



What Really Happened Here?

Dealing with Uncertainty in the Book of Distance: A Critical Historiography Perspective

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Abstract. Uncertain cultural heritage presents a dilemma in its narrative representation. History seeks to push a grand narrative, at the expense of less convenient narratives. Critical historiographic approaches favor the consideration of multiple narratives as they focus on the mediation of history rather than arriving at a single truth. Virtual Reality Interactive Narratives, such as *The Book of Distance*, exemplify how uncertainty can be represented through re-enactment. In this late breaking work, we provide a close reading of *The Book of Distance* through the lens of critical historiography and suggest improvements for future similar experiences.

Keywords: Interactive Digital Narratives · Virtual Reality · History · Critical Historiography

1 Introduction

As we seek to make sense of different social cultures, and what makes them who they are, we often look at their past to cast light on current traditions, held beliefs, and way of life. Whilst many cultures trace their origins to places away from their current territories, as a result of migration, colonization, and expansion, others feel connected to cultural heritage still evident amongst their modern settlements despite hundreds of generations separating whichever culture raised such structures and their modern-day inhabitants. Such separations, whether geographical or temporal, introduce a memory loss that depends on primary or secondary historical sources to give witness to an event or behavior. For example, what we remember of our earliest childhood is heavily influenced by photos we have of that time.

A single or a group of coherent evidence that gives unequivocal witness, absence of evidence that gives no witness, or two or more conflicting forms of evidence: how do we handle the absence of, or the abundance of conflicting, evidence? Absence results in gaps that we as humans seek to fill in order to provide a complete picture. Over-abundance results in inconsistencies from which we as humans seek to identify one consistent story supported by a subset of evidence as being the legitimate one, influenced by the court of law's need to resolve disputes, forcing historians to come to a singular truth [1].

An alternative look at the interpretation of history is presented by Critical Historiography [2], which does not seek historical facts objectively, but rather presents the mediation of history as a participatory process engaging with the past's uncertainty [3].

This seems to suggest that interactive narratives, which have the interactor decide on which narrative path to take, can be a useful tool to explore uncertainty, particularly within historical narratives. Indeed, uncertainty has often featured in scholarly work on tangible cultural heritage (cf. [4]), but is also gaining a foothold in intangible cultural heritage – especially in scholarship dealing with memory [5].

In this short paper, we explore the role of uncertainty in interactive narratives that present a critical historiographic perspective. Specifically, we use Mann and Sprecher's model of quasi-tangible cultural heritage as a lens through which to carry out a close reading of *The Book of Distance*, a Virtual Reality (VR) interactive experience in which the Canadian narrator explores the uncertain history of his immigrant Japanese grandfather. We interpret the design decisions made in this experience in the light of this model to inform future designs of experiences that deal with historical uncertainty.

2 Uncertainty in History

The ideal of history as an objective scientific endeavor, as championed by Ranke [6], found opposition by philosophers Nietzsche [7] and Croce [8] who argued in favor of a subjective evaluation of history in terms of contemporary interpretation [9]. Through history's characterization as both a science and a narrative [1], it is argued that debates on historical truth will never resolve [10], and thus uncertainty remains a key element of history.

Indeed, both scientific and interpretive perspectives of history may suffer from a level of uncertainty: quantitative uncertainty in the former, qualitative uncertainty in the latter. In the case of tangible cultural heritage, evidence is primarily in the form of the structure itself, and uncertainty here refers to approximate quantitative measurement of its form's characteristics [4]. When a structure's original form may not be reflected in its current state, such as the Sphinx of Giza, or no longer existent, such as the Colossus of Rhodes, one relies on accounts written or depicted by contemporaries to determine or deduce its original form.

The activities held around tangible cultural heritage, such as events and rituals, usage and skills, are much harder to discern because their description, limited by the vocabulary of text or the static nature of depiction, does not fully satisfy the need of observation. This lack of description, or, if present, the lack of sufficient detail to represent the behavior, or, on the other hand, the multitude of accounts that may contradict each other, lead to a level of uncertainty around intangible cultural heritage.

2.1 Dealing with Uncertainty

Curthoys lists four reasons as to why “historical evidence is insufficient for us to know the truth of the past, certainly the complete truth” [9]. There is either too little evidence, too much evidence, partial and selective historical records which introduce bias, and

haphazard survival of evidence with the mundane surviving where the critical perishes [9].

It is informative to look at how Herodotus dealt with uncertainty in the fifth century BCE: in the face of multiple witness accounts about an event, he chose to narrate all of these contradictory accounts, such as in his iconic work titled *The Histories*. In doing so, Herodotus does not intend to portray the truth, but rather to present the claims (*logoi*) of contemporaries and leave the interpretation and judgement to the reader [10]. This is in contrast to Thucydides, who presented a single authoritative account in a dominant tone, and Bury, who declared that history is a science, no less and no more, leaving no space for artistic interpretation [1].

