

Is Sid Meier's Civilization history?

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Despite the huge sales of various historical videogames (e.g. *Sid Meier's Civilization*, *Call of Duty*, *Assassin's Creed*) the discipline of history has shown surprisingly little interest in this new mode of historical expression. These videogames are perhaps the most popular contemporary histories, but there seems to be a perception of the form as unsuitable for consideration as a legitimate form of historical narrative. This article attempts to explore the videogame's legitimacy as a historical form. This is done by starting with Galloway's (2006) informatics critique of *Civilization*, which has serious implications for the videogame as a historical form. This is followed by evidence from both educators and players, which affirms that playing the game already constitutes a historical experience that ties into a larger historical discourse. Finally, by using a perspective that rethinks empiricism and written representationalism and that endorses a position that frees up intellectual space for the postmodern historian, this article attempts to address issues surrounding the suitability of the videogame as a historical form. This essay seeks to show that these are inherent 'flaws' attributable to history (which can be thought of as representation), rather than any particular form. This leads to an exploration of the similarities in the algorithmic process of creative construction of the game-based history to our other more traditional modes of history. By re-evaluating Galloway's work we are also rethinking empirical-analytical historical thinking and practice. Doing so allows us to begin to explore important questions about and affirm that the videogame can be a recognisable metonymic narrative device and thus a suitable form for history.

Keywords: videogame; history; Galloway; *Sid Meier's Civilization*; epistemology; narrative; representation

Introduction

Historical videogames¹ emergently² construct the 'past-as-history' (Munslow 2007) by presenting players with experiential narratives. In such narratives, the audience's role in its creation is not subsumed because it is, in fact, *the point*. This is a new form of, often immersive,³ history.⁴ Historical games are popular.⁵

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Despite this success, there has been little interest from history as a discipline. This is surprising given that historical videogames are some of the most successful contemporary popular histories and are obviously relevant to many.⁶ Games seem to constitute ‘neglected media’, by which I mean they ‘exhibit strong popular appeal and economic relevance, contrasted by a lack of cultural prestige and scientific coverage’ (Reichmuth and Werning 2006, 47).⁷ Resistance to serious consideration of the videogame is based on not only the specific content of contemporary products and their situated cultural role, but also the nature of the form itself. This is a similar attitude to that which dominated much of the debate concerning historical film,⁸ a questioning of the intrinsic suitability of the form for representation of the past in what is perceived to be *the* proper way. There is the inference that these newer digital forms are not suitable for the production and dissemination of what is understood to be (good) history.

Despite widespread objections to videogames as a mode for discourse, within the game studies community there is currently a research focus on ‘serious games’.⁹ As Apperley says, ‘The significance of movements like serious games, and game art, is the acknowledgment that digital games as a medium can convey messages, challenge ideas, and change lives’ (Apperley 2010, 132), seemingly indicating that the videogame is a suitable historical form. Sometimes, these game-based messages and challenging ideas are concerned with exploring (and creating) the meaning of the past by using references to construct digital-mimetic history story spaces and so we must naturally countenance the idea that videogames are recognisable metonymic devices, and accordingly that:

‘there is now another form of historical text, the computer game with historical reference and structure, that is both massively popular and also promises to change the ways in which history is received and consumed by a popular audience [...] history is already in play, played with and playfully (mis)represented (Atkins 2005).

The purpose of this article is to affirm precisely this by refuting the ‘informatics critique’ and the empirical-analytical approach to history that much of this critique is based upon.

Galloway’s informatics critique

This critique of games as systems of (historical) representation is found in *Gaming: Essays on Algorithmic Structure* (Galloway 2006, 85–106). Discussing this essay is necessary because Galloway’s analysis offers a serious obstacle to any understanding of digital games as a legitimate form of history. My argument is that the historian’s understanding of form alters the processes of construction/narration, which, of course, permits consideration of such discourses in the first place.

Galloway’s critique concentrates on *Sid Meier’s Civilization*¹⁰ series (Microprose 1991), which invites players to ‘Build an Empire to Stand the Test of Time’ (box art). In *Civilization* the player can take control of a particular civilisation (e.g. the English) in prehistory and attempt to guide them through a history filled with technological advances, diplomacy and warfare, and that

explores the path to ‘civilization’, leading eventually to the present day and slightly beyond. The games of the series have received critical and public acclaim and popularised the historical strategy genre.

Games can present us with historical worlds and challenges that are immersive and engaging, and adapt their presentation according to our decisions. This is because games are ‘procedural’, by which we mean the computers ‘defining ability to execute a series of rules’ (Murray 1997, 71). These ‘procedural environments are appealing to us not just because they exhibit rule-generated behavior but because we can induce the behavior’ (Murray 1997, 74): they are ‘participatory’. These two qualities are what we mean by interaction. Creating a digital text that can facilitate this interaction necessitates algorithmic structuring; this allows the videogame to express complex and multiple reactions to inputs (and thus the aesthetics of historical description). The informatics critique proposes that this algorithmic structuring inhibits the videogame’s ability to be meaningfully representational (i.e. mimetic). For Galloway, ‘the activity of gaming [...] is an *undivided* act wherein meaning and doing transpire in the same gamic gesture’ (Galloway 2006, 104).

‘The configurative, modulating elements of digital game play is [...] taken to mean that the coded algorithms contain all potential meanings, allowing no space for critical reflections, or engagements, with digital games’ (Apperley 2010, 133). Such a perspective rests on the core idea that the meaning of a game rests only in the object itself, because players must slavishly perform the actions required by the system until they have ‘internalized the logic of the program’ (Friedman 1999, 136), regardless of how this is situated within the games fiction, to effectively play and win, much like the empirical-analytical algorithm that prevents a recognition of videogames as a legitimate form for history.

‘Galloway argues, that digital games become “allegories” for the “control society” outlined by Gilles Deleuze in the essay “Postscript on Control Societies” [1995]. For Galloway, any notion of ideological critique is subsumed in the digital game’s reliance on the principles of informatics. Digital games represent information as manageable and quantifiable variables, and while the player has some flexibility in handling the variables of the game, this flexibility reflects the cultural shift to the society of control (Apperley 2010, 26).

