Crowd-Curating History: The Challenges of Capturing Cultural Heritage

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ABSTRACT

Museums and historical sites play an important role in authoring a representation of local history, and act directly to define a sense of community identity. However, facilitating effective engagement is not easy if communities themselves are unable to see how their own history is created. In this context, one of the biggest challenges for public and/or local history is the reconciliation of the need for curation (and imposition of narrative) and the need for personal engagement: in the context of public history, without engagement a potentially active visitor is relegated to the role of passive consumer. This paper argues that, even after significant recent innovations in using technologies in public history, the infrastructure of museums and historical sites themselves preclude the possibility of collectively curating history. In order to connect communities, community members need to have access to the means of generating and capturing history in terms of memories, anecdotes, and personal engagement with historical sites, which we propose can be done using Augmented Reality and user-generated Resource Clouds.

Keywords

Museum Studies; Augmented Reality, Historiography; Community History; History

1. INTRODUCTION

Over the past few decades, attempts to involve the public in engagement with the past (most specifically in museums and sites of historical interest) have come up against the same problem time and time again; namely, that the public's engagement with the past is contingent upon their ability to understand a single (rather than complex) narrative, to be able to engage with historical participants (not only those great heroes of the ruling classes) and to be able to see the link between the past and the present (not simply to absorb data as facts-to-be-learned). These three examples relate to wider discussions about historiography (that is, criticisms about how we produce history) and undermine the potential for a society to understand its own roots. However, these historiographical issues are not merely abstract problems in the theoretical realm, but are precisely the kinds of issues which any attempt to preserve cultural heritage encounters on a daily basis. Organising an exhibition necessarily means imposing a narrative onto an array of facts (presenting them as a history to-be-learned), rather than allowing interaction with those facts to produce an inductive narrative. Thus, a good curator is one who is able to draw on a repository of relevant stories, experiences and meanings to create a tailor-made exhibition suited to groups' needs.

Our failure to engage communities with their own past, however, is not simply a problem for historical preservation groups or universities, but is one with far wider repercussions. Decisions made by any number of bodies from town planners to the Ministry of Education are based, in fact, on the ways in which individuals and communities engage with their past. Given that—as Rosenwein and Thelig demonstrated as far back as 1998—a society engages with its past as much *outside* education as within it, it is clear that the ways in which we curate the past form part of an inherently interdisciplinary problem with important repercussions. Traditional disciplinary approaches to these issues, moreover, will necessarily lead to discipline-based conclusions and, ultimately, to a fundamental impasse caused by disciplinary boundaries.

Public history, which generates complex and at times contradictory accounts of the past, faces the same issues as formal historical education, represented by what Cannadine terms a "tension in English classrooms between 'traditional' and 'progressive' history teaching methods: the former stressing data, chronology and narrative; the latter empathy, experience and imagination." [3] Such a fundamental impasse is caused by approaches to public history which are motivated by—and constrained within—traditional disciplinary boundaries.

The curation of history thus remains one of the final barriers to a more comprehensive understanding of historiography, and for transferring the power to "shape history" [16] from the hands of traditional gatekeepers of history to communities themselves. The museum stands at the crossroads of two contemporary urges in the field of public history: on the one hand they offer a repository of historical information which is introduced to the public through exhibitions; on the other the history which is on offer is one which is not found and assembled, but one which is prefabricated and constructed, [9] raising new questions about who has the right to shape it, how best to organise it, and which criteria have been used to do so. [16] Recent advances in technology—specifically in the field of intelligent user interfaces—thus offer a range of new technologies which are for the most part designed to enrich the user experience of the past, and to play an important role in helping to shape cultural heritage; nevertheless, in many cases, we will argue here, the role which technologies like augmented reality play in enhanced museum displays *merely replicates existing modes and models of historical representation*, which does not fully answer the central problem outlined above. This paper thus argues for a new model of technological engagement with cultural heritage, outlining the context and objectives of the problem. In the final section we offer a solution in the form of a new experiment in crowd-sourcing history which is currently

being run by an interdisciplinary team based at the University of Lincoln. The project is designed to harness existing technologies in order to allow users of historical sites not only to organise their own history according to their interests, experience and priorities, but also to contribute to an open-source repository. In this sense, by opening up the source code of history itself, the technologies introduced by this new project allow users themselves the power to shape and assemble the past offering a genuinely democratic engagement with history precisely by those traditionally shut out of the process. The paper is divided into three parts, each offering their own arguments: first, we argue that museums as traditional centres and focal points of public history tend, however unwittingly, to mask the artifice which is necessarily involved in the construction of public history; next we explore the technologies which have been deployed elsewhere to demonstrate that—although offering greater engagement with the past—they nevertheless replicate existing modes of engagement with the past; in the final section of the paper we introduce the methods employed by our project and the means by which a crowd-curated history would permit us to explore significant questions regarding our ability to construct community histories democratically.

