaynor Kavanagh (ed), *Making Histories in Museums*, Leicester University Press, London, 1996, p157.

14   Jenny Macleod and Yvonne Inall, 'A Century of Armistice Day: Memorialisation in the Wake of the First World War' in *Mortality*, vol 25, no 1, 2020, p64.

15   See Lest We Forget (Online), [2019]. Available https://lwf.web.ox.ac.uk/home (Accessed 24 September 2021); also East Belfast & The Great War (Online), [2018]. Available: http://www3.qub.ac.uk/cdda/EastBelfastWW1_Archive/; Europeana 1914-1918, [2011]. Available: https://www.europeana.eu/en/collections/topic/83-1914-1918 (both Accessed 24 September 2021).

16   For recent work on crowdsourcing as a participatory research action see Alana Piper, 'Digital Crowdsourcing and Public Understandings of the Past: Citizen historians meet Criminal Characters' in *History Australia*, vol 17, no 3, 2020, pp525-541; Mia Ridge (ed), *Crowdsourcing our Cultural Heritage,* Ashgate Publishing, Farnham, 2014.

17   Serge Noiret mentions some examples of other publicly collected digital public history in his chapter 'Crowdsourcing and User Generated Content: The raison d'être of digital public history' in Serge Noiret, Mark Tebeau and Gerben Zaagsma (eds) *Handbook of Digital Public History,* De Gruyter, Berlin, 2022, pp35-48.

18   Community Generated Content in Arts and Heritage (Online). Available: https://www.dpconline.org/digipres/champion-digital-preservation/bit-list/critically-endangered/bitlist2021-community-generated-content (Accessed 12 October 2022).

19   For more on the IBCC Digital Archive see Greta Fedele, Zeno Gaiaschi, Heather Hughes, and Alessandro Pesaro, 'Public History and Contested Heritage: Archival memories of the bombing of Italy', in *Public History Review,* vol 27, 2020, pp1-18.

20   Serge ter Braake, 'Between History and Commemoration: The digital monument to the Jewish Community in the Netherlands' in Chiel van den Akker and Chiel Legêne (eds) *Museums in a Digital Culture: How Art and Heritage became Meaningful*, Amsterdam University Press, Amsterdam, 2016, pp104-106.

21   Tim Hitchcock, 'Confronting the Digital: Or how academic history writing lost the plot', in *Cultural and Social History* vol 10, no 1, 2013, p9; 21.

22   Laura Putnam, 'The Transnational and the Text-Searchable: Digitized sources and the shadows they cast', in *American Historical Review* vol 121, no 2, 2016, p397.

23   Sharon Howard, 'Bloody Code: Reflecting on a decade of Old Bailey Online and the digital futures of our criminal past', in *Law, Crime and History* vol 5 no 1, 2015, pp13-14.

24   Leo Konstantelos, Lorna Hughes and William McBride, Glasgow, 2019, The Bits Liveth Forever? Digital Preservation and the First World War Commemoration (Online), p6. Available: http://eprints.gla.ac.uk/191301/1/191301.pdf (Accessed 04 January 2021).

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26   Jenny Kidd, 'Digital Media Ethics and Museum Communication' in Kirsten Drotner, Vince Dziekan, Ross Parry, and Kim Christian Schrøder (eds), *The Routledge Handbook of Museums, Media and Communication*, Routledge, Abingdon, 2019, p194.

27   See James Wallis and James Taylor, 'The Art of War Display: The Imperial War Museum's First World War Galleries 2014' in James Wallis and David Harvey (eds) *Commemorative Spaces of the First World War: Historical Geographies at the Centenary*, Routledge, Abingdon, 2017, pp101-114.

28   Key Messages of the 'Lives of the First World War' Database (Slide 6). Courtesy of 'Reflection on IWM's Permanent Digital Memorial' Slideshow by Public Engagement Officer Catherine Long, (Online), 2017. Available: https://www.slideshare.net/slideshow/embed_code/key/J8710sl9nJqKAZ (Accessed 12 December 2021).

