

Beyond the "Historical" Simulation: Using Theories of History to Inform Scholarly Game Design

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Abstract

This paper presents a case for a gamic mode of history that focuses on the construction of the historical narrative via procedural rhetoric. The gamic mode of history presented in the paper maintains the constructionist epistemologies and explanatory narratives for the creation of reasonably justifiable truths found in many current text based works of scholarly history. It maintains them yet changes the mode to an interactive digital form where the reader explores the historical argument through meaningful decision making and play. This paper establishes that the epistemologies of constructionist history are not mode dependent, which allows for a change of mode without a change in epistemology. This is different from some other recent explorations of digital forms of history, where in the pursuit of historically accurate reconstructions of the past researchers fail to address how we construct knowledge about the past, or assume that how we know the past must change with the mode of expression. It is suggested by this paper that in the gamic mode it is not the historical past and accepted epistemologies one should reconstruct, but simply the mode of the historical narrative about the past.

Author Keywords

History; literacy; digital games; design; epistemology

Introduction

The purpose of this paper is to outline the theory behind translating reasoned historical arguments from traditional textual modes of history to an interactive gamic digital mode that utilizes computer mediation and procedural rhetoric; which one could call a gamic mode of history. A gamic mode of history is the construction of scholarly historical arguments as scholarly games, creating a relationship to commercial games analogous to that of non-fiction to fiction in literature. This enables scholars to convey their research in ways that go *beyond* the limits of textual monographs, digitized historical sources, and digital simulations. These approaches to history either fail to utilize new media or computer mediation to their fullest, or fail to uphold the basic requirements of historical scholarship. In fact, for some applications, it may allow researchers to convey aspects of the past as scholarly history that go beyond the limits of the textual mode. In order to do this, the gamic mode must be a valid and scholarly means to construct the past and be empirical in its use of evidence. The gamic mode contains all the

necessary elements of historical enquiry and construction found in a traditional print form, referred to in this article as a textual mode, and as such it has the same claims to historical validity and can be used alongside or in place of more traditional formats by all historians. As a result, many historians will find that their methodologies for constructing the past as history are compatible with the gamic mode. Depending on the outlook of individual scholars and the utility of the gamic mode for their research, writing, and teaching, some elements of the gamic mode will be more useful than others.

The response in the digital humanities to gamic technologies has been broad and has not focused on the translation of standard scholarly historical practice into a fully gamic mode. Whether the goal is to engage students and allow them to “re-live” the past or create historically accurate simulations by adopting different epistemologies they diverge from the commonly accepted approach by historians to creating the past as history.

The Kee et al., article *Towards a Theory of Good History Through Gaming* (2009) summarizes predominant and popular approaches to the application of games to historical instruction. While providing a good summary, and despite its title, the article fails to offer a theory of “good” history. Indeed, it even lacks a clear definition or description of what they mean by history itself. Instead, a common and simplistic understanding of the term “history” is assumed and the focus of the article is predominantly on the technology of digital games, simulations, and education. As a result, it is difficult to discern how they suggest one forms a historical argument, or creates a reasonably justified truth about the past, in a gamic space. This is compounded by the interchangeable use of the terms “history” and “the past”, and even “game” and “simulation,” regardless of context. The focus on the technology itself and its benefits for engagement also distracts from distinguishing between the gamic mode’s impact on the practice of historical education and the process of constructing the past as history. Additionally, their approach to historical simulations conflates history, the process of constructing reasonably justified truths about the past, and games, a particular mode that has no inherent epistemologies attached to it. Put another way, they are confusing the vehicle, the game, with the cargo, the argument (Clyde & Wilkinson, 2011). It seems that Kee et al. did not set out to provide an explanation of how epistemologically sound scholarly history can be authored in a gamic mode. This article is at least in part an attempt to address this gap in the understanding of the role of a gamic mode in the construction of the past as history.

Popularizing history by making it more accessible is a worthy goal, particularly by putting it in a mode that is more easily “read” and available. There are numerous examples of attempts at making history more accessible to various audiences through games and digital reconstructions: the University of Adelaide’s *Georgian London Project*; the *Simulating History* project at Brock University, *Drama in the Delta* (Wieder, 2011); and Education Arcade’s *Revolution*. However, in their desire to change the mode, they also change the epistemology. The primacy given to technology and engagement takes the debate away from the expression of a disciplinary way of creating truth towards one of transforming history education for K-12 and post-secondary students. At the same time, this move to popularize history through digital reconstructions unwittingly transforms the discipline, not only altering its epistemologies but also limiting its empirical rigor. This in turn limits scholarly debate by increasing ambiguity and opening reader response beyond the determination of whether or not the author has presented a reasonably

justified truth.

