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Experimental Histories and Digital Interactivity: Evaluating Three User-Navigable Texts

Introduction

Interactive digital technologies are transforming the processes of research and production across all major academic disciplines. The changes are most significant in traditional disciplines. In that of history, online public access to digitised historical resources has meant that the materials of history are now available to anyone who has access to the internet. Previously, the study of archives was only open to the dedicated specialist with access to the world's major library collections. Digital technologies have not only enhanced access to resources, but they are also enabling the development and growth of new kinds of content delivery and new modes of historical narration. Although the book is not likely to be superseded any time soon, the book now competes with experimental digital works that are relating history in new and highly interactive ways. Despite the fact that these new narrations of history are at a very early stage in their development—and certainly do not yet represent a genre or set of genres—I would argue that there is a need to examine them to see what opportunities they might offer historians and better to understand how they are beginning to influence the appreciation, accessibility and aesthetics of history in the

early twenty-first century.

Over recent decades there have been heated debates about the notion of what constitutes a historical text, of who can and should “tell” history, and in what ways history is to be told. However, in the context of the digital technology revolution that we are currently caught up in, the influence of new technologies has not yet entered or informed those debates sufficiently. I would argue that history is taking some of its most innovative contemporary forms from disciplines traditionally outside the discipline of history itself. Or to think of it another way, history is a field that has grown far beyond its original disciplinary boundaries. And yet, given the bewildering array of modes of digital delivery on offer today, perhaps it is not surprising that for the most part history is something that continues to be studied in conventional book form, with authors following centuries-old standards for historical scholarship and book publishing. This paper is written to address the need to expand the boundaries of the discussion of history to include new digital forms that have so rapidly extended narrative history’s reach and potential.

What I refer to as “interactive” histories are texts being presented in a variety of digital formats designed to offer participatory, immersive and engaging experiences of historical material. The interactive digital texts discussed in this paper may not even be considered as history because they exist in a hybrid space of new creativity. However, there is no doubt that they have *the potential* to offer history new possibilities, not only by exponential expansion of audiences, but also by providing new and sophisticated tools for capturing and recording historical data and *involving* audiences in ways that acknowledge contemporary high-tech digital environments.

My aim here is to describe some specific examples of historical representation that have emerged from this new hybrid space and to begin to consider their

effectiveness and their potential for future development. These works can take many forms and may be referred to in a variety of ways, including: multimedia documentary, interactive narrative, digital storytelling, virtual heritage, or even media art. They can be found in various settings: as installations in museums, on fixed media such as CD-ROM and DVD-ROM, and online via the internet. However, there is no clearly defined market for these digital works. In cases where they are published, it is rarely by major publishers and so there is no guaranteed distribution network. Many works remain unpublished and are only available by contacting the creator of the work. Others, such as installations in major museums, reach wide audiences but are not 'published' in the traditional sense. More aligned to interactive performance than text, they could easily disappear without trace.

Despite the possibilities offered by digital media and communications technologies more generally, grasping the power of interactive media for the study of history is at a very early stage. Genres of digital representation have not yet been developed, and until they are, most digital works can only be thought of as experiments with an uncertain future. At their best, however, digital cross-over texts represent a new kind of historical aesthetic, a new means of conveying historical experience, and a new way of recording and remembering. At their worst, these kinds of works cannot be regarded as a useful contribution to historical understanding.

Evaluating the success or otherwise of such works is a highly subjective activity and is complicated by the fact that these are hybrid works that must be considered from many perspectives including usability, design and production, as well as in terms of historical content. Should the same standards be applied as would be for a traditional written historical piece? Or should interface design and usability issues be the main concerns? In any case, the field of historical enquiry and criticism needs to be further

opened up to include discussion of these experimental ways of representing the past. There is certainly a need to continue to pay attention to essential issues relating to historiographical method as it applies in digital environments, including appropriate representation of source materials, research techniques, and issues of integrity and longevity of digital data.¹

This paper investigates what digital interactivity can bring to the representation of history. Various kinds of user interactivity, participation and engagement are discussed within the context of emerging digital media forms as a contribution to textual criticism in the emerging field of digital history. I begin by clarifying the use of the term “interactive,” which has become one of those popular words that appears to offer something new and innovative but through its casual usage has become almost devoid of meaning. The opening section also investigates the links between historical representation and interactive media, focusing on the development of experimental narrative forms and computer games. The paper then goes on to consider three examples of highly interactive digital history works that feature user navigation structures resembling computer games. Being the most advanced form of interactive media text, computer games also require the greatest degree of participation on the part of the user. The three examples considered are: Marie-Laure Ryan’s and Jon Thiem’s *Symbol Rock* (c.2004), Marsha Kinder’s and John Rechy’s *Mysteries and Desire: Searching the Worlds of John Rechy* (2000), and Brogan Bunt’s *Only Fish Shall Visit* (2002). Discussion of individual examples considers the benefits but also the limits of interactivity for historical representation. There is a strong link between theory and practice in the selected examples, as Ryan and Kinder in particular are well recognised interactive media theorists.

Interactivity, History and Computer Games

The term “interactivity” can be used in a very loose manner to indicate human engagement with any form of digital technology. It is often conflated into a single notion of a new and miraculous interface with technology, as part of a “cyber-utopianism.”² Hence there is a common perception that once any sort of material has migrated to the digital platform, it becomes magically interactive and newly compelling. Clearly this is not the case. Interactivity resides in the relation between media and their users as well as being an internal quality of the media themselves.³ However, the technically correct usage of the term involves applying this test of interactivity: to be considered an interactive work, the text itself must be able to react to user input in a meaningful way. Interactivity, taking this meaning, can be many things, ranging from the simple user activity of clicking a mouse button to navigate through a website, to a highly physical experience of immersion in simulated virtual environments. Eric Zimmerman, for example, defines four modes of interactivity: (1) Cognitive Interactivity, or Interpretive Participation with a Text; (2) Functional Interactivity, or Utilitarian Participation with a Text; (3) Explicit Interactivity, or Participation with Designed Choices and Procedures in a Text; and (4) Meta-interactivity, or Cultural Participation with a Text.⁴ The fact that a text is in digital format does not mean that it will also require interactivity on the part of the user. Many digital texts are linear, scripted texts (such as digital video pieces) which only required the user to be a passive viewer.