29   This means people from Britain, Newfoundland, the West Indies, India, South Africa, Australia, and New Zealand, and Canada. Britain also heavily recruited from African countries it colonised, including the Gold Coast (Ghana), Kenya, and (as the war went on) Tanganyika (Tanzania).

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31   ibid.

32   Lives of the First World War Homepage (Online), 2019. Available: https://livesofthefirstworldwar.iwm.org.uk/ (Accessed 06 February 2021).

33   Cyril Pearce, Uncovering the History of Britain's War Resisters (Online), 2015. Available: https://www.heritagefund.org.uk/blogs/uncovering-history-britains-war-resisters (Accessed 29 July 2021).

34   Ystradgynlais Library research featured by Imperial War Museum (Online), 2020. Available: https://en.powys.gov.uk/article/9477/Ystradgynlais-Library-research-featured-by-Imperial-War-Museum (Accessed 01 January 2022).

35   DCMS, op cit, p70.

36   Testimony extracted from Slide 27 of 'Reflection on IWM's Permanent Digital Memorial' Slideshow by Public Engagement Officer Catherine Long.

37   DCMS, op cit, p70. 'Lives' also received significant press coverage during its launch in the Summer of 2014, arguably the most active period during the whole centenary.

38   Catherine Mailhac, Lives of the First World War Re-source Evaluation (Online), n.d. Available: https://www.mailhac.org/learning-module-observations-for-iwm/ (Accessed 27 July 2021).

39   DCMS, op cit, p69.

40   ibid.

41   The platform was set up into different user categories – 1) 'Visitor' for website browsers, 2) 'Members' who could access seven million free records as well as connecting evidence and adding facts to 'Life Stories' and 3) 'Friend' who could access the premium records. The premium records were pre-existing ones that had already been digitised by 'Findmypast'.

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43   ibid.

44   Geoffrey Rockwell, 'Crowdsourcing the Humanities: Social Research and Collaboration' in Willard Mccarty and Marilyn Deegan (eds) *Collaborative Research in the Digital Humanities*, Ashgate, London, 2012, p148.

45   ibid, p149.

46   Lucy Noakes and James Wallis, 'The People's Centenary? Public history, remembering and forgetting in Britain's First World War centenary' in *The Public Historian*, vol 44, no 2, 2022, p58.

47   British Council, 'Remember the World as Well as the War: Why the Global Reach and Enduring Legacy of the First World War Still Matter Today', University of Exeter, Exeter, 2014, pp3; 38.

48   James Wallis, 'Capturing Commemoration: Reflections on the Centenary of the First World War', University of Essex, Colchester, 2019, p9. The YouGov / British Future opinion polling was conducted online in December 2018, with 2,008 adults sampled (Available: The-Peoples-Centenary.Final-report-2018.pdf (britishfuture.org), accessed 20 April 2022).

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51   For more on how individual families can resist cultural understandings of war see Roper and Duffett, op cit, pp78-79; Wallis, op cit, p25; Ann-Marie Foster, '"We decided the museum would be the best place for them": Veterans, families and mementoes of the First World War', in *History & Memory*, vol 31, no 1, 2019, p100.

52   DCMS, op cit, p14.

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54   Santanu Das, *India, Empire, and First World War Culture: Writings, Images, and Songs*, Cambridge University Press, Cambridge, 2018, p11.

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57   Angela Wollacott, *On her Their Lives Depend: Munitions workers in the Great War,* University of California Press, Berkeley, 1994, p39.

58   Lucy Noakes, ''My Husband is Interested in War Generally': Gender, family history and the emotional legacies of total war', in *Women's History Review,* vol 27, no 4, 2018, p617. See also Lucy Noakes and James Wallis (2022) 'The People's Centenary? Public History, Remembering and Forgetting in Britain's First World War Centenary', *The Public Historian* (In Press).