These examples indicate an over emphasis on empathetic re-enactment, as opposed to a focus on the construction of a reasonably justified truth about the past, which is one of the main goals of post-secondary history education (Clyde & Wilkinson, 2011). This is not to say that the use of the games (outside of a gamic mode) is problematic and should not be applied to education. There is a significant body of literature dealing with the use of commercial games in the classroom (such as Squire, 2004) to not only stimulate student engagement but also facilitate awareness and discussions about the past. In particular, Stephanie Fisher's *Playing with World War II: A Small-Scale Study of Learning in Video Games* (2011) looks at how students learn from playing commercial games, how they contextualize the history that is presented in the game, and re-purpose that history to advance their own historical education. This is useful as it provides another avenue for the effective incorporation of commercial games into the classroom without altering epistemologies or merely seeking student engagement.

In contrast to these projects, which are mostly technology-led and focused on a range of digital historicisms, the gamic mode of history starts with the philosophy of history which governs how the past is constructed as history and how that then translates from text into a new media form. This paper will address these issues in four parts. The first part discusses and describes the way in which arguments can be expressed by games via procedural rhetoric. The use of procedural rhetoric combined with the systemic nature of scholarly constructions of the past is an essential part of the gamic mode of history. Next, is an examination of the nature of historical enquiry in detail and how it is aligned with the gamic mode. The second part discusses the notion of the past as histories as opposed to merely an amassment of facts, reconstructions, or simulations. The philosophical validity of historical enquiry is not text dependent, in that non-textual formats can be used and viewed by scholars as legitimate, compelling, and useful. Thirdly, it is important to examine existing modes of the past in gamic format, including: commercial games with claims of historical truth, counter-factuals in games, and digital simulation. The last section of this paper looks at the creation and communication of history through the gamic mode. Throughout this section, a game currently under development by the authors, *Shadows of Utopia: Exploring the Thinking of Robert Owen*, is used to illustrate how the gamic mode functions in the creation and communication of history in that, like the monograph, it expresses scholarly knowledge of the past in a critical, empirical and valid manner.

Procedural Rhetoric and the Gamic Mode

The gamic mode of history is intended to fill a gap in how the games can be applied to authoring scholarly history and enabling historical education. It is an application of game design and technology to create a recognizable form of constructing, communicating, and interpreting the past in a historically valid manner. The valid gamic mode is no different from a traditional, written/textual mode of historical enquiry, such as the monograph or the scholarly article. It must maintain the hallmarks of scholarly history: the use and citation of empirical evidence; the absence of an appeal to rhetoric; the application of a narrative structure; and the requirement for a truth attribute. Though, being a different mode than text, a gamic scholarly history will engage with these hallmarks differently.

Indeed, as a game, the gamic mode of history utilizes procedural rhetoric, a mode-dependent form of rhetoric, to make and convey arguments. Procedural rhetoric as a way to think about how games as a particular mode make arguments out of processes was first proposed by Ian Bogost (2006, 2007, 2008). The basic idea is that procedural rhetoric is the use of computational processes to persuasively and effectively convey an idea. What the author creates in procedural rhetoric is not the argument itself, but a series of general and specific rules through authoring code that a computer can then use to generate the argument (Bogost, 2007). This mirrors scholarly constructions of the past as history in two important ways. First is that the argument is not the past, but a representation of it created by authoring evidential and interpretive relationships that lead to conclusions. Second is that the scholarly historical argument itself consists of facts that are converted to evidence and arranged according to a set of rules for that particular argument via interpretation. The gamic mode of history is an application of procedural rhetoric that takes advantage of the processes inherent in scholarly evidential relationships to express these arguments as games. While different in form the argument experienced by the player would contain the same series of procedural evidential relationships that work towards a verifiable conclusion with a reasonably justifiable truth attribute that they might have expected to find in a monograph of the same argument. Unlike other forms of digital history, the gamic mode does not attempt to reconstruct or simulate the past or specific argument; the game *is* the argument, it is a scholarly expression of the past.