White and Barthes contribute to a critique of the narrative structure by claiming that historians use “a range of time-honored narrative techniques ... to endow unfamiliar events and situations with meanings” [11], and thus description becomes interpretation [12]. Structural anthropologist Levi-Strauss accuses historians of imposing structure and relationships on people and events of the past and achieving coherence by leaving out incompatible facts: “historical continuity is secured only by dint of fraudulent outlines” [13].

Thus, uncertainty is inherent in the recount of history, with storytellers seeking to present a coherent whole while presenting often contrasting factual evidence. This is where a different perspective to representing history comes useful: critical historiography.

3 Critical Historiography

With historians claiming to be seeking the objective single truth of the past, proponents of critical historiography seek to foreground the mediated representation of history rather than the recovery of objective historical facts [2, 3]. History is thus not seen as a “total fact” but is rather constructed from a number of narratives [3]. This challenges the idea that heritage is owned by an authoritarian figure who determines the “truth” but considers other perspectives.

Critical historiography is framed as an “active construction, animation and recombination process of historical events and the locale of history” and thus, critical historiography is said to engage “actively in the conflicts and uncertainty of the past and present” [3].

Post-structuralist Trouillot presents historiography as being “implicated by technologies of collection of documents, their structuring into narratives and how interfaces of their dissemination culminate in a historical infrastructure, not always visible but very impactful on how heritage is formulated” [14]. Interactive digital narratives are indeed interfaces of dissemination of structured narratives.

3.1 Quasi-Tangible Cultural Heritage Model

Unhappy with UNESCO’s dichotomy between tangible and intangible cultural heritage, Mann and Sprecher present a quasi-tangible cultural heritage model that acknowledges the agency of the perceiver as an active part of cultural heritage [3]. This model follows

a critical historiography approach that replaces the binary perspective with a continuum that blurs boundaries between the tangible and intangible, objectivity and subjectivity, fact and speculation [15]. The model considers three components: the historian, the spectator, and the place. The historian is the designer of the historical narrative, the spectator is the participant in the interaction with this narrative and the site is the location offering a “landscape narrative.” Narratives are not pre-scribed but organized “on the ground,” giving text a “spatial form.” This reflects what in game academia is known as “environmental storytelling” and has already been applied to desktop archaeogaming in the past [16].

The model’s methodology features three processes in a pipeline: data collection, computational methods and immersive generative storytelling. Data collection acquires its sources from direct and indirect, physical and narrative sources. Computational methods employ automated data labelling to create crosslinks. The third step combines physical and narrative data to render immersive scenes to the user interface. This model supports the generation of multiple narratives as per parameters given [3].

In keeping with the focus on “technologies of dissemination” [14], we now shift our focus onto VR. Already acknowledged as a medium for IDNs [17] and representing intangible cultural heritage [18], we now consider it as a medium of critical historiography.

4 VR as a Medium of Critical Historiography

Mann & Sprecher’s work on the use of VR as a medium of critical historiography seeks to understand how VR can be used to question and undermine stable representations of sites and their histories, aided by the technology’s “simple, faithful realism.” They use VR as a tool with which to explore difficult pasts contextualised in their physical space, whilst offering “empathy and some reconciliation” [3].

VR, through its affordance for first-person perspective in a virtual environment, can offer a space for historical empathy, allowing the modern-day person to connect with characters from the past. Such “identification” (cf. [19]) can create meaning from intangible cultural heritage based on available evidence. However, limited evidence, compounded with the historian’s present culture, risks creating an inherent bias in the historical inquiry [3] and interpretation [20]. Acknowledging such bias and its effect on historical interpretation is an important factor in establishing such a connection with our history [21].

Mann & Sprecher distinguish between being immersed in history and being immersed in historiography. While the former usually takes the form of historically based games following some grand narrative, being immersed in historiography means being immersed in the research setting, a “behind the scenes” view into the reconstruction of the heritage site [3].

VR brings together critical historiography’s three elements: the VR interactor is the spectator witnessing the historical representation prepared by the historian as designer. Such representation is situated within a virtual space, often a digital twin of the physical site in question. Indeed, VR is not tied to a single site, unlike museum and site narratives that are physically bound to the place of heritage. VR can transcend boundaries and

take the visitor across spaces designed around the experience – rather than experiences designed around the space. As Mann and Sprecher point out, this “offers the opportunity to approach the site, and the archive about the site, with no apparent prioritization between their material presence and their non-material discursive mediation” [3].

Mann and Sprecher present a number of projects that highlight the affordance of VR as “a medium to introduce a new participatory agency in the reading and writing of historical materials” [3]. They describe this as “re-enactment within a heritage context” [3], a reenactment of affective history that attempts to create affect in the VR interactor possibly leading to a “sympathetic identification with the past.” However, for this to happen, re-enactment must remain open ended, and not prescribed, allowing for the representation of narratives that challenge the grand narrative [3]. A recent example of VR’s support for multiple perspectives in the representation of history is the work of Waagen et al. [22].