For Galloway this ‘empties the ideology of the historical representation, as every factor becomes simply a variable or input into an algorithm’ (Apperley 2007, 10). He concludes:

the more one begins to think that *Civilization* is about a certain ideological interpretation of history (neoconservative, reactionary or what have you), or even that it creates a computer-generated “history effect,” the more one realizes that it is about the absence of history¹¹ altogether, or rather, the transcoding of history into specific mathematical models [...] “history” in *Civilization* is precisely the opposite of history (Galloway 2006, 102–3).¹²

As I shall explore, by subscribing to a particular controlling algorithm for ‘proper’ (i.e. empirical-analytical representationalist) history, which games

naturally do not align with, somewhat ironically, Galloway misses the fact that algorithm (as games) can be history (and that *Civilization* is actually a fairly empirical-analytical history).

Given the nature of the modern videogame we cannot always easily divide rules from fiction.¹³ Far from being separate, 'rules and fiction interact, compete, and complement each other' (Juul 2005, 163). This idea becomes even more significant when we are considering historical videogames and thus, precisely what it means when 'the player [...] experiences the game as a two way process where the fiction of the game cues him or her into understanding the rules of the game, and, again, the rules can cue the player to imagine the fictional world' (Juul 2005, 163). Both elements are integral to the production of historical (i.e. about the past) meanings through play, as the fictive¹⁴ world of the historical videogame is brought to life by action and these actions (and their limitations) are in turn constructed in line with and supported by its fictive context. So,

While in theory it is possible to split the ludic aspects of the game (those parts of the game - including rules, goals, chance, components, and winning or losing outcomes - that make it a game) from its representational aspects (the portrayal of the game world and its inhabitants), the emergence of the game, through play, involves a weaving together of these facets (Carr 2007, 225).

Subsequently, I believe the most effective form of analysis when examining historical videogames to be a 'functional ludo-narrativism that studies how the fictional world, realm of make-believe, relates to the playfield, space of agency' (Ryan 2006, 203). Such a perspective, unlike Galloway's, seeks to examine the interplays of both interaction (form) and historical context (content) that together allow videogames to function as history.

What I am proposing through this approach is that videogames are also recognisable metonymic narrative devices, with the developer making similar choices to those historians who write 'proper' history. Far from being a destructive process of eradicating the 'truth' of the past (which is, most likely, irretrievable anyway), the production of a videogame-based history (like any history) is a creative process, as meaning is produced even whilst a duty of care is given to the referential nature of the evidence. When Meier built *Civilization* he didn't erase or ignore the meaning of the past; like all the historians before him, he constituted it. This, of course, is in conflict with empirical-analytical written-representationalist assumptions that are the foundation for much of the informatics critique of *Civilization*, particularly the verticality of the book, which is assumed to be synonymous with history itself. Before exploring these ideas further, however, it is useful to spend a little time looking at the reactions of players.

Audience recognition of *Civilization-as-history*

Some researchers have lauded the capabilities of *Civilization* (for example see Squire 2004) in the classroom. Taylor (2003) found that integrating *Civilization II* into his 'Introduction to Modern World History' module helped students

understand *The Rise and Fall of Great Powers* (Kennedy 1987) and found the 'simulation to be a great way to represent the complexities of Kennedy's model in a dynamic, visible way' (Taylor 2003). Students 'overwhelmingly note[d] in their evaluations how it helps them "see and experience" Kennedy's arguments' (Taylor 2003). This relationship was seemingly reciprocal. As one student stated, 'the readings from Kennedy and Headrick¹⁵ were like having a help line for Civilization II' (Taylor 2003). For students and teacher, playing with this game was historically meaningful¹⁶ and produced intertextual historical narratives (found in both book and game). This is a simple but important point. In his seminal text *History on Film/Film on History*, Rosenstone constantly returns to a particular idea when seeking to outline that film can constitute history: 'the notion of seeing the history film in relation to the larger [historical] discourse is central to the argument' (Rosenstone 2006, 9). To these students playing *Civilization*, the relationship between Kennedy's narrative of Western history and the representational values of the algorithms and aesthetics of the simulation was firm and useable, these players did not only engage with a historical videogame but also the larger historical discourse to which it relates.

This intertextual relationship with established historical discourse is noted by other scholars. Atkins highlights how *Civilization* rewards the player for their historical knowledge drawn from outside sources, making it 'possible to play the game intuitively and with little monitoring of the plusses and minuses that effect data' (Atkins 2005). Poblocki outlines how the series puts forward the same theory of history as Huntington's *The Clash of Civilizations*, despite being released five years before the book. 'Although praise or criticism of the clash of civilizations thesis has usually been mailed to Huntington, it is Meier who was first, has more to say, and [...] seems more convincing' (Poblocki 2002, 163).

Further evidence of audience response to *Civilization* as history can be found in the communities of the Internet. The series is about more than just the sale of millions of copies, 'it means also dozens of fan websites, hundreds of volunteers from all over the world [...] working on open source clones of the game [...]'. To cut it short: *Civilization* is all-out enthusiasm' (Poblocki 2002, 163). In 2002 the Freeciv (an open source clone) website featured the slogan 'cause Civilization should be free'. *Pro bono* works by programmers such as this 'elevate this game to the position of a public good' (Poblocki 2002, 164). These volunteers believe that there is something important to be gained through engagement with such a text. Such a wealth of public enthusiasm is likely to be at least partially based on the game's historical, yet playful, representation. Indeed, Apperley (2007) has found that after-action reports from historical strategy players, though sometimes done by utilising technical rhetoric, often also take the form of a historically-contextualised fiction. For these players, the sights and sounds of the past-as-history, as well as the algorithms that represent its processes and allow play to occur, together create a resonant narrative, both constructed *and* referential, and thus undeniably historical. These players are not just playing a game, of which only the mechanistic aspect has meaning, they are emergently building

experimental, experiential and playful historical narratives. Naturally, the way in which they would recount their experiences would be using the same imaginative and referential domain.