The concept of interactivity has proved difficult to define and it also remains under-theorised. Whenever a new technology of communication or representation emerges—such as printing, telephony or film—the next step is to become familiar with the characteristics of the new medium.⁵ Because the field of interactive media is

in its infancy it does not yet have a range of established hypertextual/interactive conventions. Even so, different forms of interactive media are already placing very distinct and different constraints on the possibilities for interactive engagement. Because interface design is not yet following commonly accepted formats, the interface is often experienced as an awkward barrier to engagement, even in cases where the structure has been carefully conceived. Only the informational website has become established as a recognisable genre. The challenges to discussing interactivity stem from at least three areas: technical advances (options for interactivity change as quickly as the technology that facilitates the interaction); conceptual understanding (how should styles and degrees of interaction be conceived and categorised?); and practical applications (how does the experience of interaction enhance the textual representation?).

What are the applications of digital interactivity for historical study? There are at least three main contexts, and each relates to the way in which the digital material is presented: (1) in a museum or gallery as an interactive display; (2) on fixed media such as CD-ROM or DVD-ROM; or (3) online via the internet, most commonly in the form of databases of digitised material. Museums have long been at the forefront of the field of interactive display, engaging the visiting public and encouraging them to participate in the processes of the exhibition space. Community access, engagement, and participation are central to the charter of most museums and interactive displays help to fulfil that aim. In the museum context the purpose is clear: the museum seeks to engage visitors by getting them involved physically in the process of learning and taking in the information on offer. Curators aim to strike a balance between the visitors looking, doing, and learning. And yet some complain that the use of interactive displays in the museum environment is a symptom of reduced funding,

forcing museums to become “razzle-dazzle fun houses” of “high tech gimmicks.”⁶ Efforts to bring interactive aspects to the academic study of history began with enabling access to online information and archives, and with early examples of interactive historical CD-ROMs.⁷ Many of these were educational or curriculum based CD-ROMs, and they perform the same function as online databases now do.

The focus of this paper is a newer area and that is the narration of history in experimental digital formats. The examples discussed below are available on CD-ROM and DVD-ROM. With greater download capacity in the future, these works will be readily available in the online environment. Through the internet, digital technology has put into the hands of everyday people the tools to create their own lasting historical records, to trace their family histories, and to create new kinds of communities, which in turn then have their own history. The possibilities seem endless.

Some kinds of history lend themselves more readily to the new interactive environments. These include: cross-cultural histories (where multiple perspectives can be set alongside one another); indigenous histories (indigenous history has traditionally been passed down in oral form and is therefore not wedded to print-based media); and personal histories (with the resources of the internet and digital recording equipment, anyone can become a historian of their family history). However, almost all kinds of history can be “migrated” to the new platform. Here, in this last sentence, is a clue to a major problem with using digital media as a primary form of recording and telling history. The language of new media is very much at odds with the language of history. These differences are perhaps most obvious not even in the language itself, but more basically, in the people who speak it. Historians are not trained as multimedia producers. Multimedia producers rarely have the skills of a

historian.

Multimedia histories represent a convergence between cinematic traditions, especially screen documentary traditions, and conventional print-based textual forms. The convergence of the visual and the textual is, of course, a hallmark of multimedia forms, by their very definition. For the study of history, this offers a very particular set of challenges. The recording of history relies, perhaps more than any other humanities discipline, on the parameters set out by genres. The convergence of the visual and the textual best resembles the convergence that occurred to create the coffee-table picture-book—heavy on images, light on text, visually appealing, inviting to navigate, easy to take in small chunks. The challenge is to find ways of representing history using new media that bring a scholarly dimension to the work at the same time as harnessing the new technological and navigational possibilities, while also not abandoning the familiar linear structures of narratives to the point where the work becomes one of experimentation only.

There have always been experimental texts. In the past, these works have been accessible to restricted audiences, primarily elite groups. As in the past, we must ask the serious question: how many of the new forms will ever become mainstream? If the most interesting are the most expensive to produce and the most obscure and “arty,” then is there a genuine possibility that they will be adopted into the future? And is it worth developing forms that rely on technology that will quickly be superseded and survive only as historical artefacts, if at all?

When advanced technology is involved in the workings of the text, we are made very aware that the text is a work of artifice. It needs its own machinery to make it mean, to make it perform. It is performance in a very literal sense. The software powers up and, if we are lucky, it loads and presents the work. We rely on something

that is in the way. But of course as technology develops, this kind of interruption becomes less apparent. The book, when the printing press was invented, would have been quite a foreign object. Now we are familiarised through centuries of thumbing through books. We know the conventions of the book. Specific digital works may never be accessible again precisely because their experimental formats pass their “use by” date.

The study of history in academic contexts has moved a long way from the traditional assumption that it would be possible to record the precise “truth” of an historical event, from a suitably “objective” position.⁸ In fact, poststructuralist theories of discourse led us towards the opposite view—that there is no objective reality, only textuality. However, there has also been a return to a more balanced view of textuality and truth. There has been a renewed focus on the essential role of established narrative forms in making sense of the past. In this move back towards confidence in narrative is the recognition that narrative is the key defining factor in how we make sense of the world around us.

In interactive narrative forms, to create a versatile digital environment, narrative strategies need to be selected from a repertoire of possible approaches. The narrative strategies that help to position the user in a particular relation to the historical material being presented can take many forms, and degrees of those forms. These include: the user as co-writer of the text; the user as participant in a simulated past; the user as observer of an historical character re-enacting a past; the user as viewer of privileged information (as voyeur, in much the same way as for reality television); and the user as onlooker (purposeful detachment). In each case the user plays a key role in the process of narrative construction.

Computer games make particularly good use of the possibilities offered by

virtual reality technology and are an essential element in any discussion of narrativity in digital form. They are particularly relevant in this paper because the three examples discussed below are digital history works that closely resemble computer games. Many games contain historical content as a background to a game narrative (this is worthy of a study in its own right). The 1980s mark a key period in the history of computer games (which properly begins in the 1950s and 1960s) because, for the first time, games became a major media form.⁹ Adventure games utilise the familiar spatial aspects of a physical world but transpose those attributes to a virtual terrain. The linear journey through that abstract space is a critical element. Like early European narrative forms in history and fiction, in adventure games the player, as participatory character, navigates a spatially ordered world that simulates the layout of a physical world. Progress through the stages of a game is usually structured around a series of interlinked narrative pathways, with the players negotiating abrupt moments of threat and disruption that propel them into the next imaginative terrain to be explored and controlled.

