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MAKING WORLDS HISTORICAL: THE POLITICAL AESTHETICS OF SID MEIER'S *CIVILIZATION* SERIES

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Broadly speaking – and certainly in the constructivist terms of Nelson Goodman's *Ways of Worldmaking* (1992), which forms the theoretical backbone of this volume – every computer game produces "a world to be explored" (Kücklich 2003: n. p.). Sid Meier's *Civilization*, however, does so even more conspicuously than most. Its various and ever more sophisticated instalments – after two official expansion packs, part four of the series has just been supplemented by the spin-off *Colonization* – are all best-selling examples of the so-called world-builder genre.¹ The 'world-building' in question takes place on two different, if closely related, levels. There is, firstly, the player's preliminary configuration of a game world. Such a world may come fully pre-fabricated, as in the case of the game's geographically accurate 'Earth maps'; it may be designed by the player himself with the help of an editor, which, since *Civilization IV*, forms a fixed component of the game; or it may follow what seems still the standard method of originary world-building in *Civilization*, namely a random generation carried out by the computer, with the player determining a few broad parameters such as overall size, difficulty, variety of landmasses, number of human and *AI* opponents, and resource density, but remaining ignorant of more specific features.²

Partly conditioned by these brief yet foundational acts of virtual genesis, there are, secondly, the turn-based game-play experiences of the player – experiences which, too, constitute ways of worldmaking in Goodman's sense of the word. The player's actions determine the course of the game and with it the rise or fall of his chosen civilization. In practice, they consist of series of strategic moves and decisions within the game-worlds, which are usually intended to expand one's influence in relation to both competing civilizations and areas of 'wilderness'. A successful game ends when one player has attained unchallengeable supremacy with regard to either 'dominance',

1 Though not the only way of classifying *Civilization*, the term 'world-builder game' is especially popular with online retailers. For the industry-sponsored but still most reliable compilation of US computer game sales figures and related demographics, see the annual online report *Essential Facts about the Computer and Videogame Industry* (2007). With *I*, *II*, and *III* having famously dominated all authoritative best-of lists, *Civilization IV* could only be expected to figure among the top-selling games of 2006 (ibid.: 6). Unless otherwise indicated, detailed references to the game will be to this most recent version.

2 In the absence of systematic and statistically representative studies of how people actually play the game, I am basing this claim on the layout of the user menus, which, for commercial reasons alone, is likely to be based on extensive testing as well as customer research, and which clearly privileges automated game-worldbuilding.

'conquest', 'diplomacy', 'culture', 'space travel', or a mix of these – all concepts that are clearly defined within the game. Once the necessary scores are reached, the game stops counting, announces a victory, and compares the winner's performance to the putative ones of leaders of the past such as Catherine the Great, Asoka, or (at the lower end) Dan Quayle. To quote the original 1991 package of the game, the winner has met the challenge of building "an empire to stand the test of time!"

The above slogan is paratextual and as such hardly essential to *Civilization*. Yet its imperialistic bravado still indicates both the historically informed aesthetics of the game's ludic fictions and their potential to cause political controversy. It is these last two aspects of *Civilization*'s worldmaking that I will concentrate on in the following. There are many others, of course, that equally deserve scholarly attention. Looking at *Civilization* and its world editor as a god-game, one might well, for example, highlight their implicit theological tenets. Alternatively, the constantly shifting position of the player within the game-worlds and the effect this has on his or her imaginative world-making could be analysed; as could the precise cognitive processes involved in this worldmaking, the game-world-transcending status of certain meta-ludic functions in the game (e.g. those of saving and loading), the visual representation of the game-world on the computer screen, the worlds within the game-worlds and consequent ontological hierarchies – one could go on and on. Barely documented and explored as these and similar topics still are, though, investigating their political and aesthetic implications would exceed the scope of this article. *Civilization*'s historicity, by contrast – the relation, that is to say, between the worldmaking of its designers and players and that of the historian – has already become the foundation of a highly politicized controversy about the game's aesthetics. It thus both allows and invites supplementary critical commentary. As Barry Atkins puts it in "History is Bunk? Historiographic Barbarism in *Civilization*":

[I]t might [...] be an appropriate time to begin to question whether the intersection between computer, game, play, player and history is in need of serious consideration, or at least to question whether a computer game such as *Civilization* might mark yet another change in our apprehension of the historical text that needs to be accounted for in any understanding of how we confront the past. (Atkins 2005: 3)

By raising the important question of counterfactuality (see below) and drawing a few parallels to other new-media engagements with the worlds of our past, Atkins himself does slightly more than merely begin to ask whether one needs to consider the relationship between history and *Civilization*. His is still not a sustained attempt, however, to actually consider it. While the following, too, cannot offer a comprehensive analysis of the issue, i.e. one that takes into detailed account the immense intricacy of the cultural artefact that is *Civilization*, it can at least further the current debate around it by highlighting and assessing several widely neglected general aspects of the game's historical worldmaking. Yet before moving on to these – what exactly is currently being debated by critics of *Civilization*?