The joy of such play is in its relationship to other narratives about the past. Accordingly, some player communities actively work to enhance the perceived historical fidelity of the games simulation by rewriting elements of the games code and distributing the alterations as modifications (mods) for download. Fan forum 'Vojska.net, based in Croatia, has advocated serious changes to the map of the Balkans in *Europa Universalis II*, to have provinces boundaries drawn in a historically authentic manner' (Apperley 2007, 16). The forum eventually redesigned the map and distributed it as a mod. The construction and popularity of these mods show that the videogame histories' relation to the wider historiography is considered significant enough to revise. Mod creators can change time-frames, maps and even create original scenarios and objects/agents. Sometimes they even reject some developer interpretations as to the causal factors of history (as communicated through the game's ludic structures) as irrelevant or unconvincing and alter the balance of these factors, even removing some of them entirely. These modders are a new, albeit digital, wave of popular history revisionists.

Often this concern for the larger historical discourse entails players setting each other goals that do not align with the prescribed 'win conditions' of the game, but that better reflect particular historical concerns, questions and interpretations. Apperley (2007) found that players of *Europa Universalis II* (Paradox Interactive 2001) often set each other challenges, such as only colonising the countries that were actually colonised by their chosen nation in the course of their play. Often these goals may be counter-historical, such as 'retaining control of Zanzibar if playing as Oman' (Apperley 2007, 4; the colony was actually lost to the British Empire). Always the joy of such challenges are situated in their comparison to the wider historical discourse, it is only this that allows the thrill of 'what if' to be so gratifying.

These goals that we term extra-telic (not intrinsic to the game itself) and fan modifications indicate that to many of the fans of these historical strategy games, playing *Civilization* is about playing with the past-as-history. So much so that the experience is enriched by changing the boundaries of play and the particular history in relation to a larger historical discourse. This has fairly severe consequences for the 'grip' of control over the player, which thinking such as Galloway's suggests. When players alter the game in these ways, much of the logic of the system is discarded and play is done precisely on the basis of the game's historical representation. The will to reach desirable historical conclusions outweighs the desire to reach the logical conclusion of the game's algorithmic system. The algorithmic code of videogames does not prevent them functioning as history, it merely allows players different ways to explore representations of the past because it 'supports styles of play [and in these cases historying] that utilize the algorithm to execute their own exploration of

ideology; by either learning the pattern of the algorithm, or by creating their own variances within it by altering the code' (Apperley 2007, 10).

It is this constant interplay between the socio-historic setting of play(er) and the setting of the videogame, the ability of the historical videogame to allow the player to engage in terms of their own historical understanding, that most highlights that the meaning of play can indeed be a rich representational process rather than only a series of actions with no mimetic aspect (Genette 1983). The subjectivities of audiences mean we cannot make universal claims about what the meaning of a text is and this is further emphasised in the modern videogame, which requires actualised configuration (see Note 2) and so is even more uncertain. However, what is clear is that the intertextual historical understanding and enthusiasm with which *Civilization* is greeted by these students and fans indicates that for these players, *Civilization* is history because it is a text that allows playful engagement with, connects to and produces discourse about the past.

The videogame-as-history

If we accept that history is a narrative-making pursuit, then play with historical videogames is a diegetic activity. Indeed, the simple markers that we would expect to see within any history, regardless of form, are all present in the historical videogame. Firstly, at its most basic, 'historical narrative is always built on blocks of verifiable data' (Rosenstone 2006, 161). Historical videogames typically have large information loads of such data. For instance, *Assassins Creed 2* (Ubisoft Montreal 2009), a historical action-adventure game set in renaissance Italy, features fantastic recreations of cities such as Venice and Florence that show a great fidelity to the artefacts of the past in terms of architecture, clothing, weaponry, art and the whole raft of other objects that constitute the physical evidence of the past. In *Civilization*, we find that though it 'might play fast and loose with historical detail [. . .] it nevertheless remains almost overwhelmed by historical references to peoples, leaders, events and cultural achievements' (Atkins 2005). The aesthetics of the videogame often contain a vast amount of data and, accordingly, have a comparable (though different) information load to history in literary form. Further information about these replicated historical objects is easily included due to the multiple possible semiotic modes through which the videogame can operate. Often this means that particular objects or practices are explained through supporting documents that are accessed context-specifically intra-ludically or extraneously through a menu system. Either way, what is important to note is the effort to include secondary sources. Sometimes games may even include (copies of) the primary sources themselves, most commonly in the form of pictures, photographs, documents, videos and, as aforementioned, the virtual replicas of the environment.

The presence of these elements seems to indicate that, like other histories, historical videogames are referential. In addition, the games developers/historians

seek to arrange these pieces of referential data (with supporting explanation) to produce meaning: the beginnings of narrative construction. Whilst supporting documents, dialogue and cutscenes¹⁷ are important, the majority of the meanings about the past are constructed by deciding who/what will populate the game space (i.e. evidence selection) and how they/it will (inter)act (i.e. emplotment and agent intentionality), thus producing a specific spatio-temporal setting for play to take place within. Similarly, decisions regarding the actions that will be allowed to be taken by and constrictions that will apply to the player, the 'affordances' of the environment (Gibson 1986), are a huge part of meaning-making in this type of history.¹⁸ Each of these decisions, whether implemented through more traditional narrative techniques or the newer digital ludics, contribute to the construction of a history that includes sights, sounds, processes, practices and, naturally, ideology in its representation and, in short, brings 'movement, colour, sound, and drama to the past' (Rosenstone 2006, 37). Narrative-making decisions about emplotment, tense, focalization, timing, duration, frequency, intentionality and so forth are still made, but this is done by using algorithm to control the various actions and audio-visual elements that allow for historical narratives to be experienced through play instead of (or as well as) words or film. Simply, evidence is arranged into a series of procedural processes that allow the invention of meaning and therefore produce a historical experience when interacted with. Each of the above decisions are of course ones of digital design but they also and at the same time constitute the normal range of aesthetic decisions that seek to arrange reference into narrative and produce meaningful discourse. For instance, when a developer makes the decision that their historical game will feature what I term a 'realist simulation' (i.e. the physics, audio-visual design, and rules will show a high degree of fidelity to the world we know), they are, simultaneously, often probably unconsciously, making the first epistemological decision about the approach that the game will take to the evidence of and its eventual claims to the past. For instance, most historical videogames that feature a realist simulation use a 'reconstructionist' (Munslow 2007) epistemology.