Bogost (2007) points out that procedural rhetoric functions to not only express a point of view but also persuade the player of the validity of a point of view. Scholarly constructions of the past primarily base their truth claims on the arrangement of evidence and not on any inherently persuasive attributes of their modes of expression. A gamic argument that has such qualities as internal consistency of rules and play and the ability of the player to understand and predict what will happen in the gamic environment creates a sense of veracity outside of the arrangement of evidence and interpretation of the argument (see Jesper Juul's work *Half-real*, 2005). In response to this characteristic of the medium of games, a gamic mode of history needs to be particularly rigorous on the points of evidence and interpretation. But just as procedural rhetoric serves as a way to express arguments in a particular medium, it also serves as a way to read or interpret those arguments, a way to see the argument at work beyond the mediums inherent characteristics of persuasion. In addition, the extra-rhetorical quality of games as a mode can also be found in more traditional textual formats. For example, a monograph from a prestigious academic press that is in hardcover, nicely printed, well organized and of significant length will seem more valid to many readers than the very same argument published by a lesser known press in soft cover with lots of pictures.

The Past as Histories

The norm for the scholarly expression of the past as history is the monograph or the article, a form of communication that relies upon text. This is so commonly done that it is easy to consider the texts themselves as history. That the majority of sources used are also textual only strengthens the connection. Examination of how historians have established adequately-justified truth claims and theories about the past indicates that the essential elements of this knowledge

are independent of the text, or the mode of expression. The mode instead is an aspect of practice that is shaped by how historians establish knowledge claims about the past. Our point is that if the gametic mode shares the same epistemological virtues as traditional (textual) modes already accepted by historians, then this mode should be recognized as being an equally, if not more, appropriate manner of expressing the historical past.

Alun Munslow in his works *Narrative and History* (2007) and *The New History* (2003) defines three broad epistemological approaches for historical scholarship: construction, deconstruction, and reconstruction. This paper will borrow these categories to help define the preferred epistemological approach for the gametic mode of history as a means of expressing the past and to clarify how some of these digital expressions of the past, such as *Sid Mier's Civilization* series and other history themed digital games, are different from a gametic mode of scholarly history in more ways than simply a failure to footnote. In *Narrative and History* (2007), Munslow suggests that the vast majority of historians practicing today fall in to the category of constructionist historians and it is this category in which this paper places the gametic mode of history. For the gametic mode to be a relevant and acceptable expression of history, it needs to be epistemologically recognizable to the majority of historians as the type of history they themselves practice.

Constructionist history relies on empirical method as well as analysis to create adequately justified true claims and theories about the past. Such claims and theories function as the basis of both historical knowledge and the traditional epistemology of history. This form of history, recognizes that "history" is not the past. Constructionist history builds up knowledge of the past and expresses the past as history by both analysing how and what individual pieces of evidence can do, and what conclusions about the actions of historical agents (be they individuals or corporate entities) can be established through evidence relationships. In this case, evidence itself is separate from a notion of historical fact, as the fact only becomes evidence based upon its relationship to the question at hand. The constructionist approach to history, while allowing almost any question to be asked, provides parameters around how the question can be answered.

Another epistemological approach to knowing the past is deconstructionism which basis the individuals understandings on their own personal experience of the evidence or arguments. Basing the understanding of the past on the individuals experience to certain extent means the past is unknowable and denies a corporate understanding of history. The deconstructionist idea of an unknowable past, or past that can be known in a multitude of ways suggests the gametic mode of history could be almost anything as long as it could be shown to have some sort of expressive power or meaning for the individual player or reader (Munslow, 2007, p. 103). Taking a deconstructionist approach then might be simpler, or at least offer more freedom to the scholar working in the gametic mode, than the mainstream constructionist approach to history. All that is required of the author working in a deconstructionist gametic mode is that the individual player gains some understanding of the past from the experience. However, this approach would also be in prohibitive contradiction to most historians' aspirations to something approaching objective truth in their historical scholarship. In addition, for a history (as an expression of the past) to have meaning and achieve adequately-justified true claims and theories about its subject matter, these claims and theories must be recognizable as history and be part of the scholarly discourse. The gametic mode discussed here will tend to take a constructionist approach to the past, for while more restrictive it is better able to be integrated with existing historical

scholarship in monographs, articles, and teaching (Clyde & Wilkinson, 2012).

Reconstructionist history is a third choice for the gamic mode of history, and like deconstructionist history does seem to present some benefits to a scholar working in the gamic mode of history. The reconstructionist historian attempts to descriptively recreate the past as it actually was through the use of sources, which by their nature as facts are objective. The potential to use computers to collect, compile, arrange and present a vast array of historical data seems to hold the promise an accurate recreation of the past. Of course the utilizing of data, or facts, and their arrangement are subjective activities and even the way in which a computer is used to arrange and present them is, to some degree, tainted by subjectivity, and therefore taxes the historian's traditional ideal of objective scholarship. The reconstructionist mode is now that of the popular historian, the television documentary and many digital games and in particular simulations where an attempt is made to tell the "real" story and the main claim to authenticity is based on the volume of data used. Reconstructionist history claims that history is the past, as opposed to a constructionist view where it is the past as history.