There is, of course, little disagreement about the game's own claim to historicity. It emphatically presents itself as a way of both making and experiencing history. From advertising slogans to the concepts mentioned above, from graphics to soundtracks, initial configuration screens to winning conditions and final score sheets – *Civilization* abounds with familiar historical references. In a medium long associated mainly with escapist science fiction and violence-inciting fantasies, this eminently respectable subject matter soon came to stand out after the game was first released, eventually leading educational scholars to look for ways of introducing it into the history classroom and draw attention to its pedagogical potential. Kurt Squire, most notably among them, has argued on several occasions that, properly combined with other forms of classroom learning, the world-building practices involved in *Civilization* could help students understand historical questions "such as why Europeans colonized North America, instead of vice versa, or the comparative advantages and disadvantages of political isolationism" (Squire 2002; cf. Squire 2004a, 2004b). Predictably, given the inevitable and generally recognized political import of historical education, such proposals have prompted other scholars to study more closely the particular kind of history constructed by the game series. The result has been a controversy regarding its ideological implications that makes up much of the existing secondary literature.

In this controversy, the historical nature of *Civilization*'s game-worlds is usually taken for granted. Certain packaging and game-play elements are regularly singled out and treated as symptomatic of the game's more or less reprehensible historiographical bias. Denouncing, for instance, such game-play objectives as exploiting natural resources, climbing the tree of technological progress, or expanding one's borders into uncharted territories and in the process purging these of nomadic 'Barbarians', critics have read the game as "constructed on the basis of nineteenth century folk wisdom" which perniciously conforms to "the master narrative of globalization" (Poblocki 2002: 167, 171), as bearing "on several white western histories of exploration and expansion at once" (Lammes 2003: 126), or as promoting "a very specific version of the American myth of progress, especially as espoused by [the historian] Frederick Jackson Turner" (Kapell 2002: 129). Occasionally, though not always (cf. Stephenson 1999), such readings include passing references to how their authors conceptualize the assumed connection between the worlds constructed in the game and those produced by historiography. Thus Christopher Douglas describes *Civilization* as a "simulation of alternative histories, recognizable as still being historical because their referents come from real things – names of actual nations and cities and people, and the real things that happen, such as trade, war, peace, exploration" (Douglas 2002: par. 27). Douglas's characterization here is vaguely suggestive rather than properly explanatory. Given that the relations described form the indispensable basis of his main argument, one might expect a more detailed account to follow, yet this is, quite typically for the existing literature on *Civilization*, where his analysis ends. In fact, the only critic to date who can be said to have considered the historical worldmaking in *Civilization* in any way systematically is David Myers (2003, 2005), whose radical claims on the sub-

ject will be discussed in my last section. As it happens, Myers is also the critic most dismissive of history's relevance to the game. He promotes an exclusively ludic aesthetics in which *Civilization*'s historical worldmaking forms at best a negligible adjunct, which again – albeit for reasons different from those of other critics – limits his reflections on the subject. From Myers's point of view, there is little need for what I will do in the following, namely highlighting the game's intermedial links with more established practices of constructing past worlds.