Further evidence for the familiarity of this fictive process of narrative construction (as well as for the complexity of these games representations) is found in the fact that these historical videogames are already capable of producing competing narratives, as developers/historians utilise the same basic sources, yet arrive at different conclusions about their relative importance and arrangement (just like written history), in depicting the past through play. *Civilization* has an often distinctly different and even competing view of Western history in causal theory, scope, tone and ideology to the historical strategy *Europa Universalis*, despite utilising many of the same referents and themes. The fact that such a comparative discourse can exist is because videogames are playful, referential, yet constructed historical texts.

Whilst the pressures upon the developer/historian may, like most public histories, involve creating an entertaining *and* informative text, as well as the

particular demands that the form itself makes, we can still conclude along with Rosenstone that,

the familiar, solid world of history on the page and the equally familiar but more ephemeral world history on the screen are similar in at least two ways: they refer to actual events, moments and movements from the past, and at the same time they partake of the unreal and the fictional, since both are made out of sets of conventions we have developed for talking about where we human beings have come from (Rosenstone 2006, 2).

As aforementioned, I am proposing that historical videogames are recognisable metonymic narrative devices that are created by a developer making authorial choices, like those made by historians who write 'proper' history. In the majority of articles that analyse *Civilization*, there is a sense that it is generally understood that in the creation of this game-based history, decisions as to the meaning of the historical evidence, in light of Meier's perspective on Western progression, were made and implemented through algorithm, probably not 'blunt propaganda but instead Althusserian unconscious manifestations of cultural claims, of which Meier may well not be aware' (Poblocki 2002, 164). Interestingly, despite these conclusions as to the constructed nature of the past-as-history, in some work on the series there is the sense (similar to that which Galloway has) that this is because *Civilization* is a game rather than a history and therefore is incapable of proper historical objectivity. It seems that forgoing the empirical-analytical representationalist assumptions about the past is easier for some critics when confronted with a new form, but that this does nothing to confront the same epistemic claims upheld in 'proper' written history.

Regardless, the historical evidence of *Civilization*, as in any history, is arranged to produce meaning. Whether the criteria for such decisions is formed reflexively is largely irrelevant in the current context: unconscious histories, whilst epistemologically undesirable, are of course still narratives about the past. Given that narrative can be understood as the 'fashioning of human experience into a form assimilable to structures of meaning' (White 1980, 5), the proposition that the historical videogame is a diegetic mode is hardly new thinking. Regardless, facing the claim that the format is less suited to, or, worse, incapable of, depicting the past-as-history and therefore producing historical meaning, outlining it in this specific context is evidently still necessary. Unlike Galloway's interpretation of *Civilization*, which is situated at an unrealistically removed theoretical level from the actual playing of the game and incongruous with the gameplay experiences, analysis and market responses discussed here, history as 'structures of meaning [that] are potent in direct relation to the effects they have on the lives of ordinary people' (Munslow 2007, 73), seems a much more suitable explanation as to what we are engaging with when we play such videogames.

If these videogames are indeed referential, their narratives are 'subject to content/story, narrating/narration and mode of expression choices just like any other manufactured, cultural artefact' (Munslow 2007, 68), and they are received by their audience as meaningful texts that talk about a shared past and therefore

relate to a wider cultural context; it becomes increasingly difficult to deny their status as a legitimate form of historical narrative. Even Galloway, who sees identity in *Civilization* as nothing more than 'a data type, a mathematical variable' (Galloway 2006, 102), seems to sense that algorithmic construction of *Civilization* is based on historical evidence. As he notes, 'the construction of identity in *Civilization* gains momentum from offline racial typing' (Galloway 2006, 102); however, he underestimates the importance of this dynamic in the construction of much of the game's representation. This is probably because he fails to explore (understandably given his focus) the epistemic point: that when the historian uses the evidence of the past, within any form, to produce meaning, it is always a process of aesthetic and ideological decision making, all the while influenced by the necessities of the format as well as a multitude of outside pressures (often including the demands of its audience). Galloway senses the loss of 'history' in the construction of these algorithmic systems. I propose that what he actually senses is the normal loss of the past. Simple statements or figures of data may be truthful and verifiable, but as soon as we try to arrange them into a narrative using the words of literature, the cinematography of film or the algorithms of the videogame, we also begin to *construct* meaning.

Games as 'less' than history

Galloway's judgement about *Civilization*'s shortcomings as a history are clearly made in comparison to something he considers 'more history', likely academic literature. This is an epistemologically-flawed assumption based on biased ideas about what constitutes 'proper' history and is therefore more capable of uncovering and communicating truth, and rests on empirical-analytical conclusions that ignore the nature of history as a narrative undertaking (rather than the process of recovering the past). This often (as in this case) leads to the conclusion that literature is the only form sufficiently able to convey the complexities of *the* story, rather than multiple media being able to produce different understandings by telling *a* story, according to the strengths and necessities of the particular mode of expression as well as the choices of the historian. Popular and newer media forms are often aligned in opposition to academic literature as unable to properly explore the meanings of the past. This is also often compounded with a further confusion between the achievements or failures of particular popular-history products and the mode of expression through which they are narrated. In actuality most of the flaws are not in the particular forms we use to explore ideas about the past but in the epistemological understanding of 'history' itself. Ignorance of key postmodernist ideas¹⁹ naturally leads to the construction of a hierarchy of modes based on judgements as to the suitability of history as a practice to particular forms (ignoring the consideration that history never exists as a pure object removed from form).

As noted above, much of the logic of the informatics critique demonstrates such ignorance. Like all modes, the videogame (as both form and product) brings

its own pressures to the way in which narratives about the past are constructed. 'These factors cannot help but clash on some levels but it is a tension that is easy to exaggerate if compared to more linear texts such as history books [...] Games cannot, and do not try to compete' (MacCallum-Stewart 2007, 205), instead they offer different ways to produce, receive and explore the past-as-history.