2. MUSEUMS MASK HISTORIOGRAPHY

It is worth mentioning, from the very outset, that the purpose of this project is in no way intended to criticise existing methods, employed by a host of public history institutions, to present history to a wider public; given that we work closely with a range of existing institutions devoted to representing the past in the fairest and most inclusive way possible, not only would such criticisms be somewhat churlish, they would also, in our experience, be unsustainable and inaccurate. However, as David Cannadine et al have convincingly demonstrated in a recent work on public history, [3] what is true is that despite the best intentions of public history institutions, the understanding of history as a cumulative collection of dates, facts and logic means that these will inevitably tend to form the focus of museums. As Kavanagh argues, "museums are a meeting ground for official and formal versions of the past called *histories*, offered through exhibitions, and the individual or collective accounts of reflective personal experience called *memories*, encountered during the visit or prompted because of it. History and memory meet in the collections, within the research process and within the museum visit." [9] This is particularly true in the case of those museums (the vast majority, by their very nature) which use objects as a nexus through which the past is made meaningful to the present. Such object-based organisation of museums tends inevitably to place the objects at the foreground as authentic remnants of material culture, an approach which precludes empathy and identification without some form of narrative framing.

However, looking at the situation from a different perspective, it is clear that the purpose of a museum or a historical site is not simply as a collection of artefacts, but as a physical repository of the past, and one which plays an important role in authoring a

representation of local history, and which can act directly to define a sense of community identity. As Sorlin summarises it: "History is a society's memory of the past, and the functioning of this memory depends on the situation in which the society finds itself." [12] Thus in the museum, issues of the personal clash with wider issues of historiography in the ways in which it constructs a narrative of identity which is contingent first upon the facts available to a given group, and second upon how those facts are presented to them. [8, 10] As Jerome de Groot observes, "How a society consumes its history is crucial to the understanding of all contemporary popular culture, the issues at stake in representation itself, and the various means of self- or social construction available [...] consumption practices influence what is packaged as history and work to define how the past manifests itself in society." [6]

An important factor, often overlooked, is the personal sense of the past which a visitor brings to the museum; "when people visit museums, they can do no other but bring their life histories and memories with them, maybe not ostentatiously nor even consciously, yet within reach. Personal memories may be stirred by the images, objects or words made visible and may dominate over any 'formal' history offered." [9] In this context, one of their biggest challenges is the reconciliation of the need for curation (and imposition of narrative) and the need for personal engagement; this challenge embodies the artificial and problematic division often drawn between the personal and the 'historical' in the curation and organisation of a museum's various exhibits since "many of the best works of historical engagement recognize the importance of ... intimacy and sense of personal story." [14] In the context of public history, without engagement a potentially active visitor is relegated to the role of passive consumer. [3, 6] Indeed, where profit becomes the primary purpose, then the empathic connection with any given exhibition risks being downplayed in favour of a broader sense of 'consuming' the past without empathic engagement. In the worst cases, "organizations with an imperative for capital accumulation trivialize and package experiences which are, essentially, neutered reproductions of possibly the most horrible and tragic ordeals any person might experience." [15] However, facilitating effective engagement is not easy if communities themselves are unable to see how their own history is created. If they are unable to engage communities in the creation of their own history, then the museum is inevitably forced to assemble a pre-constructed narrative of the kind of history which is on display. [16]

Thus we can see that the interests of museum studies are in some senses inextricably intertwined with those of the historiographic project engaged over the latter half of the twentieth century. To summarise a very complex debate in only a few words, the project of historiography, led initially by perhaps an overzealous confidence in postmodernism, has opened up significant questions which transcend the discipline of history wider audiences. Inherent in the process of doing history, argues Hayden White, are a series of three decisions which have to be made, concerning 1) which facts are selected, and what level of priority is to be assigned to each, 2) how then to assemble those facts together into a coherent narrative, which also 3) requires the historian to make a series of assumptions about the audience to whom those very facts are to be presented.