The gamic mode of history creates knowledge about the past, or chooses how to know things, in a way that is in line with practice of the majority of historians. It asks similar sorts of questions, looking primarily at human action or agency and proposing relationships between events in the past. Those proposed relationships are validated through considered application of evidence, interpretation, and explanation and communicated through a narrative. Narrative as a form of explanation is crucial to the gamic mode of history as it is to all history. For the gamic mode of history to actually be history, as understood by most scholars, it not only needs to make the same epistemological choices, it also needs have a narrative form.

History and Narrative

In suggesting narrative is common to all history, including the gamic mode, one does start to move from a basic discussion of epistemology to one of practice in a way that places the gamic mode further in to the mainstream of historical scholarship. Philosophers of history, such as William H. Dray (1993) and R.G. Collingwood (1994), suggest that narrative is essential to history as a heuristic device to create knowledge as well as a tool to communicate that knowledge. Narrative is central to the writing of history because it enables empathetic re-enactment, the process by which we understand past action (Stueber, 2003, p. 35). In its form narrative is very close to that of human action and it is through narrative that we understand or construct action in the present, and as such is essential to historical explanation (Carr, 2008, p. 29). Narrative is so closely tied to our understanding of action, and as history is the study of past action, that if the historian's prose does not present a cohesive narrative to the reader, the reader then creates one. Therefore, the gamic mode of history needs to be able to utilize narrative in the same way. Like the epistemological choices of how one creates knowledge about the past, narrative is an important factor in making the gamic mode of history recognizable as history. And like those epistemological choices, narrative is not tied to the textual mode. While history creates knowledge in a particular way, that way does not necessarily require text as its mode of expression. For the gamic mode of history to be scholarly, other practical considerations must be addressed, such as making sources clear through citations. These will be dealt with later in the paper, but first we will examine non-scholarly gamic representations of the past.

Digital Histories

One of the challenges with conceiving of a gamic expression of scholarly history is the number and ubiquity of forms of digital historical re-constructions that already exist, from commercial video games and simulations to digital course materials and archives. These are not scholarly expressions of new knowledge about the past but instead are digital expressions of only parts of the historical process. In order to reframe the discussion of digital histories to one where games encompass the whole process of creating justified truths about the past, it is important to look at the shortcomings of existing forms. Though many of these digital forms of history make claims regarding their historical veracity, amass historical facts, and utilize game based technologies they are not history. Alternately, while the gamic mode of history may look like a commercial game, possibly even using the same technology to create it, it carries and presents an argument that constructs the past as historians do. Thus, like a more traditional text-based history, the gamic mode of history can neither simulate the past nor simply be digital course materials and still be a valid form of constructionist history. To make this clearer we examine the truth claims of commercial games, counter-factuals, and simulations.

Counter-factuals and Truth Claims

History, particularly military history, provides the settings for many digital games. Games, simulations and digital course materials, have become significantly more sophisticated in their appearance and have made various claims to historical authenticity. These digital reconstructions of the past fail to be history because of the nature of player interaction with them and what they allow the player to do. Even if one were to accept their claims that they have historical validity, authenticity, accuracy, and educational value, they are still at best re-constructionist histories, an epistemological approach seldom practiced by current historians which limits their application to post-secondary education and scholarly communication.

Commercial games such as the *Brothers in Arms* series and games that make claims to educational utility (Rejack 2007) such as *Making History: The Calm & The Storm*, base their claims of historical authenticity on getting the facts right. In other words, developers of these games understand a history's ability to create knowledge about the past to be a function of the amassment of facts. In addition to the marshaling and arrangement of facts, the past as history is integrally concerned with evidence. Facts become evidence based on their explanatory power regarding the question at hand and their role as evidence requires explanation. Games such as these ignore this important fact-evidence relationship and instead assume all data or information about the past is valuable to telling the real story. They seem to proceed as though the volume of facts accounted for by their system is directly equivalent to the degree of its validity. Developers of these games demonstrate attempts to create "historically authentic" games in a variety of ways, such as utilizing similar sources as historians, hiring historians as consultants and making bibliographies available. Based on their own criteria of amassed facts and similarity to unanalyzed primary sources, such as photographs and film, these commercial games, whether geared for education or not, would be a more authentic version of history than many scholarly histories.