The assumption that the verticality of the book is akin to history is problematic. This misses the point that perhaps if the logic of horizontality of the videogame is built from a centre point of historical evidence (or more accurately is built according to and entwined around, a most likely inter-textual, constructed, cultural horizontality that already exists), it can offer competing and emergent interpretation and algorithmic interplay; the historical videogame, whilst not echoing the specificity, linearity and claims of its literary counterparts, is still *a* history. To expect this to be the history we find in books, given the different meaning-producing structures, is clearly problematic. Judgments of inferiority/superiority are far too simplistic and increasingly unstable in the light of postmodernism. These hierarchical notions are flawed because they ignore the obvious supposition that for videogames (as well as the wealth of other forms) 'the rules of engagement of their works with the stuff of the past are and must be different from those that govern written history' (Rosenstone 2006, 8). Thus, though often they may claim otherwise, 'a developer's goal is not to capture reality as it is, or as it was expressed in the text, but rather as it can be interpreted in a game' (Kee and Bachynski 2009, 3). Each form constitutes both a pressure and a valuable expressive toolset in the creation of narratives concerning the past and each does so, perhaps no better or worse than the other, but certainly differently.

Somewhat ironically, *Civilization* is actually an empirical history. Galloway outlines how the game seeks to enforce absolute principles by formalising the variables and subjectivities of the past to the point at which it is no longer history; in fact, the game merely aligns with other empirical-analytical histories. Perhaps, far from expecting too little of games, Galloway expects too much of history. If so, what he senses is not the flaws of the videogame in particular but the increasingly apparent failings in the claims of empiricism as to the retrievable nature of the past. The fault may not lie with the form but with the much larger conceptual domain of our traditionally upheld epistemic approaches. Acknowledging this epistemology at work in *Civilization* does nothing to suggest that algorithms could not be used to produce histories constructed on a different (perhaps multi-sceptic) theoretical basis. Indeed, the intrinsic nature of the videogame as audience-led playful text means that the grip of empiricism in this medium may already place less demands over meaning than in other forms.

Transcoding the past

In new media language, to 'transcode' something is to translate it into another format. In historical terms this is easily understandable as 'history' never tangibly

stands alone as an unmediated object, and this process of transcoding is a part (or perhaps even the creative entirety) of history as a practice. When Galloway states that 'The modelling of history in computer code, even using Meier's sophisticated algorithms, can only ever be a reductive exercise of capture and transcoding' (Galloway 2006, 103) he is right. However, what he does not account for is that this is because history is *always* a reductive exercise of capturing the evidence of the past and transcoding it into an assimilable narrative through the particular semiotic channels and codes of the form and the particular structures that this entails (in this case algorithm). Galloway is right in that this process of transcoding does realise an absence, however this is not of history but of the past.

History is an enterprise that necessitates selection (E. H. Carr 1961). The story space in which the narrative is produced (and in the case of videogames received) is a construct that is built by the historian, and this includes the process of selecting evidence. At its simplest, this entails deciding who, where, what and when will be included. This is before considering even more complex questions such as why and how. As soon as causal explanation becomes a consideration in the construction of the narrative space, determination about the boundaries (and meaning) of the constructed causal nexus must be made. These decisions, whilst not arbitrary, are nonetheless subjective. For any considered event, it is apparent that the causes are 'an infinite chain spreading backwards and outwards which you somehow have to cut into despite the fact that no method (and no amount of experience) can provide you with any logical or definitive cut in (or "cut out") points in order to give a sufficient and necessary explanation' (Jenkins 1991, 63).

In history it is the necessity to make such decisions and define the boundaries of the story that means that this is a mimetic space. 'Imitation [mimesis] always involves selecting something from the continuum of experience, thus giving boundaries to what really has no beginning or end' (Davis 1992, 3). This accepts the discrepancy between reality and representation, and though mimesis is imitative (particularly given the referential nature of history), we can never properly imitate. Thus 'mimesis translates as the emplotment of it [history] (defined as the narrative organisation of human action) and not just an imitation of the past (as data)' (Munslow 2007, 37). The concept of mimesis is, then, integral to any understanding of the narrative-making logic of history. This is perhaps even more pertinent when considering the dual nature of videogame history, which is simultaneously both a history and an interactive digital *simulation*, a historical narrative that must be enacted (these two aspects are also often likely to be overdeterminate). Both form and content are an 'imitative substitution of human action' (Munslow 2007, 37); after all, '*simulation* [...] is perhaps the best translation of the Greek *mimesis*' (Genette 1983, 15). Accordingly, every game that is simulative (as, due to the above noted imitative but substitutive nature of history, all historical videogames must be) is mimetic.

When the developer writes an algorithm (which, like its historical subject, is inherently dependent on causal relationships) to represent a particular

relationship between historical data, the same process, in terms of its attempts to produce meaning by the arrangement of the evidence of the past into a narrative construct, is at play as in any history, in any mode. Thus, the historical videogame, like its peers, is both diegetic and mimetic. Neither is a category that can capture reality, historical narrative is formed within the story space, and 'everything in the story space creation process is a simulation based on the notion of *mimesis*, where art imitates (note: not corresponds to) reality' (Munslow 2007, 24). In the historical videogame this simulation becomes a virtual digital mimetic space in which the narrative can be formed emergently. Thus, as Carr notes, whilst Galloway may be right that the 'historical trajectory modelled by *Civ III* is certainly reductive [...] criticising a simulation for being reductive is nonsensical [...] endnote ...] That would be like disparaging a map for not being life-size' (Carr 2007, 234, endnote 6). What Carr does not emphasise is that this intrinsic flaw in representation is not inherent to the digital simulation alone but to all simulation (i.e. *mimesis*). This is of course a key debate in history but in no way specifically challenges the videogame's (or indeed any forms) ability to produce historical narratives, which we acknowledge as pertaining to, but never recovering, an actual past. Conversely, this alignment in epistemic flaws actually confirms the historical videogame's representationalist status. *Civilization* is not only reductionist because it is a simulative game but because it is a history, a mimetic cultural product.²⁰

The historian's creative conception of the past (their story space) is always transcoded into a format quite unlike that in which it was conceived, a process that, like the transcoding of the evidence of the past into the historian's interpretation in the first place, necessitates a process of both loss and creation, whilst maintaining (or more likely producing) a meaningful discursive relation to the object/process/person it attempts to represent (and of course the reader/player). Of course, each of these steps in the production of history are in reality not so separate and distinct, nor is it a unidirectional process. History as a practice is always fluid and evidence does not exist as an entity separate to its perception by human thought. However, the point is made that transcoding is always a part of production (and most likely reception) that always involves a necessary loss (and indeed a gain), and this process can never necessitate the destruction of 'history' because creative transcoding is precisely the historian's task.