As E.H. Carr describes it:

> History consists of a corpus of ascertained facts. The facts are available to the historian in documents, inscriptions, and

so on, like fish on the fishmonger's slab. The historian collects them, takes them home, and cooks and serves them in whatever style appeals to him. [4]

What is of particular importance for our purposes here is the role of the historian as a fabricator, or manufacturer of historical meaning. One of the main criticisms launched by historiography can in some ways be encapsulated in Carr's simple idea. As both Carr and White contend, the past is not something concrete and unidimensional which lies behind us, but it is rather the ways in which we put together the various facts and fragments of history which comes to form our own, individual, idea of what went before us, with any ambiguities carefully smoothed over.

Consequently, even with the best intentions, the role of the museum curator requires some difficult manipulation of the past, forcing them to confront a series of decisions about how to present the history on offer to the public. The same three principles emerge here as we saw with historiography proper: 1) selection (from the artefacts available and/or accessible, which of those is sufficiently resilient to be exposed to the open air, which of these can be touched, etc?), 2) assembly (in which room is this object to be placed, where precisely, and next to which other objects?) and 3) presentation (does the object need an explicatory plaque, is the whole exhibition to be arranged chronologically or thematically, how important is this object?). To make matters worse, this mode of presentation is made still more problematic by the fact that the purpose of the museum itself, as well as to preserve historical memory in a tangible way, is to attract as many visitors as possible. With recent cuts to public funding, too, the role of the historical curator has been made still more difficult. A fundamental shift in thinking in Whitehall has, to summarize it perhaps rather too bluntly, led to a perception of value based on utility with regards to funding to arts and cultural projects, which seems to reflect an economic imperative: if no-one is going to the museum then it ceases to have any value. Such free-market thinking thus places even more emphasis on the global appeal of exhibits, which leaves us in a position where those decisions made by the curator are doubly complicated by the compulsion to think up an attractive way of framing the whole exhibition in the first place.

For all of these reasons, then, it becomes clear that museums and historical sites (cathedrals, battlefields, historic cities) are compelled for a variety of reasons to replicate traditional modes of shaping history which historically favour those in power to shape it. A further argument may well be made here to suggest that those who receive training to become museum curators are by necessity those who have been educated to a sufficient level to do so, and thus the curator is simply one whose consumption of history has led them to cross sides from consumer to producer. Similar (admittedly speculative) criticisms might also be levied at this closed loop, since the expectations of the curator might dictate those of the potential visitor rather than the other way around. Put simply, the influence of the curator in shaping a given record might suggest that those who will be attracted to a museum are those demographics that would go to museums anyway, and by contrast those traditionally shut out of meaning making continue to be excluded.

3. EXISTING TECHNOLOGIES REPLICATE TRADITIONAL METHODS

It is, then, into this gulf that recent technological advances have often stepped. To allow several examples to stand for a great many more, the harnessing of technology to increase innovation, interaction and ultimately empathic connection with museum visitors has often followed a specific line of approach. This approach is, we argue, more of a replication of traditional methodologies than one which allows for a new way of accessing the selection or assembly of historical content. For example, one report on an innovative experiment with Augmented Reality in science museums recognized the "over-formalization of the learning experience that appeared to be needed to achieve those results [i.e. the ability to interpret information]." [17] As a consequence, in order to achieve the higher cognitive engagement with the exhibits, technologies needed to be introduced which afforded greater engagement with a given exhibit. AR used in this way "serves as an educational support that provides the user with additional (virtual) information to aid in his/her performance of specific tasks." [18] Reading between the lines, we can see that what is on offer is an already-interpreted kind of meaning, one which requires the intervention of an expert to select the salient ideas and assemble them in a way that will be meaningful for the museum visitors. In other words, even with the greater "affordances of participation" permitted by these technologies, learners were nevertheless positioned as receivers of a pre-fabricated output rather than fabricators of meaning themselves.