These stories about the past that they create are, of course not real in that they are not empirical,

justified, truth claims about the past. But for the player, they can seem very realistic (Juul 2007). World War II games such as the *Call of Duty*, *Medal of Honor*, and *Brothers in Arms* series all strive to create an authentic or real experience, often using black and white images, archive film footage, diaries and letters to develop their narratives, all of which are forms commonly associated with historical evidence (Cruz 2006). They are often real or authentic to the players understanding of the past, not so much through a use of evidence but through consistency of story-telling techniques players recognize from World War II film and television such as *Saving Private Ryan* and *Band of Brothers* (Cruz, 2006; Kingsepp, 2006). In other words, many history-themed games that revolve around war use historical facts and rhetorical story telling techniques borrowed from prior media forms (e.g. film and television) in an attempt to convince the player that they are telling the “real” story. Games also create a sense of realism for the player based on the player’s actions rendering expected results, a type of realism that stems from the players control over the game, as opposed to the presentation of historical evidence in the game or narrative; a sort of unavoidable rhetorical device (Sommerseth, 2007). The amassed facts are not just used to allow the game makers to make claims of realism but also for allowing them to make claims to a type of historical accuracy in simulating the past and creating alternate histories.

Simulations and Counter-factuals

There are numerous games that play with history, allowing the player to manage an army, a country, or a civilization and guide its development through time. The idea of exploring what might have been, or playing with the counter-factual is a popular one, because the nature of a game and the necessity for a player to have meaningful choice means that counter-factuals are used in history-themed commercial games. Many commercial games function as simulations and take it a step further to give these counter-factuals a truth attribute through their claims of historical accuracy. There is a degree of popular acceptance of their validity with game based simulations such as *Sid Meier’s Civilization* and *Making History* being used in classrooms to teach history. Examples of this practice include Squire and Barab’s (2004) use of *Civilization III*, Aaron Whelchel (2008) using *Civilization III* and *Age of Empires*, and Julian DelGaudio (2002) scratch building role play simulations such as *Eunice: A Captivity Simulation* and *In Search of Freedom: Navigating A Slaves’[sic] Journey*. Despite the gamic mode of history’s limited use of counter-factuals, it cannot and is not the past as expressed by these games. Games in general are characterized by fixed rules, variable outcomes, valorization of that outcome, player attachment to the outcome, player effort, and negotiable consequences (Juul, 2005, p.44). The difference between history-themed commercial games and the scholarly construction of the past as history in gamic form, can be demonstrated by examining these points posed by Juul. For example, while history is procedural, it is based on what is observed of the past and its justifiable interpretation, not a rule or model imposed upon past events. In addition, the historical enquiry may have variable outcomes based upon sources used and questions asked, but it is not variable in the sense that player effort can change it in pursuit of a win state, such as a preferred past. In the gamic mode of history, as in any scholarly history irrespective of mode, evidence and reasonable interpretation cannot be disregarded in order to create a preferred past. The value placed upon the consequences and impact of a game’s outcome is negotiated by the player, this is not quite the same as a scholarly history, as new knowledge has the potential for unforeseen or anticipated consequences. Ultimately a game needs to let a player do something meaningful, where history allows the reader to observe the meaning of someone else doing something. Most games do not strive for a truth attribute and are intended for their own enjoyment, thus the use of

counter-factuals.

In games, as soon as the player has agency to make meaningful choices and they are playing with the past, every action is a counterfactual. In the gamic mode those meaningful choices are in relation to the constructed argument not a simulated past. The need for history-themed commercial games to allow meaningful interaction and to play with the past ultimately leads to the creation of alternate history. Some commercial games engage this fully, such as *Valkyria Chronicles* which is an alternate history of interwar Europe and the Second World War, where Belgium, in the guise of the fictional state Galia stands up to and defeats the German war machine (Sega, 2008). This game as a source has much to tell scholars, yet despite the accurate graphical representation of historical arms and armour it can tell us little about history. It acts as a primary source for researchers looking at modern representations of the past in general, or modern Japanese culture in particular, but it has very little to tell us about the history of Europe. Games by their nature are fixed rules, or systems, and it is this systematizing of the past (as opposed to the systematizing an argument) which appears to offer the potential for historically accurate simulations.