If we accept that history as a mimetic process is the figurative imitation of human action, then we must accept that this naturally involves a metonymic process, whereby 'some "thing" stands in for another "thing"' (Munslow 2007, 52). Naturally, we would then expect transcoding in the construction of the videogame, as with any mimetic text. In this process the historical game (or film, documentary, etc.) is like a written work, in that it 'is based upon data, but the totality of its words transcend that data and launch into a realm of moral argument and metaphor' (Rosenstone 2006, 163). The fact that in the videogame this is done through algorithm instead of words is, I would argue, of little consequence in terms of hindering *mimesis* and does not therefore indicate some kind of representational

incapacity. Whilst algorithms are currently a somewhat unfamiliar representational tool, in games such as *Civilization* they are clearly functioning as historical *signifiers* (both audio-visual and procedural), and this is evident by the clear understanding of the player-audience of the *signified* and the transference of this knowledge between different forms that concentrate on similar historical discourses. The raw data of the past has ‘no utility until it is *encoded* and given meaning (a signification) in an explanatory narrative’ (Munslow 2007, 84). In the videogame this entails algorithmic coding and this in its key historical context differs little from the more familiar but probably no less transformative (though different) structures of cinema or literature. Real time is harnessed and understood by a turn to narrative, as within any history. Specifically within the historical videogame, this eventually unfolds into play-time.

The production (and reception) of history is always one of creative construction and encoded abstraction and it is this normal rupture between reality and representation that Galloway (and empirical-analytical epistemology) misses. The construction of digital simulations can give the impression of ‘systematic scientific work [that] seeks to quantify, measure, and control the world, drawing it further away from human experience’ (Bogost 2006, 7); however, in actuality, like all mimetic constructs and practices, ‘what simulation games create are *biased, non-objective* modes of expression that cannot escape the grasp of subjectivity and ideology’ (Bogost 2006, 99). A misunderstanding of the nature of history when approaching the videogame as historical form creates a concentration on the homogeneity of the code to the point of ignoring its wider cultural context in both play and construction. For instance, the transcoding of raw historical data into algorithms entails ascribing relative values to the historical referents (i.e. ‘historical judgement’). This to Galloway means a process of quantification that necessitates the destruction of the initial cultural momentum to construction. However, a slight change of perspective according to the ideas explored here and we can recognise this process as an early form of digital troping, which can be understood as ‘a basic human intellectual faculty through which we ascribe meaning to events (past and present) in terms of similarity or difference’ (Munslow 2007, 35). In fact, the cause and effect structuring of the algorithm makes it a very natural metonymic device and thus, arguably, suited to the creation of histories. Player-actions and their corresponding procedures are given form and meaning through algorithm, as is the structuring, presentation and even creation of the various audio-visual elements that the typical modern videogame includes. It is this dynamic interaction that allows historical videogames to represent past actions, processes, sights, sounds and ideas, both figuratively or more literally, through present enactment.

In fact, algorithm seems a representational tool well suited to history if, as Kracauer suggests, history is the process of organising our life world, which, as he says, is ‘for long stretches inchoate, heterogeneous, obscure’ (Kracauer 1969, 46–47). Algorithm in the modern videogame, like (and sometimes as) history, attempts to make clear the inchoate, to establish the causal and thus eradicate

heterogeneity and make formally apparent the obscure. Both simulative algorithm and history are the practices of formalising data into causal and mimetic structures to create meaning. It is only natural that algorithm (as well as the multiple audio-visual elements that support it) be a capable tool in the production of history. History is always a process of formalising the elusive, trying to represent real time through narrative time, and in this the videogame mode is no different. In this light, for videogames to be the only text that unalterably destroys their own representational capacity by encoding the data of the past into a recognisable narrative structure seems very unlikely. Civilization is indeed reductionist and does indeed transcode, but this is precisely because it *is* history and thus is a mimetic cultural product that entails the narrative organisation (and loss) of the past.

The language of the algorithm is currently less advanced than our other forms, unsurprising given the youth of the medium in comparison to film and literature. Accordingly, so too is the development of the form's conventions (particularly its interactive aspect) and our understanding of encoding (as developer) and decoding (as player) meanings in this way. However, the development of these will enable increasingly complex 'procedural rhetoric' (Bogost 2007) to be produced and received. Likewise, the sometimes simplistic representations that we find in these historical videogames can be attributed to their current cultural and economic role. However, each of these factors says nothing about the mode's eventual (or even current) limitations in terms of representation (which will probably one day rival that of cinema or literature). Acceptance of this leaves *Civilization* open to criticism on the basis of reproducing 'models of social change well known, and extensively criticized, in twentieth-century social science' (Poblocki 2002, 164), but certainly not the videogame form for being non-mimetic. *Civilization* is hardly the first history to face criticism on the basis of being outdated and naïve in its sociological, ideological or epistemological assumptions; indeed, the fact that such a criticism can be levelled at the game indicates its status as history.