59   Lyn Lewis Dafis, Lorna M Hughes and Rhian James, '"What's Welsh for Crowdsourcing?" Citizen science and community engagement at the National Library of Wales' in Mia Ridge (ed) *Crowdsourcing our Cultural Heritage*, Ashgate, London, 2014, p149.

60   Jeremy Jenkins, 'The British Library, Europeana 1914-1918 and the Memorialization of the Great War' in *electronic British Library Journal*, 2018, p1.

61   Mia Ridge et al, op cit, Chapter 3.

62   ibid.

63   Technically, all UK based museum websites should be WCAG 2.1 compliant, but in practice, times between identifying accessibility issues and fixing them can be vast.

64   Lives of the First World War (Online), 2013. Available: https://www.youtube.com/watch?v=JM4TkpdUzFg (Accessed 24 September 2021).

65   You can download the Chrome Screen Reader extension and try the website for yourself. Screenreaders struggle to understand the information contained on this page, for example: We Remember Alhaji Grunshi (Online) [2014-2018]. Available: https://livesofthefirstworldwar.iwm.org.uk/lifestory/1492566 (Accessed 16 September 2021); Christmas Letter (Online), [2014-2018]. Available: https://livesofthefirstworldwar.iwm.org.uk/story/21299 (Accessed 16 September 2021).

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67   For items exempt from WCAG 2.1 compliance see Central Digital and Data Office, Understanding Accessibility Requirements for Public Sector Bodies (Online), 2018. Available: https://www.gov.uk/guidance/accessibility-requirements-for-public-sector-websites-and-apps#exemptions (Accessed 16 September 2021).

68   See Geri Augusto et al, 'Learn From the Past, Organize for the Future: Building the SNCC digital gateway' in Wingo, Heppler, and Schadewald, op cit for an excellent case study which highlights how communities and institutions can work together.

69   Alongside 'Lives', IWM delivered 'Mapping the Centenary' in 2019-21. This operated as a national portal designed to collate information about projects and activities which had marked the First World War Centenary from 2014-19. It built upon an established network of external contacts and users by tasking them to record their work, in populating an interactive digital map. Already, it is clear than many projects did not have digital legacy baked in, with broken links and disappeared websites. See, Mapping the Centenary (Online), [2021]. Available, https://www.iwm.org.uk/partnerships/mapping-the-centenary; Ann-Marie Foster, Mapping the Centenary – An Academic's Perspective (Online) 2021. Available: https://www.iwm.org.uk/blog/partnerships/2021/03/mapping-centenary-academics-perspective (Accessed 29 July 2021).

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73   For more on the role of social media and digital commemoration, see Tom Sear, 'Dawn Servers: Anzac Day 2015 and hyperconnective commemoration' in Brad West (ed) *War Memory and Commemoration*, Routledge, Abingdon, 2017, pp69-88; Silke Arnold-de-Simine, 'Between Memory and Silence, Between Family and Nation: Remembering the First World War through Digital Media' in A. Dessingué and J. Winter (eds) *Beyond Memory: Silence and the Aesthetics of Memory*, Routledge, Abingdon, 2016, pp143-161.

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76   Shanti Sumartojo, 'Reframing Commemoration at the end of the First World War centenary – New Approaches and Case Studies' in Shanti Sumartojo (ed) *Experiencing 11 November 2018: Commemoration and the First World War Centenary*, Routledge, Abingdon, 2021, p5. See also Samuel Merrill, Shanti Sumartojo, Angharad Closs Stephens and Martin Coward, 'Togetherness after Terror: The More or Less Digital Commemorative Public Atmospheres of the Manchester Arena Bombing's First Anniversary', in *Environment and Planning D: Society and Space,* vol 38, no 3, 2020, pp546-66.

77   See Aleida Assmann, 'Transformations between History and Memory', in *Social Research*, vol 75, no 1, 2008, pp213–214.