The simulation takes the alternate history and counter-factual a step further by systematizing the past. Counter-factuals are indeed used by historians, and would be used in the gamic mode of history, but their use is limited and does not extend to the point of simulation. The historian can use counter-factuals as a device to determine if something significant happened. The very act of studying change in the past implies the use of the counter-factual, as it is assumed without a particular event things would have stayed the same. Simulations use counter-factuals to not just determine that something significant happened but also to discuss "historical events" that did not happen. Simulations are models of the interaction between cause and effect that seem to offer a laboratory or playground where one can test out historical conclusions. By changing certain factors or variables, one claims to demonstrate in what ways they relate to one another and how they are important. Simulations do this in relation to their own model or system, which is not the past as history. For a simulation to provide conclusions with a truth attribute of the same type that a historical narrative does, the system would have to accurately model the past, which supposes all important factors and relationships could be observed and that the historical method allows one to say what might have been. Muzzy Lane attempts this, in their game *Making History*, by claiming "each nation is given detailed characteristics built on extensive research, including economic and military strengths, diplomatic relations, ideology, and technical advancement (Muzzy Lane, 2009). The empirical nature of constructionist history, however, only allows one to observe what was and proposes relationships between those things. One cannot observe what did not happen nor can one extrapolate to produce general laws of history, or covering laws (Fischer, 1970, p. 128-130). Simulations by their nature propose covering laws, where the more factors considered and the more complex the system, the more accurate the covering law is proposed to be. This may be a way of knowing something, but it is not history.

Creation and Communication of Gamic History

The gamic mode can be used to avoid the trap of simulations and digital re-enactment to express scholarly arguments for education. For example, our New Lanark game, *Shadows of Utopia*:

Exploring the Thinking of Robert Owen (currently under development), demonstrates how a game can communicate historical truths and simulate an argument rather than the past. While *Shadows of Utopia* contains multiple digital reconstructions of the nineteenth century it goes a step further by simulating an argument about Robert Owen's thinking, allowing the player to explore the developers' argument in an interactive way. In other words, the game is not about reconstructing New Lanark, but rather conveying an argument about Robert Owen's utopian ideals. Throughout the game the player follows the developer's argument about the progress of Owen's thinking by engaging in metaphorical education and labour reform, to construct a system that changes the working classes from fearful shadow-creatures into people and creates wealth for all. Initially, the game world is dark, threatening and scary; full of lazy, foolish shadow-creatures who steal and rob unless they are harnessed to horrific, profit-oriented, and moral factory production. The completion of environment-altering puzzles and player exploration of the game world reveals the real people within these shadow-creatures, demonstrating an argument about Owen's belief that people are the products of their physical and institutional environment.

The most important element of the gamic mode of history, of which *Shadows of Utopia* is but a single example, is that it creates a reasonably justified truth maintaining the epistemologies of the written textual modes, such as the monograph and the scholarly article. While the gamic mode has some unique characteristics given its combination of visual, aural, written, and interactive elements inherent in its usage, many of the functions of validity found in the written textual mode are also necessary in the gamic mode. If one wants to express historical interpretations of the past in a gamic mode, one must ensure that it operates in the same way; that it can articulate scholarly knowledge of the past and contribute to historical debate.

The monograph and the scholarly article both have as central to their claims of validity their connection to evidence and the clear demonstration of that connection. Not only do historians have to evaluate and use evidence to support their arguments, they must show that they have done so in ways that are convincing and clearly articulated. The way that the textual mode does this is through the use of citations, usually in the form of footnotes, though this is becoming lamentably less common. The citation must contain, within standardized formats, information concerning authorship, title and publication data, and the exact location of the material or idea taken. The citation is a representation and a place holder of the source of evidence utilized by the historian (O'Sullivan, 2006). In *Shadows of Utopia*, citations take the form of digital copies of Owen's own writings and other primary sources presented in a way that is contextually appropriate to the parts of the argument represented by specific rules or moments of game play. Where the citation normally stands in for the source, taking advantage of what is already being done in the digital humanities, the gamic mode allows for the source to be present immediately. This is not necessarily limited to digitized print, but could be GPS data or computer models as long as they can function as a reasonable historical source. There is also scope to add interpretations and annotations with these sources, just as one might find in the print equivalent of the argument.

All histories, irrespective of mode, have a requirement of transparency of evidence and because the gamic mode translates the argument into a set of computer-mediated rules, it also requires systemic transparency. As a result, there must be not only valid citations, but appeals to evidence

as opposed to rhetorical language and imagery to make and support an argument. The textual mode must avoid what David Carr (2008) calls “persuasive terminology,” meaning language that is “designed to achieve by rhetorical means what it does not attain by argument” (p.28). There must be a clear truth value associated with evidence that eliminates or at least severely limits ambiguity. Furthermore, in order to avoid the forms of fallacious arguments outlined by David Hackett Fischer (1970), the past as history must always be articulated as a reasoned argument, which requires the application of evidence. Clarity and transparency must also be paramount since the gamic mode of history turns the argument in to a system, and systems add an additional layer of rhetoric. Not only do all of the rhetorical fallacies outlined by Fischer apply to the gamic mode, but new mode-dependent issues such as “procedural rhetoric” (Bogost 2007, 2008), that is, “the art of persuasion through rule-based representations and interactions” also apply. *Shadows of Utopia* achieves transparency of evidence by linking sources and related interpretations to the game code, user interface, and aesthetic choices.