1. *Civilization* as Historical Narrative

Stories are not only etymologically integral to what we call history. Be it through books, the voices of educators, museum exhibitions, television, our own research, or other channels – historical worlds usually come to us in the form of narratives. This is at least true of history in the representation-based senses of the word that are most straightforwardly transferable to a computer game. According to the *OED Online* these are “1. A *relation* of incidents (in early use, either true or imaginary; later only of those professedly true); a *narrative*, *tale*, *story*” and “2. A written *narrative* constituting a continuous methodical record, in order of time, of important or public events, esp. those connected with a particular country, people, individual, etc.” (*OED Online*; my emphases).³ Now, insofar as the worldmaking of the historian is predominantly narrative, narrativity also constitutes an important condition of *Civilization*'s claim to historicity. Of course, the peculiarities of the game's digital medium conflict with any narrow and exclusively language-centred conceptions of narrative, but this potential difficulty has already been dealt with by the narratologist Marie-Laure Ryan (2005: 1, 4). Ryan's theory of narrative as outlined in her “On the Theoretical Foundations of Transmedial Narratology” recommends itself as a starting point not only because it is emphatically transmedial, but also because it hinges on the notion of worldmaking as a cultural (as well as cognitive) activity. In addition, there are the different ‘modes’ of worldmaking Ryan distinguishes in her essay, and which she sees as either increasing or diminishing the narrativity of a given text. Going beyond simplistic ‘either-or’ dichotomies and capturing our most common intuitions regarding narrative, these modes constitute useful criteria for assessing the narrativity of *Civilization*'s worldmaking.

It should be noted at this point that applying Ryan's conceptual apparatus to a multi-functional computer game like *Civilization* already requires certain interpretive choices. If, for example, one privileges the first kind of worldmaking in the game as outlined earlier, i.e. treat as central the players' originary creation of their game-worlds by means of the built-in world editor, one comes to very different conclusions than if

3 Directed against the dominance of ‘representationalism’ and revaluating the concept of ‘presence’, a current trend in the philosophy of history might soon break new theoretical ground that could affect even these two definitions (cf. *History and Theory* 45 (4)). As far as I can discern, though, it has not yet been done so.

one regards as primary the subsequent game-play experiences. In the former case, despite a final game-play phase that allows the player to admire or ‘try out’ the world of his or her making, the overall experience would, if at all, figure extremely low on the narrativity scale. Resembling, say, a child's day-long building of sand castles followed by a brief Godzilla-story-emulating spree of destruction, it would constitute an example of, as Ryan puts it, “a text that uses narrative scripts in an instrumental way,” i.e. a text such as, more familiarly, a sermon or philosophical treatise, which includes narratives “on the micro-level” but whose “global” purpose is “certainly not to tell a particular story” (Ryan 2005: 7). As we will presently see, this assessment of *Civilization* as predominantly non-narrative does not apply to the game if one regards it as primarily consisting of long-lasting game-play experiences, which naturally raises the question of how to decide between the two views. My own choice here, as on similar occasions, is largely based on majority practice. Thus, while fully acknowledging the possibility of deviant playing styles, I regard the turn-based game-play experiences in *Civilization* as central to it simply because they are almost ubiquitously encouraged and hence likely to be almost ubiquitously practiced: the in-game menus are geared towards them, the game's handbook written with them in view, most programming effort invested in them, most updates designed to improve them, all reviews written about them, most fan web sites pre-occupied with them, etc.

If, with this understanding in mind, we consider the game in the terms of Ryan's transmedial definition (Ryan 2005: 4), it appears to fulfil all three of her conditions of narrativity: 1) it typically involves the construction of the mental image of a world populated with individual agents and objects (a construction substantially aided by the presentation of that world on the computer screen); 2) this world undergoes not fully predictable changes caused both by accidents and deliberate actions (the latter carried out by both the player and his usually computer-controlled opponents); and 3) these changes are in turn associated with mental states and events (they are so even when caused by the computer's artificial intelligence, which quite convincingly simulates human behaviour). In terms of Ryan's narrative modes, *Civilization* can further be characterized as a) external, because it is materially encoded on both screen and computer; b) predominantly mimetic, since it shows more than it tells; c) largely autonomous, since one can play it without previous knowledge of any particular plot; d) participatory, because the player becomes an active character in the story and through his or her agency contributes to the production of the plot; e) largely indeterminate, because of the player's contribution mentioned in d); and f) literal, since the game satisfies all three conditions of narrativity (cf. Ryan 2005: 11 ff.). Whereas b), d), and e) are what Ryan calls ‘marked’ modes that detract from the perceived narrativity of an artefact, the others are all ‘unmarked’ and hence reinforce it. On the whole, then, the narrativity of *Civilization*'s primary worldmaking processes seems fairly well confirmed – even though here, too, interpretive choices are frequently involved. Regarding narrative mode f), for example, the unchanging individual leaders in the game (e.g. Ghandi, Frederick the Great, Shaka, Hammurabi), who diplomatically represent their

respective civilizations for centuries or even millennia of game time, might well be read as allegorical embodiments of these civilizations. Depending on whether one agrees with this reading and how significant one deems it, this could in turn render the entire game metaphorical in the sense Ryan considers in her essay:

If we define narrative as the representation of a world populated by individuated characters, and if characters are intelligent agents, the following relaxations of the definition should be regarded as metaphorical [rather than literal]: scenarios about collective entities rather than individuals [...]; narratives about entities deprived of consciousness [...]; and dramatizations that attribute agency to abstract objects. (Ryan 2005: 13, see also fn. 4)

Rather than collective entities, of course, the leaders in *Civilization* could also stand for each successive diplomatic representative of their respective nation, which would again support a more literal reading of the game. But then one still needs to answer the question of whether or to what extent opponents controlled by an artificial intelligence can be seen as conscious agents. Unable to trace all of these possibilities here and justify each of my decisions at length and in exhaustive detail, I have to rely on the instant plausibility of my choices as at least possible ways of understanding the game.

Having thus established that *Civilization*'s dynamic and allegedly historical game-world experiences could in principle pass for narratives, we can now consider the other central criterion of narrative historicity. I am speaking of truth or factuality, of course (see the first *OED* entry above), which has been deemed essential to history at least since Aristotle's *Poetics*: "Where the historian really differs from the poet is in his describing what has happened, while the other describes the kind of thing that might happen." (Aristotle 1963: 17) With arguments closely resembling some of Nelson Goodman's claims in *Ways of Worldmaking* (1992: 3 f.), theorists of history have recently highlighted that 'what has happened' cannot be established by narrative or any other representational act except as one of many possible constructions (cf. Jenkins 2003: 11). This complicates Aristotle's distinction, but does not entirely do away with it. Hayden White is generally regarded as the most radical proponent of what has also been called the linguistic or postmodernist turn in historiography, yet even he does not deny that the referential, or, in his terms, stylistic constraints placed on historiographical worldmaking differ significantly from those applying to accounts of 'what might happen', that they differ enough, in other words, to justify at least occasionally distinguishing between the two (White 1999: 17). Neither is Goodman's constructivism incompatible with differences of this kind:

That right versions and actual worlds are many does not obliterate the distinction between right and wrong versions, does not recognize merely possible worlds answering to wrong versions, and does not imply that all right alternatives are equally good for every or indeed for any purpose. (Goodman 1992: 20 f., cf. 10 f.)

In any case, by the game-playing public and most critics who address the subject of historicity at all with respect to *Civilization* (cf. my next section as well as my first), the criterion of factuality is indeed regarded as highly relevant.

That the criterion of factuality also marks the point where *Civilization* parts ways with traditional historical worldmaking is almost needless to say to anyone familiar with the game – including its creators. Their well-considered view of the matter can be gathered from the handbook to *Civilization IV*. Soren Johnson, who has succeeded the eponymous Sid Meier as lead designer of the game, discusses the issue in connection with the latest development of the 'technology tree', i.e. the feature that determines the sequence of discoveries a player's civilization can make when investing in research:

This development was exciting from a historical point of view as well – *Civilization* is a game about *alternative* histories, yet *too often the tree mapped out only what did happen instead of what could have happened*. Does a civilisation actually need Flight to discover Rocketry, or could scientists simply be inspired by Artillery? Playing a game of *Civilization* should inspire the imagination to consider the *alternative* paths history *could have taken*, and the new, more open tech tree explores many of these possibilities. (Take-Two Interactive Software 2005: 162 f.; my emphases)

The affinity between Johnson's understanding of the game and what Aristotle considers to be the work of the poet is clearly evident here. Johnson positively encourages deviations from the historical record as long as these still capture 'what could have happened'. This confirms that, judging by the criterion of factuality, the worlds narrated by *Civilization* cannot be described as properly historical. For as such, to return to Ryan's narrative modes d) and e), these narrated worlds would have to be both receptive and determinate: determinate because determined by, in constructivist terms, the stylistic conventions and pragmatic criteria of relevance that apply specifically to historical narratives (which would presumably include conformity to sources, material evidence, natural laws, and whatever else renders an account 'factual'); receptive because the narratees' ability to co-'write', at the same time as consume, the actual texts of such narratives is incompatible with their determinacy.