Conclusion

There are many complex questions to be asked and answered about how the videogame form can work as a historical mode of expression. These questions, however, are, as noted, dependent on an acceptance of the videogame as a valid mode of expression for historical narrative, an argument for which has been the purpose of this article. This validity is based on accepting, in opposition to Galloway's claims, that these games are not incapable of being or may already be considered history. I have sought to refute the informatics critique that seeks to deny the very possibility of game-based history, because this helps us begin to think about the relationship between algorithm and historical representation. This has been done by explaining that the normal markers of historical narrative are present in *Civilization* and that the 'problems' that Galloway notes as affecting

this representational ability are in fact normal epistemic flaws/concerns that in themselves affirm the game's status as history. Galloway's argument rests on the ideas that because games are algorithmic they quantify, transcode and reduce data too much to represent the past; actually they do this because they are representations and thus inherently 'flawed'. Similarly, much of the control that Galloway senses lies not in the game's coded algorithms, but in the construction of and his interpretation of *Civilization* (and history) according to an empirical-analytical representationalist algorithm. This naturally creates histories that are controlling systems within which the player/reader has limited agency.

Critiques such as Galloway's, which focus on the ludic structures and ignore the fictive aspect of digital play, can reach valid conclusions, but these will only ever be partial and ignore the actual everyday experiences of the audience and their play. This problematic primacy in Galloway's critique springs from an interchangeable usage of the concepts of 'game' (understood to be a formal ludic system) and the 'modern videogame' (as a widespread cultural product). Such an ontological inconsistency allows the discounting of the other supporting structures that are included in the modern historical videogame besides rules (such as audio-visual data) that often entail 'reading' as well as action. It is clear that in most modern videogames there is much meaning that is not conveyed in the ludic semiotic channel, and in the creation of history there is always an intertwining with and dependence, between the ludic and fictive elements.

That these games are referential is very evident from the vast amount of data contained within their simulations. They are producing representations that their users recognise as history and are engaging with a wider historical discourse, and we can tell this from the historical language, modifications and understood intertextual relation between the game's representation and other historical narratives that students and historical-strategy communities display. Approaching the historical videogame from the historian's perspective allows us to allay many concerns and criticisms by showing that these are epistemic issues that are inherent to history rather than the videogame.

This perspective allows a recognition of some of the familiar elements we would expect to find in any historical, and thus mimetic, text, even if these are constructed by using unfamiliar (though often familiar outcome-producing) meaning structures, such as algorithm. Accordingly, we can conclude that whilst one of the many possible meanings of play with *Civilization* may indeed be as an allegory for control society with little historical meaning, there are also rich opportunities for play *within* and *with* history. Algorithm can be a valid tool for expressing the meaning of the evidence of the past by creating active ludic relationships that function to transcode interpretations of human experience into (emergent-narrative) meaning structures. These digital simulations allow for the detail, 'colour and movement' of the other visual media, but also combine this with an interactive aspect that necessitates, actualises and structures audience involvement and allows for ideas about past processes and actions to be explored, appropriately, experientially. In this way, games already offer a layer of

information that the literary and visual media cannot, allowing for the values ascribed to the objects and institutions of the past to be understood in new ways by seeing (and partaking in) their interplays and experiencing rule structures that allows these inter-relations to be actively extricated. Historical videogames as form, content, and of course eventual practice, accept, emphasise and allow us to explore the idea that ‘we can never really know the past, but can only continually play with, reconfigure, and try to make meaning out of the traces it has left behind’ (Rosenstone 2006, 164). This new medium is already impressing upon popular cultural memory, and we as historians must now begin to explore how this is occurring and how we can use it to produce (and understand) historical narratives that tap into the immersive, experiential, exciting and engaging (in short, playful) qualities that the videogame exemplifies. What I hope this article begins to emphasise is what Niall Ferguson expressed in a recent article in *New York Magazine*:

Gaming history is not a crass attempt to make the subject relevant to today’s kids. Rather it’s an attempt to revitalize history with the kind of technology that kids have pioneered. And why not? After all, the Game Boy generation is growing up. And, as they seek a deeper understanding of the world we live in, they may not turn first to the bookshelves. They may demand to play – or rather replay – the great game of history for themselves (Ferguson, ‘How to Win a War’, *New York Magazine*, October 15, 2006).

Let us play, and perhaps in doing so find that in ‘the great game of history’ the control pad (or mouse and keyboard) may yet serve as an alternative to the pen.

Notes

1. It is important to define the term ‘historical videogame’. Within almost any genre of videogame there are examples that we could delineate as historical, ‘Thus we wish to define a historical game outside the parameters of “activity” (shoot, manage, take a turn), and within that of its world setting’ (Macallum-Stewart 2007, 204). Accordingly, I define the historical videogame as those that, through digital-virtual referential mimesis, bring ‘the past-as-history’ to narrative life by asking and allowing us to experience and explore its sounds, sights and processes and requiring us to make decisions about and within that constructed past-as-history. Whether we talk about the strategy, first-person shooter, action-adventure, role-playing, or even racing genres, each can be a historical game, and we define it by its attempts to explore the past in a similar (but still different) manner to that which we would recognise from more established ‘modes of expression’ (Munslow 2007). It is also important to note the ontological distinction between ‘game’ (understood to be a formal ludic system) and the ‘modern videogame’ (as a widespread cultural product), though of course the two are heavily related.
2. When speaking of the videogame’s ‘emergent’ quality, we refer to the active configuration of the uncertain text by the player. This goes quite beyond the audience participation suggested by the concept of the active reader or viewer and refers to an actualised playful process of decision-making that decides the eventual form the particular text takes from multiple possible combinations.
3. ‘Immersiveness’ is of course a loaded quality for histories. Too little and we may lose a popular audience and the imaginative aspect of history that popular forms

emphasize so well, too much and we risk losing the critical detachment that fosters reflexive thinking in an audience. What is confusing is that the academic literary text is seen to rise above the 'dangers' of immersivity, but this is a fallacy (given the narrative status of history). Whilst, accordingly, all history relies on some level of 'immersiveness', games such as *Call of Duty*, which are (as well as agon) mimicry games (Caillois 1958), necessarily emphasise this aspect. An exploration of immersion in videogame-based history (and how play affects this) can be found in my previous work (Chapman 2010, 475).