Linked to this idea is the need for transparency not only in the employment of evidence and language, but also in the application and use of theoretical and methodological transparency. It must be clear from the very start that the assumptions and techniques used intrude as little as possible on the argument. Since history is the interpretation of the past, the theories, methods, assumptions and techniques utilized will always be subjective to a degree, but they must not distort evidence in order for it to conform to preconceived ideas held by the historian. The gamic mode of history must accomplish the same connection to evidence and make clear the source of that evidence. To be history it is required to do all of the things that the textual modes does, but it can add digital utilities that augment the research in imaginative and useful ways. For example, citations in the gamic mode of history can follow traditional text-based practices within textual parts of the game, such as written explanations or background. But within the visual elements, the parts that look most like a “game”, citations can “pop-up” or appear and be read while the mode temporarily stops, or even be part of the play experience itself. Citations can also use hyper-links to reveal other useful elements, such as video clips, speeches, oral history/interviews, or in the case of *Shadows of Utopia*, digital copies of important documents, such as factory invoices or Owen’s essays and letters. Connections can be established to libraries, archives, collections, and other repositories of historical evidence. Original documents can be seen and read not only in their original language, but also in their original context. For example, a newspaper article about Owen’s utopian ideals can be read as part of the game, rather than as a disembodied cut out or an out-of-context quotation.

Our argument here is that a gamic mode of history, like *Shadows of Utopia*, can be divergent from commercial reconstructions and their academic equivalents. The gamic mode can offer game play interaction and engagement while at the same time maintaining disciplinary epistemologies and scholarly rigor. Just as a work in the textual mode, it can be constructed to utilize scholarly citations, it can avoid the reliance on rhetorical language or images, and it can be created to ensure transparency. In many cases, it is able to do these things better, with more scope for conveying research and learning beyond the printed word.

Conclusion

The gamic mode of history is a useful tool to convey and conduct historical research. It can replace or supplement the written textual mode or work alongside it in order to use digital tools to convey an historical argument more fully and completely. This is possible because the links to evidence and supporting materials are clearly stated, closely connected to the argument, and do not rely on rhetoric to make their case. It is a recognizable mode of research, using procedural rhetoric to construct and convey arguments. The gamic mode also follows the notion of the historian constructing the past making it a recognizable and legitimate epistemology. In spite of its relationship with similarly formatted digital expressions, the gamic mode of history is not simply a commercial game, a simulation, a counter-factual, or an alternate history, as none of these have solid and clear claims to historical validity. The gamic mode's relationship to commercial games and simulations is exactly that of fiction to non-fiction in books. The gamic mode has the characteristic of historical validity and it also has a close connection with facts as evidence in order to construct a scholarly argument. Just like scholarly monographs and articles, the gamic mode of history utilizes citations, avoids appeals to rhetoric, and establishes clarity of assumptions to construct and defend an argument, in ways that are more useful and multifarious than the written textual mode. The gamic mode allows scholarly constructions of the past to be "read" through trial and error and through meaningful choice. It has the potential to take advantage of advances in game design to do this with increasing flexibility and effectiveness. For instance the digital annotations or palimpsests found in games such as *Demon's Souls* allow for group and shared learning across all versions of the argument. For the gamic mode to be fully realized, a suite of examples will have to be produced, games carrying full scholarly arguments that can be subjected to peer review. Furthermore, the gamic mode could be applied to scholarly arguments in disciplines other than history. The key to doing this is to determine how truth is established in a discipline and translating that epistemology to a gamic mode. Those who possess digital or gamic literacies will be able to utilize all of the advantageous facets of the gamic mode, while at the same time being both cognizant and critical of its limitations. Ultimately it is important to remember that the gamic mode does not simulate the past or an argument, the game *is* the argument: it is a scholarly expression of the past.

References

- Bogost, Ian. (2006). *Unit operations*. MIT Press.
- Bogost, Ian. (2007). *Persuasive games: The expressive power of videogames*. Cambridge: MIT Press.
- Bogost, Ian. (2008). The rhetoric of video games. Katie Salen (ed), *The Ecology of Games: Connecting Youth, Games and Learning*. Cambridge: MIT Press.
- Carr, David. (2008). Narrative explanation and its malcontents. *History and Theory*, 47, 19-30.
- Clyde, Jeremie & Wilkinson, Glenn. (2011). The siren song of digital simulation: Games, procedural rhetoric, and the process of historical education. *The International Journal of*

Virtual and Personal Learning Environments, 2(2), 46-58.