2. *Civilization* as Alternative History

Although Johnson's remarks oppose *Civilization* to history proper, he still happily speaks of 'alternative histories', of course, and so do many critics who at least implicitly acknowledge the game's lack of factuality (e.g. the already quoted Douglas). The attribute 'alternative' is obviously crucial here. It acknowledges the marked fictionality of the game while allowing it to keep at least some of its academic panache and consequent socio-political import. Yet in how far are these associations justified? Has the discipline of historiography moved sufficiently beyond the Aristotelian dichotomy to accommodate this particular way of worldmaking? Barry Atkins, for one, seems to suggest exactly that. He not only points to a new British TV 'edutainment' format involving the digital live-replaying of ancient battles (Atkins 2005: 3 ff.), but also draws a direct connection between *Civilization*'s alternative histories and the practice of 'the professional historian':

What the particular form of computer game best exemplified by *Civilization* has done is allow popular access to a form of engagement with history previously only available to the tabletop wargamer or board-game player [...], or to the professional historian who possessed enough knowledge of the variables within the historical record to construct a plausible counterfactual narrative. (Atkins 2005: 9)

The form of engagement Atkins has in mind here may be nothing more elaborate than what he elsewhere calls “the basic question of ‘what if?’” (Atkins 2005: 7). After all, he is generally careful not to overstress the historical credentials of *Civilization* and never loses sight of its “primary function” as a game (ibid.: 11). Nonetheless, by using the term ‘counterfactual’ and referring, as he does earlier in his essay, to a programmatic text on the subject by the historian Niall Ferguson (ibid.: 7, fn. 3), Atkins likens *Civilization* to a very specific kind of professional historical worldmaking, whose nature and relationship to the game need to be looked at more closely.

First practised and promoted as a serious historiographical method by Ferguson (1997) and a group of like-minded colleagues, counterfactual or virtual history actually constitutes a very recent development in mainstream historiography. As such, it faced – and arguably still faces – considerable resistance. Quite ominously in our ludic context, the academic establishment has long tended to dismiss it as merely a kind of “parlour game” or “*jeu d’esprit*” (Ferguson 1997: 4, 14). Yet even if we optimistically assume that counterfactual history is by now safely entrenched in at least a small niche of the larger academic field, the question remains whether *Civilization* conforms to its strictures. For strictures there certainly are – even to ‘what could have happened’ historically. As Soren Johnson himself implies in his discussion of the tech tree, it all comes down to plausibility. In his example, the plausibility of having Artillery (rather than, say, Music or Biology) replace Flight as the immediate ‘inspiration’ for scientists to research Rocketry seems to be based on the common-sense speculations of the game designers. Yet could such speculations ever make for respectable counterfactual history? Not, it appears, according to its beleaguered champion Ferguson, who insists upon a more palpable criterion:

How exactly are we to distinguish probable unrealised alternatives from improbable ones? The most frequently raised objection to the counterfactual approach is that it depends on “facts which concededly never existed.” Hence, we simply lack the knowledge to answer counterfactual questions. But this is not so. The answer to the question is in fact very simple: We should consider as plausible or probable *only those alternatives which we can show on the basis of contemporary evidence that contemporaries actually considered.* (Ferguson 1997: 86)

There are at least two independent reasons why this ‘simple’ requirement of plausible counterfactual history is impossible for *Civilization* to meet – not only in its latest version but ever and in principle. The first is the game’s incorporation of variables well outside Ferguson’s focus on contemporary human agency and thought: for instance pre-historical geography, the distribution of natural resources (some of which, such as Uranium, are only revealed after certain technologies have been developed), natural catastrophes, partially randomized births of great individuals, etc. The second and

equally disqualifying reason is that, whereas Ferguson’s requirement limits counterfactual histories to certain well-defined short-term scenarios imaginable by contemporaries, the long-term forking-paths narratives of *Civilization* are bound to outstrip both the anticipation and the recording powers of even the most clairvoyant futurologist of the past – and this is even before considering how the game-player’s narrative worldmaking in the game could be practicably limited to the imagined scenarios for which we have recorded evidence, or the sheer scarcity of such evidence to date.