The game and the novel share the common feature of seeking out a final destination, an endpoint, as the ultimate reward or goal of the textual experience. The first interactive novels and experiments in hypertext were applauded for the way they drew attention away from that fixed endpoint. These interactive narratives could offer a variety of endpoints, a number of options for narrative fulfilment, or they could even deny the reader that fulfilment by creating a never-ending reading experience. However, the pleasure of games and novels is not only in narrative fulfilment but also in the process of being carried along in the narrative flow of events and scenes. In terms of structure and framing there are many different kinds of novels, and likewise there are many different kinds of games. The edited collection *First Person: New*

Media as Story, Performance and Game investigates the entangled connections between story forms and computer games and surveys other experimental narrative works.¹⁰ Henry Jenkins's chapter in *First Person* is an excellent overview of the different options available to those he calls "narrative architects" in designing game spaces. While traditional history is less open-ended there is certainly scope for alternative pathways towards different points of closure.¹¹ Indeed, it is in the presentation of "different endings" through different perspectives, that game formats arguably have the most to offer the presentation of history in digital form.

Narrative theory and game theory offer different (sometimes competing) perspectives on the narrative qualities of texts. Some critics argue that games are not narratives, that trying to link the structures of stories and of games is simply fruitless. They argue that new kinds of theories are required to describe and understand the narrative at play within digital environments, whether the focus is on games or stories.¹² In this debate, hypertext, interactive cinema and nonlinear narrative have become the "traditional" forms which some proponents of game theory argue are being inappropriately mapped onto computer games as a means of explaining how they work. A major issue is whether the experience of playing a game involves user interpretation or simply *configuration*. Henry Jenkins tries to tread a middle ground, "examining games less as stories than as spaces ripe with narrative meaning."¹³

The factors involved in narrating history in digital formats are quite different, even while many of the narrative and technical considerations are the same as those that are relevant to novels or games. The current discussion about the future of computer games points to the kind of discussion I believe we should be having about the future of historical representation in digital forms. For games, argues Jenkins, "the goal should be to foster diversification of genres, aesthetics, and audiences, to open

games to the broadest possible range of experiences.”¹⁴ While history is a more serious matter, there is no doubt that it can benefit from sharing the same goals in a digital environment. In other words, in the face of the challenges presented by dynamic digital environments, history has found itself in an unlikely, but, in its own sphere, highly successful and interactive role model.

Example 1: *Symbol Rock* (c.2004)

I begin by discussing this example because, of the three, it requires the greatest degree of interaction on the part of the user. *Symbol Rock* is a multimedia hypertext game created by Marie-Laure Ryan and Jon Thiem.¹⁵ The game has as its goal the accumulation of biographical information about the former inhabitants of an abandoned ranch in Lorimer County, Colorado, USA (see Figure 1). This work is an experiment in creating navigable environments where historical material can be accessed and explored using the “seek and be rewarded” structure of a computer game. Only by the user undertaking specific activities, and in a particular order, can information be accessed and the user gain permission to enter the next “level.” In the “read-me” file the work is described by its authors in this way:

‘Symbol Rock’ is a hybrid text, inspired by hypertext, computer games, multi-media databases, activity books, ‘coffee table’ books and children’s pop-up books. It is above all a documentary text, based on extensive research, and capturing the voices of dozens of informants.

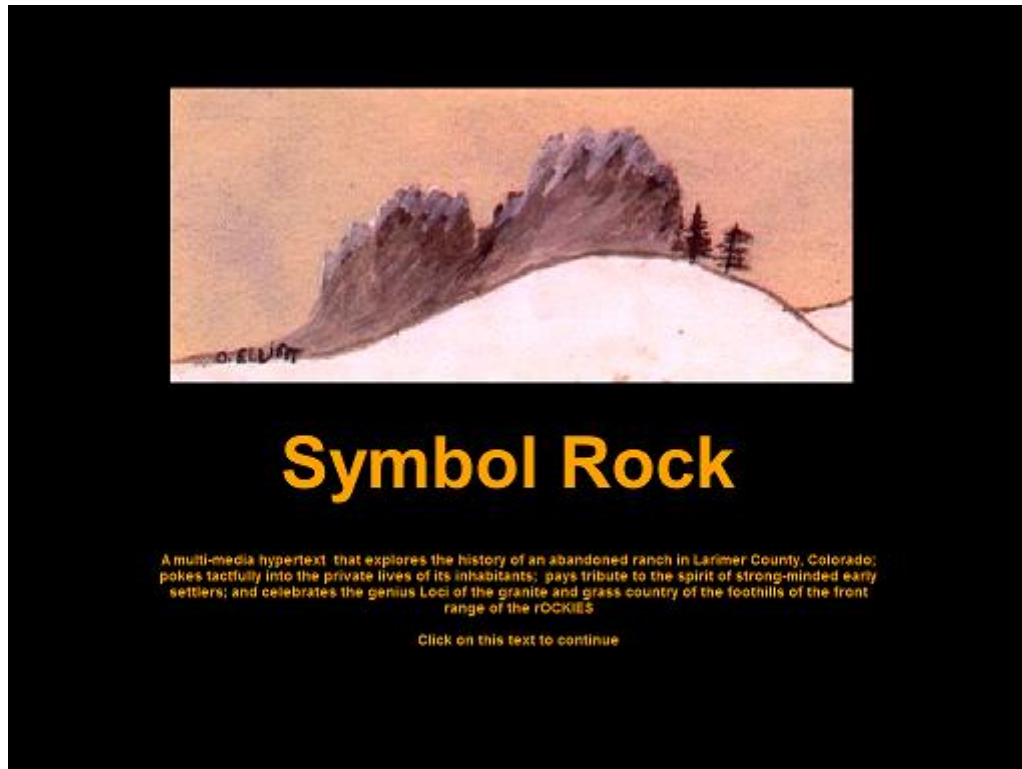


Figure 1: *Symbol Rock* title screen

The instructions given indicate to the user that a series of complex tasks must be undertaken in order to proceed (see Figure 2).