4. It is worth noting before going any further my working definition of history as the practice of weaving a narrative representation, with the intention of producing meaning about the past. This type of narrative is separated from its fictional counterparts in that one of the many elements in its creation is the historian's interpretation of evidence. However, because it is a narrative text, it is, by definition, ontologically distinct from the past and its sources. 'History' also refers to the text itself, the process of narration, and, thus, reception and the discourse that surrounds texts of this type. Such a definition is intended to question and confront notions such as 'truth', which is as much (perhaps even more) aesthetic as evidential, and 'proper history' (normally perceived to be empirical-analytical and written representation-alist), and instead embraces the universal narrative aspect of history in *all* forms and cultural roles. Such an idea of history naturally makes it an inclusive practice that denies traditionally-defined ideas in favour of a consideration of all those that produce (and to some extent, actively receive) discourse about the past as 'historians'. Accordingly, all texts that are referential narratives about the past are legitimate, in the sense that they *are* histories and construct the past-as-history without being able to reconstruct the actual past. Interpreting legitimacy as based on any more than this relies on judgements about 'good' or 'bad' history that infers ideas about comparative truthfulness, and particularly that history done 'properly' can offer more access to the past than those that aren't, comparisons that are naturally uncomfortable to any postmodernist. As such when I speak of the videogame as a legitimate mode of expression I merely refer to its capability to function as a meaning-producing and referential narrative representation of the past. Such a definition obviously owes a lot to a number of historical theorists, but chief amongst these in terms of my direct interaction with their work are Rosenstone, White and Munslow.
5. The recent World War 2 first-person shooter *Call of Duty: World at War* (Treyarch 2008) sold over 11 million copies.
6. In the sense that there is obviously some satisfaction to be had from these representations of the past. The exact nature of this gratification (or at least acceptance) is a complex issue, but it is likely to be based on perceptions of 'believability' or 'truthfulness', i.e. offering unmediated access to the past (though this is of course impossible), relevance to modern discourse (and sentiment) and, of course, entertainment.
7. There are many possible explanations for this to be found in the particular cultural history of the medium. I attempted to explore some of these factors in my recent paper 'Playfully Popular: Studying a Neglected Media', given at the 2011 'Theorising the Popular' conference at Liverpool Hope University.
8. For an excellent discourse involving these concerns surrounding historical film see Rosenstone (2006).
9. By which it is commonly taken to mean games that have a specific (usually political, satirical, industrial or educational) purpose other than entertainment.
10. Although Galloway specifically talks about *Civilization III*, the discourse is applicable to any game in the long running series.

11. Whilst this is explored in greater detail in the later sections, it is useful to note at this point Galloway's assumption that 'history' is synonymous with 'the past'.
12. Galloway's conclusion does not merely rest on a case-specific logic and he adds that a more progressive version of the game (*Civilization*) would 'beg the same critique [... as] the logic of informatics and horizontality is privileged over the logic of ideology and verticality in this game, as it most likely is in all video games to varying degrees' (Galloway 2006, 103).
13. Though obviously 'fiction' is a troubling term, especially given history's status as fictive (see below), here it is used to mean the elements of the game that represent and often give meaning to actions within the game-world but are not obviously action-supporting rules themselves (e.g. the 'sky' of a realist simulation).
14. History's reference to the agreed facts of the past means that it cannot be equated with fiction; however, because history is a narrative undertaking and therefore imaginatively organised, it is authored and thus best described as 'fictive', neither fiction nor truth (Munslow 2007).
15. Headrick's *Tools of Empire* (Headrick 1981) was another text used on the course.
16. Due to the demands of space this is a small sample of evidence from only two sources. However, further examples of *Civilization*'s usage in education (and the students' recognition of it as historical text) can be found in the excellent articles at <http://www.insidehighered.com/news/2005/11/28/civ> and Firaxis' own site <http://www.firaxis.com/community/teachers-spk.php> Perhaps the most convincing piece of evidence for this, Kurt Squire's excellent dissertation on the usage of *Civilization III* in the classroom, can be accessed at <http://website.education.wisc.edu/kdsquire/dissertation.html>
17. A cutscene is a video sequence in which the player normally has no, or limited, control. These sequences are often used to drive plot and characterisation without the complexities of doing this within an actual play moment.
18. Allowing the player to use a historical object or see another character do so, engage with historical dialogue, or see the geographical context of particular architecture through their own spatial exploration are basic examples of this.
19. Most importantly, this includes the ignorance of the ideas surrounding history as a fictive narrative undertaking, that this is the nature of human temporal understanding, indeed perhaps even the *a priori* form of cognition (Bruner 1986), and that this applies regardless of the particular mode of expression that is used.
20. Galloway's judgement about *Civilization* is clearly based on concerns about the structures of the mode itself. Such a critique of the videogame is flawed in the ways noted above. However, there is also a much simpler point to be made: much of the particular tone and content of *Civilization* is not determined by its form but by the social positioning of it as a populist product, and Galloway seemingly confuses these two aspects in his concern with reductionism. If we, then, make a fairer comparison between *Civilization* and its actual public history contemporaries, the popular historical film or documentary rather than academic literature, we find that the videogame provides a similarly historical experience. Each of these mainstream products must bow to commercial pressures in order to be both commissioned and received, obviously this means they must be informative yet be understandable to their target audiences and, most importantly, they must be entertaining. Accordingly, it is probable that much of the simplification that the game uses in its historical themes is not a modic concern but a commercial one. Of course the public history will choose exciting pieces of evidence and may attempt to cover large periods of time or many events shallowly, rather than concentrating solely and in depth on a particular area, as those involved in professional historiography may. For instance, David Starkey's successful *Monarchy* series takes a macro view of British royal

history, so much so that he covers the European Reformation in less than two minutes and the entire English reformation in around 15. This does not mean that the programme did not however, serve its purpose, and indeed it is typical of a genre that most often attempts to provide an exciting and engaging overview to captivate and hopefully inspire further historical investigation in its audience. With the nature of these public histories in mind, by comparison, the huge wealth of historical detail in *Civilization* is rather impressive.

Notes on contributor

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