5 Case Study: *The Book of Distance*

In this last section, we briefly report on a close reading of *The Book of Distance* [23], a VR IDN that has the interactor accompany Randall Okita, the narrator, discover his grandfather’s personal history as he migrated from Japan to Canada prior to World War II, married and built a family business there before being taken to an internment camp as Canada feared enemy activity on its own soil when the War began. Whilst some merits of *The Book of Distance* as an IDN have been discussed elsewhere [24], we hereby wish to analyze the experience through the lens of critical historiography.

We first consider how does the experience fit into the quasi-tangible cultural heritage model of Mann and Sprecher? What aspects of its methodology can be seen in the experience?

Then we seek to address some questions that Mann and Sprecher make about the use of VR for critical historiography: “[W]hat does VR offer for critical historiography of sites, and what is at stake? Can we take advantage of the realistic illusionary capabilities of VR to teleport us in space and time while not losing touch with our role as critical thinkers? Does VR enable new modes of questioning the notion of facts?”

Yonezo’s story is linked to a number of places: his home in Hiroshima, his journey into Canada, his new home, the internment camp to where he is forcibly taken, the chicken coop where his family were relocated to upon release, the farms upon which they worked, and the house he eventually bought from his hard-earned money. These geographically and chronologically distant sites are visited by the interactor as he follows Randall’s narration of his investigation into this grandfather’s uncertain history. This matches the model’s three elements of spectator (interactor), historian (Randall), and site (all the places being visited).

As Yonezo barely spoke about his life, Randall had to piece evidence together to try and recreate his grandpa’s life history. This evidence takes the form of photographs, digitized into interactable objects that can be handled and seen, including short descriptions on the back. Further evidence is in the form of letters that Yonezo had written, but more abundantly letters received from Canadian government departments as he had tried to learn more about his standing after his release from the internment camp. A third form

of evidence is recordings of conversations Randall had with his father about granddad. This all fits within the model's first stage in the data pipeline: acquisition of 2D photos, recreation of 3D models from said photos, and reference to archives and literature. We have no knowledge as to whether computational methods were employed in the processing of this acquired data but the resultant VR narrative fits well into the third and last stage of the data pipeline. This narrative however does not change shape according to any parameters: it is a linear narrative as Randall only considers one hypothetical path full of questions.

In answering VR's offering for critical historiography, we agree with Mann & Sprecher's notion of re-enactment: in *The Book of Distance* the interactor takes a virtual camera in his hand and snaps photos of scenes that are shown in the digitized photos; the interactor hammers a fencepost in its place to help construct Yonezo's house, picks up their strawberries from the fields and hands them out on their table. The re-enactment serves to create a connection with the protagonist. But re-enactment is not limited to actions that help Yonezo. The interactor also re-enacts Yonezo's imprisonment as they activate a lever, which fences Yonezo inside an internment camp. The handling of photos and the listening to Randall's conversations with his father are all actions that happened in Randall's time, not Yonezo's. This ambiguous identification of the interactor as they teleport across space and time helps us to keep in touch with our role as critical thinkers. Our "home" in this experience is Randall's virtual office, giving us access to the evidence he has collected and serving as a hub to the different locations travelled by Yonezo. This gives us a "behind the scenes" perspective as Randall sews the different narratives together in order to create a coherent whole to satisfy his quest for exploring his grandfather's closely-guarded past. We are thus immersed in historiography, and we join the narrator in questioning his grandpa's silent narrative and seeking to fill it in with his investigations.

6 Conclusion

VR interactive narratives may not fit the needs of the historian seeking to push a grand narrative, but through their affordance of interaction and multiperspectivity, they present a suitable medium for critical historiography. Taking *The Book of Distance* as an example, we have seen how the constant shifting from one place to another, the re-enactment of the grandfather's life episodes, the narrator's studio acting as our hub, the access to digitized photographs, letters, and telephone conversations, all fit within a model for quasi-tangible cultural heritage reported in the literature. Uncertainty is embraced and built upon having the narrator ask questions while the interactor re-enacts, reflecting upon these questions. The shortcomings of this IDN in respect of this model are its linear narrative as a result of a prescribed narrative.

Future IDN experiences that seek to present a critical historiographic perspective of past events should seek to employ intelligent systems that unfold the narrative according to the interactor's choices, as per Koenitz' System-Process-Product model [25]. A knowledge base of historical data can provide the system with narrative potential that results through the interaction process. Repeat sessions expose the interactor to different potential narratives, with the outcome being not the identification of the "true" narrative, but embracing the uncertainty of the particular historical event.

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