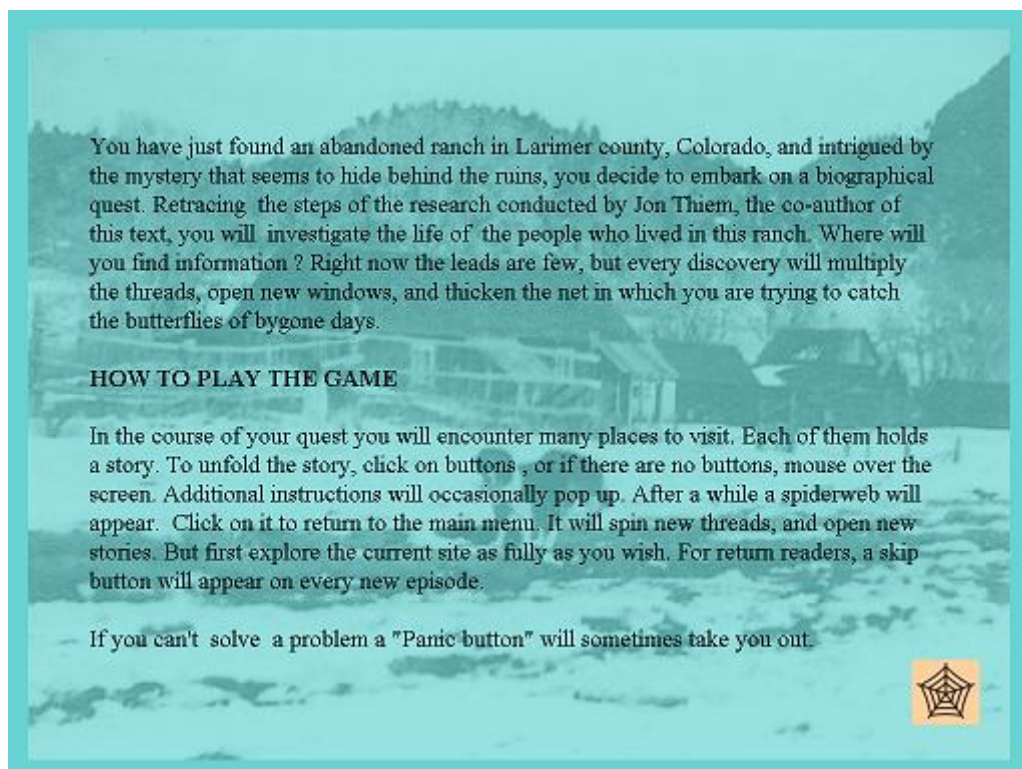


Figure 2: *Symbol Rock* rules of the game

Upon entering the work, the user is presented with a series of picture frames, each of which contains a link to a discrete part of the game (Figure 3). Each link involves a different kind of activity. This may be browsing through a series of archival photographs of members of a family associated with the abandoned ranch—with each photograph appearing only as the user hovers the mouse over parts of a screen against the backdrop of a colonial settlement scene (Figure 4)—or it may require the user to navigate his or her way through a series of video panoramas that mark out and document a route taking the user to a hidden location in the hills, from which a view of the ranch can be had. Or else the user may be required to click on various books which in turn lead to samples of text that must be read before a particular task is fulfilled.

Figure 3: *Symbol Rock* links to tasks to be completed

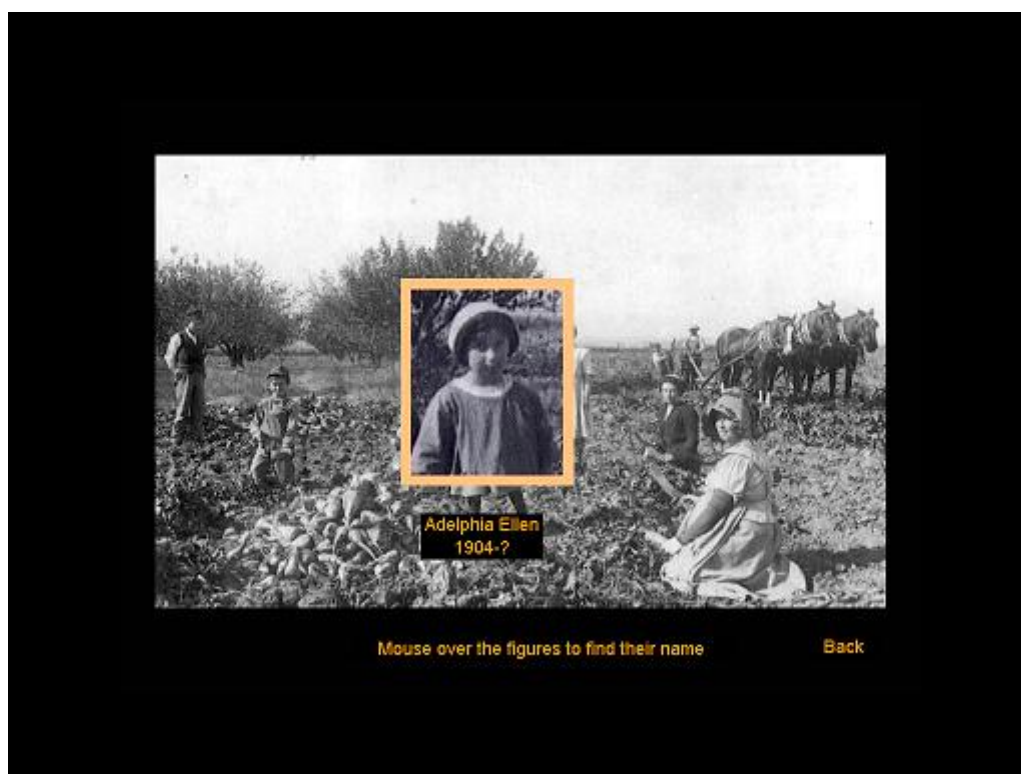


Figure 4: *Symbol Rock* screen shot showing detail of identification task

What is notable about this experimental history work is how closely the interactive structure replicates a computer game. In the two other examples to be discussed next, the interactive structure is also modelled on a computer game interface. However, there is not the same requirement to complete “stages” in order to progress further through the work. This requirement makes for a frustrating experience for the user not used to playing computer games. The form becomes more important than the content, or at least that is the way it feels for this user. There is relative freedom in the sense that the user can choose to quit the game—most of the time, that is. Occasionally there is no option but to follow through to the next stage. Nevertheless, the educational potential of this kind of user reward system is doubtless very great, and for this reason the work is an important model for future projects. Further, *Symbol Rock* must be considered the most technically innovative of the examples considered in this paper. This is because in addition to setting tasks for the

user the text keeps track of user movements and keeps a record of those activities as an integral aspect of its textual function.