The same issues affected the much-vaunted 'Ultimate Dinosaurs' project, launched in 2012 by the Royal Ontario Museum in Toronto. Using an AR-based app, visitors were able to enhance their engagement with dinosaur exhibits to bring them to 3D life, offering a virtual reality which was enhanced with layers of contextual information. As one press release in the *Globe and Mail* described it, "When visitors point their smart phones at markers throughout the museum, the dinosaurs come to life in the app. iPads mounted in the museum and directed at the skeletons show the creatures more realistically, with flesh." [5] As with the Science Museum exhibits examined by Yoon, although the enhanced information is designed to extend engagement with the museum's exhibits, it is nevertheless reliant on a prefabricated version of events. Moreover, the emphasis on a clear narrative masks a series of interpretations and judgments already made by specialists in the field, reflecting probable opinion on morphology, gait, etc., which are carefully concealed in the interests of clarity and coherence.

In both cases, then, what is on offer to users of Augmented Reality in museums is *an enhanced form of already existing modes of engaging with exhibits*. Visitors are freed from the restrictions of following set pathways through museums, and are able to spend more time engaging with specific exhibits, which certainly allows for a more immersive pedagogical experience. However, because of the narrative necessity of consuming already-constructed information and material, visitors do not necessarily transcend the divide to move from visitors as passive consumers of history to become active manufacturers of meaning.

In the examples given here, as well as other implementations of AR such as the Getty Museum in Los Angeles' "Life of Art" exhibition, or the Science Museum in London's Virtual Reality guide, in all cases we come up against the central problem with which this paper is engaged. In the preparation of each exhibition a programmer, a designer and a curator (in the sense of one who deals with the historical explication of materials, rather than necessarily the curator of that specific space) have come together

to decide 1) which objects are to be enhanced (given the economic restrictions), 2) how to enhance the 'readability' and interactivity with those exhibits (given the technological restrictions) and 3) how best to explain the historical significance of those objects once having caught the attention of the museum visitor (given the historiographic restrictions). An attentive reader will no doubt have picked up here the deliberate re-use of the three specific problems of historiography outlined above: despite the increased potential for interaction and empathy which these technologies afford the visitor, we are still faced with problems of selection, presentation, and assembly of a historical narrative—meaning that visitors are nevertheless faced with an already assembled historical record.

Consequently, modern technologies used in public history do not by themselves resolve the debate, but rather present new challenges in themselves. As Alejandro Baer observes, "the modern history museum favours a multimedia and participatory approach. It proposes simulated environments and an emotional encounter with the events. [… which allows for an] immersion of the visitor into the past". [1] However, although "this could not be reached via traditional modes of presentation […] With its high-tech displays and simulations, the museum enters into a troublesome areas that has almost become a 'special effects arena'…" [1] This leads to charges of simplifying and commodifying history (the "Disneyfication" of the past), and potentially risks "the disappearance of the epistemic borders between what constitutes imagined and factual history, invented and real spaces, documentary modes and fictional modes of TV and film." [1] The only way around this problem, then is by the introduction of a central agent capable of rearranging and imparting meaning onto the historical narrative—in other words the curator, which was what was trying to be avoided in the first place.

4. CONCLUSION: CROWD CURATION CAN DEMOCRATISE PUBLIC HISTORY

As a consequence, the central problem becomes clear. What is needed in order to allow museums and historical sites to open up a genuinely democratic means of fabricating the historical record is a means of assaulting these problems on all three fronts simultaneously, which is of course precisely what the University of Lincoln's Crowd-Curated History project is designed to do. In this project we are trying to implement AR technologies on the one hand which also, at the same time, permit an ambitious but hugely important historiographical question on the other, namely: what happens if the selection, assembly and presentation of these historical objects is opened up and given to those museum visitors in the first place? What happens if they are given the option not only to contribute to this general repository (by uploading photos, images, stories to an open-source resource cloud), but also to decide themselves whether or not it is of interest to them? In other words, what if communities could shape their own histories?

This project contributes to this ongoing debate in its use of apps to harness wider participation in the ways in which history is collated, constructed and by allowing broader control over the narratives which are "shaped" and presented to the public. Building on other investigations into the role of interactivity in the presentation of history—especially video games [2, 7, 13]—this project demonstrates that allowing individuals and communities to piece together their own narratives from the facts and material evidence opens up the "source code" of historical representation, creating a genuinely democratic means of historical engagement. Piecing together the facts of history, and indeed contributing their own memories and stories, allows users to make the transition from being passive consumers [6] to active participants in the generation of narratives of identity.

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