Clyde, Jeremie & Wilkinson, Glenn. (2012). More than a game...teaching in the gamic mode: Disciplinary knowledge, digital literacy, and collaboration. *History Teacher*, 45(2).

Collingwood, R. G. (1994). *The Idea of History*. Oxford: Oxford University Press.

Cruz, Trent. (2006). 'It's almost too intense:' Nostalgia and authenticity in *Call of Duty 2*. Proceedings from Canadian Games Studies Association 2006, Toronto, Ontario..

DelGaudio, Julian J. (2002). Creating simulations for use in teaching lower division U.S. history. *History Computer Review*, 18(1), 37-52.

Dray, William H. (1993). *Philosophy of History*. New Jersey: Prentice-Hall.

DreamWorks Interactive. (1999). *Medal of Honor*. Redwood City, CA: Electronic Arts.

Ferguson, Niall. (1997). *Virtual history: Alternatives and counterfactuals*. London: Picador.

Fischer, David Hackett. (1970). *Historians' fallacies: Toward a logic of historical thought*, New York: Harper & Row.

Fisher, Stephanie. (2011). Playing with World War II: A small-scale study of learning in video games, *Loading... The Journal of the Canadian Game Studies Association*, 5(8), 71-89.

From Software. (2009). *Demon's Souls*. Tokyo, Japan: Atlus.

Gearbox Software. (2005). *Brothers in Arms: Road to Hill 30*. Paris, France: Ubisoft.

Hass, Jason. (2008). *Revolution*. Retrieved from <http://educationarcade.org/node/357>.

Infinity Ward. (2005). *Call of Duty 2*. Santa Monica, CA: Activision.

Juul, Jesper. (2005). *Half-real: Video games between real rules and fictional worlds*. Cambridge: MIT Press.

Kee, Kevin, Graham, Shawn, Dunae, Pat, & Lutz, John. (2009). Towards a theory of good history through gaming. *The Canadian Historical Review*, 90, 303-326.

Kingsepp, Eva. (2006). Immersive historicity in World War II digital games. *Human IT*, 8 (2), 60-89.

Martin, Rex. (1977). *Historical explanation: Re-enactment and practical inference*. Ithica: Cornell University Press.

MicroProse. (1991). *Sid Meier's Civilization*. Alameda, CA: MicroProse.

- Munslow, Alun. (2003). *ThenNewhHistory*. Toronto: Pearson Longman.
- Munslow, Alun. (2007). *Narrative and history*. New York: Palgrave MacMillan.
- Muzzy Lane (2009). *Making History II: The War of the World*. Retrieved from http://www.muzzylane.com/ml/making_history_edu_features
- O'Sullivan, Luke. (2006). Leon Goldstein and the epistemology of historical knowing. *History and Theory*, 45, 204-228.
- Rejack, Brian. (2007). Toward a virtual reenactment of history: Video games and the recreation of the past, *Rethinking History*, 11, 411-425.
- Sega WOW (2008). *Valkyria Chronicles* [Computer Software].
- Sommerseth, Hanna. (2007). Gamic realism: Player, perception and action in video game play. *Situated Play*, Proceedings from Digital Games Research Association Conference (Digra 2007), Tokyo, Japan.
- Squire, Kurt & Barab, Sasha. (2004). Replaying history: Engaging urban underserved students in learning world history through computer simulation games. Yasmin B. Kafai, Sandoval, William A., Enyedy, Noel (eds). Proceedings from the 6th International Conference on Learning Sciences, 505-512.
- Stueber, Karsten R. (2008). Reasons, generalizations, empathy and narratives: The epistemic structure of action explanation. *History and Theory*, 47, 31-43.
- University of Adelaide School of History & Politics.(2011). *Georgian London Project*, Retrieved from <http://www.hss.adelaide.edu.au/historypolitics/georgianlondon/>
- Whelchel, Aaron (2007). Using civilization simulation video games in the world history classroom. *World History Connected*, 4(2), 1-14.
- Wieder, Ben. (2011). Researcher's video game puts players in Japanese-American internment camps. *The Chronicle of Higher Education*, July 6. Retrieved from http://chronicle.com/blogs/wiredcampus/researchers-video-game-puts-players-in-japanese-internment-camps/31624?sid=wc&utm_source=wc&utm_medium=en