Example 2: *Mysteries and Desire: Searching the Worlds of John Rechy* (2000)

This CD-ROM interactive history work explores the many facets of the life and literary production of the American novelist John Rechy.¹⁶ Rechy is a highly regarded gay Mexican-Scottish writer, known for having produced twelve novels and various plays between 1963 and 2000. The CD-ROM was produced as part of the Labyrinth Project at the Annenberg Center for Communication at the University of Southern California. This ongoing project, focused on developing experimental forms of interactive narrative, is directed by Marsha Kinder. *Mysteries and Desire* is one of the earliest works in the series produced by the project, and one of the most experimental in terms of its narrative structure. The work won the 2000 NewMedia Invision Award for Overall Design—at the time the world’s largest peer-evaluated digital media competition.

The opening screen shows a schematic map interface displaying the three thematic areas of “Memories,” “Bodies” and “Cruising,” with instructions on how to access content in each section (Figure 5). This interactive CD-ROM work presents a highly abstract reflection on the life of John Rechy. At no point is there a textual explanation of Rechy’s life. It is the role of the user to discover Rechy’s life by piecing together parts of it through taking in the voice-over sections—some of them narrated by Rechy himself (who was involved in the production of the work) and others by his family and friends.

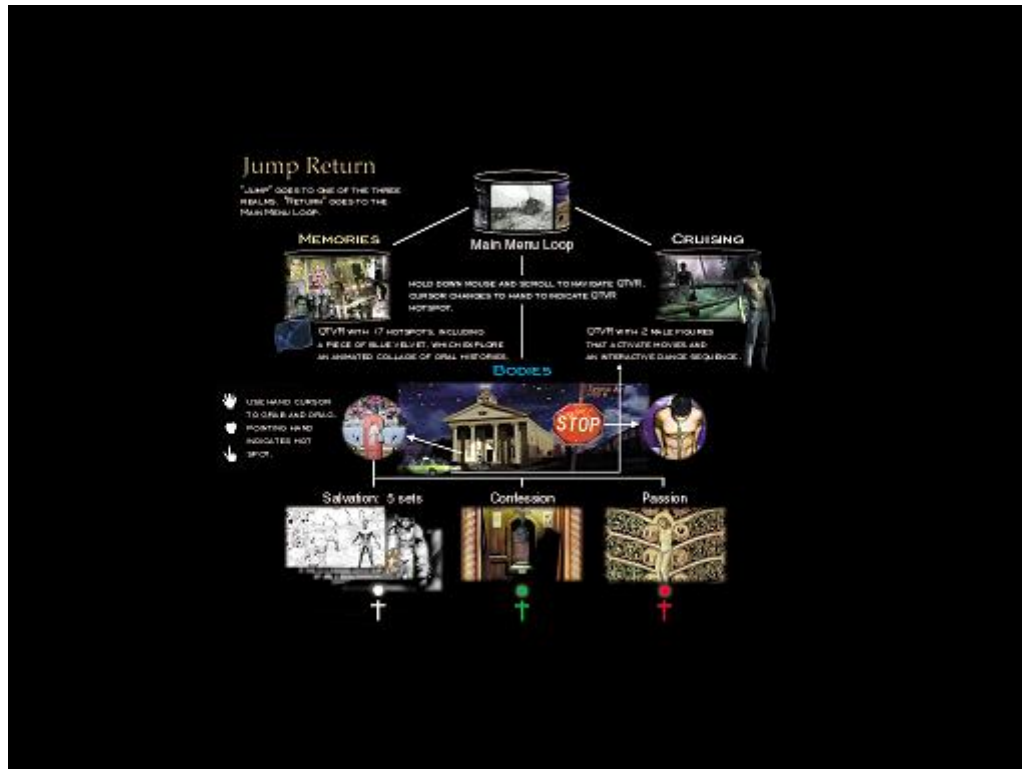


Figure 5: *Mysteries and Desire* map interface

The “Memories” thread takes the user into a “back alley” space that is larger than the boundaries of the screen indicate. Placing the cursor near the edges has the effect of making the screen-view move in either direction, exposing more of the scene.

Clicking on a graffiti-covered brick wall triggers a religious scene and causes it to “bleed through” the brick and gradually take over the main scene. These are abstract visual effects, which are given with little interpretation in the form of text or voice over. It is simply not the purpose of the work to present a version of Rechy’s life that is clear, coherent and accessible.



Figure 6: *Mysteries and Desire* screen shots of religious imagery emerging through brickwork

This work dramatises Rechy's life (this is an author who is alive and writing today) and offers the user a window into his eccentric personality, passion and creativity. The point that it makes via its odd and often puzzling effects is very relevant to historical narrative: that a person's life is itself made up of contradictions, shocks and unfathomable events and images. The "Bodies" theme leads the user into an animated dance sequence featuring a computer-generated Rechy against the backdrop of a mystical forest scene (Figure 7). The only option the user has in the interactive experience is to scan this environment by probing the edges of the space and rotating around the Rechy figure to view it from different angles. It is not clear what the purpose of this animated sequence is, and yet it is compelling—and it gives the user a break from the voice-over narratives describing Rechy's personality and achievements (see Figure 8). Perhaps the "Bodies" section is there simply to make the fundamental point that the person, the subject (in this case Rechy), is defined by a

physical body as well as by the many ways in which he is seen and the many texts that “speak” him (to use Samuel Beckett’s expression).

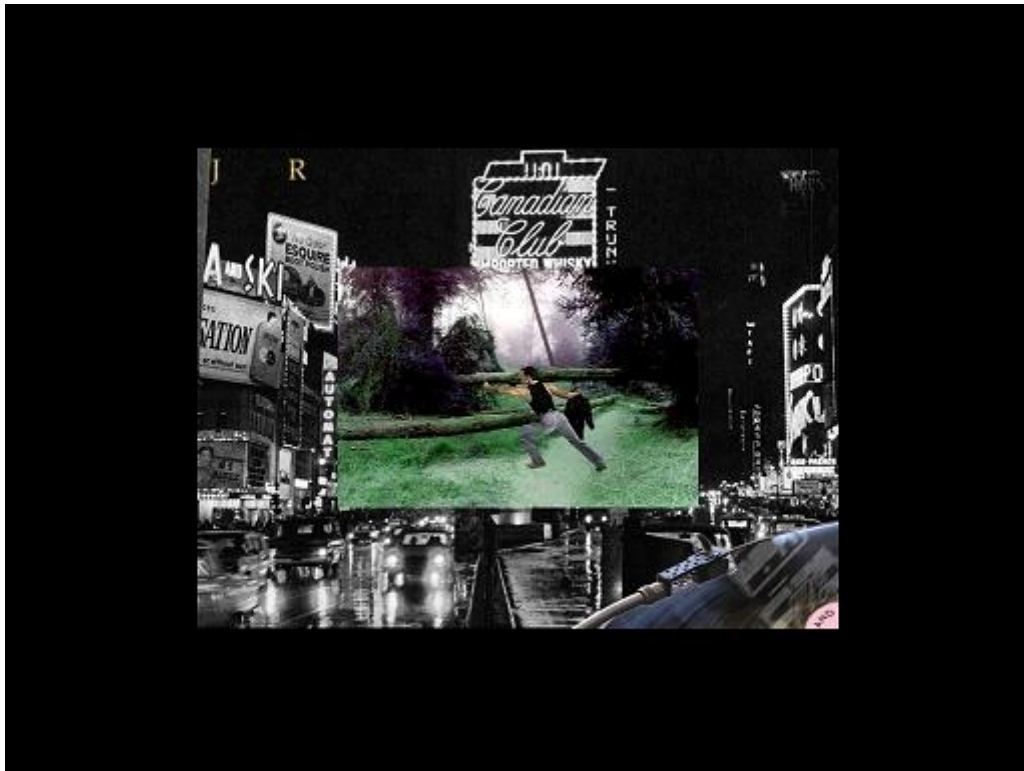


Figure 7: *Mysteries and Desire* screen shot of animated dance sequence



Figure 8: *Mysteries and Desire* screen shots of John Rechy

Mysteries and Desire is undoubtedly the most expensive to produce, of the three examples. It is technically sleek and the visual content is alluring, in high resolution and beautifully choreographed. This user nevertheless found it to be the most difficult to appreciate and that various barriers to engagement resulted in very little information being retained after interacting with the text. The user frequently has the sense of being lost within the structure of the work. Mouse clicks here and there appear to progress the user on to the next area of the work, and yet one then finds that one is returning to the previous screen via a frustrating loop. Only by patiently clicking on all parts of every screen and waiting for an effect is it possible to find the hidden routes between the screens.¹⁷

Example 3: *Only Fish Shall Visit* (2002)

Only Fish Shall Visit is a CD-ROM documentary created by Brogan Bunt (based at Wollongong University, New South Wales, Australia).¹⁸ Bunt created this navigable, map-based, multimedia work as an experiment in how photographs and video segments could be linked, to form an enduring historical record of the ancient Turkish town of Halfeti in the months leading up to its flooding for a major dam project. Most of the streets of this town are now permanently submerged. This documentary is created from very large sets of nodal photographs and video segments. Each image or video segment connects logically (typically spatially) to others, simulating the “texture of actuality.”¹⁹ The user controls the textual experience by deciding on how to navigate through the documentary using a map interface (see Figure 9).



Figure 9: *Only Fish Shall Visit* map interface

To progress through the work, the user clicks on entry points marked on the map. The map is accessible at any time—it is only one mouse click away. What unfolds for the user is a moving historical record of a streetscape populated by a traditional Turkish community. The user clicks through sequences of still images that link together to provide a full view of the physical space. Symbols appear that indicate directions that can be followed by the user. Sometimes they are difficult to find, and many routes are dead ends. There is no interface that shows where all the paths are on the map—just the entry points marked on the map interface. The work is structured around oral history segments that the user must literally discover in the way that a player searches for secret codes and aids in a computer game. Here the cartographic navigation structure gives the photographs the context they need to act effectively as an historical record rather than a photographic archive. The oral history segments offer reflections, in the voice of the people of Halfeti, on the future of their lives in the

“new” Halfeti, a purpose-built town nearby. There is also a “history” segment, which provides a background both to the digital project and also to the plight of the people of the town (see Figure 10). This tells us that Halfeti is a town that was submerged when a new dam was built in the valley it had occupied for centuries.

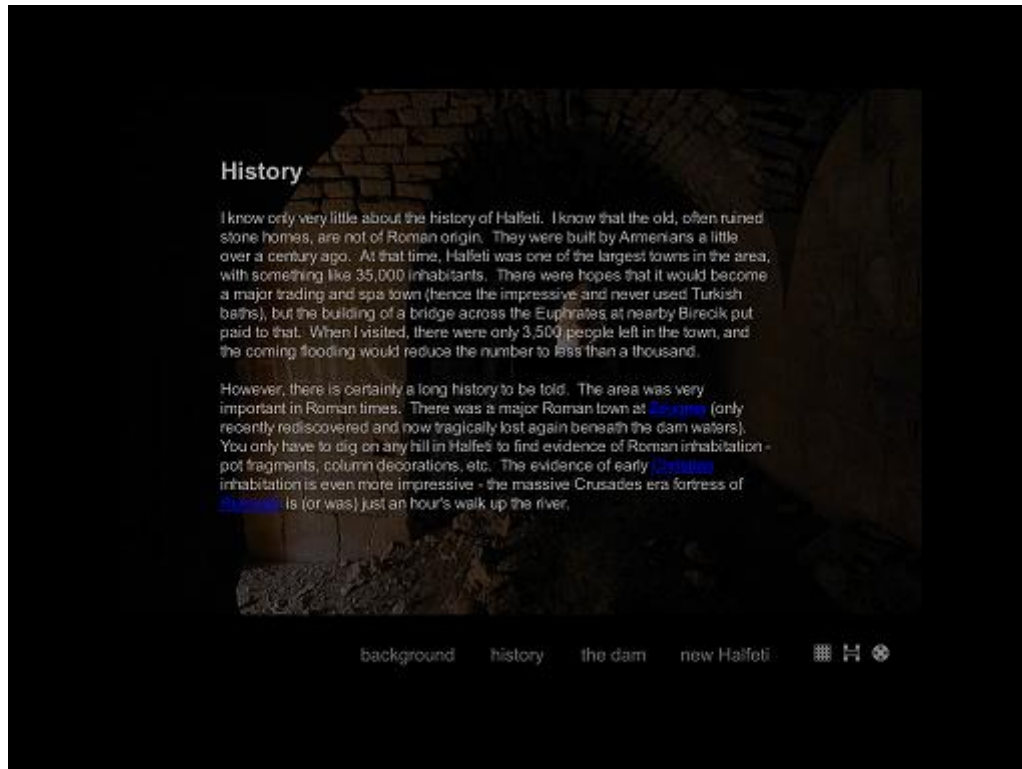


Figure 10: *Only Fish Shall Visit* background history page

The aspect of this work that impressed me the most is the way in which, as a user, it is possible to take in the history of this beautiful town from many different perspectives: not only physical perspectives (such as the sweeping panorama of Figure 11), but the perspectives of representative people in the community.



Figure 11: *Only Fish Shall Visit* screen shot view of Halfeti

It is possible to select (or more properly “find”) a person and to decide to see Halfeti through their eyes, staying with them and their world for a time—following the paths they follow between buildings, between seasons (on some roads there is snow; others are in sunshine), interacting with neighbours, serving in a shop. Once the user discovers the oral history video segments, it is as though treasure has been found. An icon representing the video recordings appears and becomes clickable. A window within the current window appears with the video segment (see Figure 12).



Figure 12: *Only Fish Shall Visit* screen shot showing oral history segment in separate window

Only Fish Shall Visit is the simplest to use of the three digital history works considered in this paper. The simplicity is achieved through the use of still images, which can be predictably navigated and understood within the larger context of the map interface. This is a highly interactive experience—the user must constantly click on the screen to reach the next still frame. My last experience of investigating the work in depth required upwards of three hundred mouse clicks. This may seem extreme, and yet the consistency of the action guarantees a degree of simplicity that is lacking in the other examples considered in this paper. The video segments, where they do feature, are signalled with a video icon. This avoids the frustrating sense that the user is clicking randomly to generate some activity in the text. Most significantly, however, *Only Fish Shall Visit* offers the user an immediate escape route at any point. This empowers the user; it makes it a choice to view the material or not. Unlike the other examples discussed above, the interactivity does not overpower the user—the

navigation of the work remains within total control.

Conclusion

This paper responds to what I see as a lack of discussion in history circles about experimental narrations of history using new technologies. Whether such works are counted as history, as meditations on memory, or as creative artworks, this new field of work needs to be regarded as a contribution to the larger process of recording the past for the future. There is a range of likely reasons for the lack of discussion:

- (1) The pace of technological change is fast, meaning that to be able to comment on the repercussions of that process of change requires one to become knowledgeable about technology itself.
- (2) It is generally the case that older people are interested in history, whereas younger people tend to be the ones more interested in new technology.
- (3) There is an awkward relationship between history and technology. History has usually documented the processes of technological change from a distance, rather than drawing directly on new technologies and so giving up that objectivity (although of course the objectivity itself has often been overstated).
- (4) The digital history field, while it is relatively new, has already become specialised, with intense activity in various areas including GIS mapping and other kinds of spatial visualisation (especially useful for archaeology), online databases and archive digitisation projects, and digital video and animations for historical re-enactment.
- (5) One of the great challenges in producing informative interactive texts, especially in humanities and social science disciplines, is the need for close collaboration between multimedia producers and those academically trained in and responsible for the content. Very often that relationship can produce mediocre results, even with the greatest goodwill and planning on both sides. This is evidenced by the endless websites that are designed beautifully but have limited academic content value. These creations are effectively in the hands of multimedia designers and producers rather than in the hands of historians.

Depending on the user's own preferences for interactivity (often as a result of age, experience, interest in technology), s/he may feel that the level of interactivity required in digital history works is a barrier to taking in the information presented.

Click because you have to. Nothing happens if you do not click. There is no way of

finding the information except through that clicking. Sometimes you must click everything before the next range of information is available. The three examples discussed in this paper are not designed to frustrate the user. Nevertheless, my evaluation of these works is that they are all difficult to use. The information is difficult to access. I do not feel that I have been easily educated—it has been hard work. It is important to recognise that while games frequently work around a frustration/breakthrough dialectic, this strategy can actually threaten the success of educational applications of multimedia.

What is the future of interactivity for history? As technology is allowing for new interactive relations of reader/viewer/user with text, so too has the conception of interactivity itself changed.²⁰ In the near future, history in digital form is likely to be not simply an interactive screen-, text- and sound-based experience but a far more immersive “hyper-reality” engagement between humans and augmented digital environments. The common term “virtual reality” suggests that the interactive experience will always be limited to a simulation of reality. However, interactive media are likely to enable far more realistic and stimulating experiences.

Experimental technologies are already making it possible for taste, smell and, using tactile feedback, touch, to be artificially recreated.²¹ These developments are opening the way for radical new forms of historical representation, promising to offer a new level of “participation” in and engagement with the past. As the curators of the exhibition “Future Cinema” explain, the digital technologies being developed offer an “immersive narrative space wherein the interactive viewer assumes the role of both cameraperson and editor.”²² They anticipate that distributed virtual environments will also become social spaces where actual people can interact, co-experience and co-direct the narrative content.²³

The single greatest change in the interactive narrative experience may come in the form of intuitive computer programming and the incorporation of other forms of rudimentary “artificial intelligence.” It is possible that texts could be designed to adjust to suit the pre-recorded tastes, age, cultural background or knowledge-base of the viewer, and in response to initial choices made as the viewer engages with the text. I do not believe it is overstating the case to say that the very way we remember the past may change if these applications of technology are developed and embraced (letters, for example, used to be an important form of personal communication between friends and family and these have largely been replaced by email, sms texting and the telephone). Butterworth and Wyver have a vision of the future where simulation engines drive social change through making people aware of alternative ways of seeing:

...at the heart of a virtual environment a simulation engine of such simple perfection that it nurtures a communal narrative, a narrative so vivid and richly focused that inhabitants learn to see their own real lives and communities with fresh eyes... a profound redefinition of public service broadcasting, which is truly inclusive, and perhaps, democratic.²⁴

There is no doubt that, as digital technologies mature and applications diversify, the study and appreciation of history will continue to benefit. And yet, after the initial rush to embrace the newness of the networked computer experience in whatever messy and complex forms it took, most people now seem to long for simplicity, with digital forms following a familiar interface, with logical narrative and navigation structures. There seems to be increasing emphasis being put on valuing simple organic structures against the barrage of technology and information.

For all their innovation, the core of the matter is that, unlike books, experimental digital histories will continue to be considered fleeting and impermanent until they can be reliably preserved. Ultimately this is what makes them a curiosity

and an art form more than serious history. In the future they will be looked back on as the artefacts of our time, rather than the record of our time. Has the format worked? That is a vital question. Can we say that these various examples achieved something more than could have been done with a traditional book? The experimentation itself, it seems, constitutes the success at the moment—that is because we are so concerned with technical innovation and the possibilities of new formats.

It is time, I believe, for historians to become more closely involved in this arena of digital technology in order to harness its potential and play a role in shaping its development to serve history's purposes.

Notes

¹ See: Randy Bass, *Culture and History as Electronic Text: A Lexicon of Critical Questions* (1997), available from <http://www.georgetown.edu/faculty/bassr/511/lexicon.html> [accessed 20 June 2006] and Carl Smith, *Can You Do Serious History on the Web?* (AHA Perspectives OnLine, 1998), available from <http://www.theaha.org/perspectives/issues/1998/9802/9802COM.CFM> [accessed 20 June 2006]. Also see Roy Rosenzweig, "Scarcity or Abundance? Preserving the Past in a Digital Era" (*American Historical Review* 108.3, 2003), 735-62.

² Jody Berland, "Cultural Technologies and the 'Evolution' of Technological Cultures" in Andrew Herman and Thomas Swiss, eds., *The World Wide Web and Contemporary Cultural Theory* (New York: Routledge, 2000), 236.

³ Johan Fornäs, "Digital Borderlands: Identity and Interactivity in Culture, Media and Communications" (*Nordicom Review* 19.1, 1998), 27-38.

⁴ Eric Zimmerman, "Narrative, Interactivity, Play, and Games" in Noah Wardrip-Fruin and Pat Harrigan, eds., *First Person: New Media as Story, Performance, and Game* (Cambridge, MA: MIT Press, 2004), 158.

⁵ Janet Murray, *Hamlet on the Holodeck* (New York: Free Press, 1997), 28.

⁶ Leigh Dayton, "Theme Parks with Old Stuff" (*Australian Higher Education Supplement* 22, February 2006).

⁷ See Stephen Brier and Roy Rosenzweig, "Who Built America? From the Centennial Celebration of 1876 to the Great War of 1914 [CD-ROM Multimedia Curriculum]," (Washington, DC: George Mason University, American Social History Project/Center for Media and Learning, 1993).

⁸ For example, Hayden White, *The Content of the Form: Narrative Discourse and Historical Representation* (Baltimore: Johns Hopkins University Press, 1987). Also see Michel Foucault, *The Archaeology of Knowledge* (London: Tavistock Publications, 1972).

⁹ Ted Friedman, "Making Sense of Software: Computer Games and Interactive Textuality" in Steve Jones, ed., *Community in Cyberspace* (Beverly Hills, CA: Sage, 1994).

¹⁰ Harrigan and Wardrip-Fruin, eds., *First Person*.

¹¹ Henry Jenkins, "Game Design as Narrative Architecture" in Harrigan and Wardrip-Fruin, eds., *First Person*.

¹² *Ibid.*, 124.

¹³ *Ibid.*

¹⁴ *Ibid.*, 125.

¹⁵ Marie-Laure Ryan and Jon Thiem, *Symbol Rock [DVD-ROM]* (Unpublished, 2003. Available on request).

¹⁶ Marsha Kinder and John Rechy, *Mysteries and Desire: Searching the Worlds of John Rechy [CD-ROM]* (Annenberg Center for Communication, University of Southern California, 2000).

¹⁷ One only has to think of the later works of twentieth-century experimental writers such as James Joyce, Samuel Beckett and Virginia Woolf to remember that they too (in their very distinct and different ways) set up frustrating multilayered barriers, including riddles and puzzles, that prevented simple navigation through their texts.

¹⁸ Brogan Bunt, *Only Fish Shall Visit* [CD-ROM] (Exhibited at Artspace, Sydney, 19 September - 12 October 2002).

¹⁹ Brogan Bunt, "New Media Documentary" (Paper presented at CAMEO conference, University of Canberra, Australia, April 2002).

²⁰ Compare Anthony J. Niesz and Norman Holland, "Interactive Fiction" (*Critical Inquiry* 11, 1984), 110-29, with Marie O'Mahony, *Cyborg: The Man-Machine* (London: Thames and Hudson, 2002).

²¹ O'Mahony, *Cyborg: The Man-Machine*.

²² Jeffrey Shaw and Peter Weibel, eds., *Future Cinema: The Cinematic Imaginary after Film* (Cambridge, MA: MIT Press, 2003), 16.

²³ Ibid.

²⁴ Alex Butterworth and John Wyver, "Interactive or Inhabited Tv: Broadcasting for the Twenty-First Century" in Martin and Andrea Zapp Rieser, eds., *New Screen Media: Cinema, Art, Narrative* (London: British Film Institute, 2002), 95.