Clearly, then, counterfactual history’s recent bid for academic respectability does not extend to the game-worlds of *Civilization*, whose overall orientation thus remains largely confined to the poetic side of the Aristotelian dichotomy. Instead of historical worldmaking in any traditionally sanctioned and institutionally enshrined way, it appears as though the game simply involves the player in the construction of ‘alternative history’, a practice defined as predominantly fictional by the *Oxford Dictionary of Science Fiction* (Prucher 2007: 4) as well as the most popular website on the subject.⁴ More frequently referred to as ‘alternate history,’ this practice boasts a long tradition of its own and a committed base of enthusiastic supporters. Yet, obviously, it is still far less prestigious and influential in our current educational institutions than history as constructed by its certified practitioners. One could argue, of course, that counterfactual history is still too novel a sub-discipline to have arrived at a representative methodological consensus and, more specifically, that Ferguson’s plausibility criterion for counterfactual histories is not universally agreed upon among their advocates. Martin Bunzl, for example (2004: sec. 3, 4), has only recently promoted the less forbidding requirements of Tetlock/Belkin (1996: 16–31). Assuming some major compromises on both sides, such objections allow us to envisage at least the possibility of a future convergence between the *Civilization* series and professional historiography. In addition, they point us towards yet another notable dimension of *Civilization*’s claim to historical worldmaking.

3. *Civilization* as Historical Simulation

Another way of looking at the seemingly historical game-worlds produced in *Civilization*, one which is reflected by the occasional references to them as historical ‘simulations’ (e.g. Douglas 2002: par. 27; Kapell 2002: 130), is through the scientific paradigm originally associated with computers and computation. As the already mentioned

4 According to alternatehistory.com (2007), “alternate history generally exists as works of fiction, either in narrative (story) format or in the form of an essay or other non-narrative work, which have been created at least in part to showcase an imagined world where a change at some point in history led to events that could have happened, but did not happen in the actual past. A work of alternate history may focus on a point in the past, showing a departure from real history occurring, or it may focus on an altered world that resulted from the consequences of a departure long past.”

Bunzl points out (2004: sec. 4), Tetlock and Belkin's principal (though not only) requirement of counterfactual histories is consistency with theoretical and statistical generalizations – a preference that is quite widespread among researchers (cf. Dawes 1996; Kiser/Levi 1996; Elster 1978: 184 f). And here *Civilization* can certainly deliver. However crude, empirically unsupported, or even politically objectionable its concrete generalizations may be, their mathematical codification in the game as rules, concepts, and object-defining qualities does guarantee that every historical narrative constructed in and through the playing process is entirely consistent with them. For instance, the effect of every church (or 'Christian temple') built in the game fully conforms to the generalisation that, all other things being equal, churches add to a civilization's culture as well as the happiness of its population – though not quite as much as cathedrals. This conformity is guaranteed simply because churches are defined *a priori* as adding fixed amounts of culture and happiness – two concepts which, too, are quantified in game-mechanical terms – and the respective amounts added, in turn, are defined as lower than those added by cathedrals.

Naturally, such mathematical rigour alone is not sufficient to render *Civilization* acceptable as counterfactual history. To say it again, consistency with theories and generalisations constitutes only one of several still debated criteria for acceptable counterfactuals, and many of these criteria would be failed by all currently available instalments of *Civilization*. First proposed by Max Weber, to give just one example, was the additional demand for a minimum of changes to the historical record (Weber 1949). Moreover, academically acceptable theories and generalisations have their own criteria to meet, or rather quality standards to uphold, and whether those proposed and met by the game do so is doubtful at the very least. After all, *Civilization*'s claim to being historical takes at best second place to its claim to being an enjoyable game, which means that playability, rather than academic acceptability, has been the overruling priority in the designers' theory choices.⁵ In any case – and this is why, like Atkins, I have given Ferguson pride of place in this discussion – the consistency criterion is largely promoted and developed within the political and social sciences rather than history itself, within disciplines on whose scientific models historians may occasionally draw in specific contexts, but whose overall methods, goals, and epistemological assumptions they by no means unconditionally share.⁶ In fact, by so obviously relying on, and presenting as historical, certain politico-socio-economical generalisations that assume the character of laws in the game-world, *Civilization* happens to touch on an old and inconclusive meta-historiographical controversy.

I am referring to the debate around the so-called covering law model, whose validity is evidently presupposed by *Civilization*'s in-game rules and definitions and hence part of the foundation of the player's worldmaking. This model was first developed

and given normative currency amongst philosophers of history by Carl Hempel in 1942. In line with Popper's *Logik der Forschung* (1935), Hempel argued that history's claim to provide genuine rather than pseudo-explanations was only justified insofar as it explains past events by identifying them as instances of – or 'covered by' – previously established general laws. Although the covering law model attracted a significant number of followers, it was also widely opposed. There were not only the idealist philosophers seeking to counter it with R. G. Collingwood's hermeneutical focus on the intentions behind human action, but also the less philosophically articulate majority of practising historians. As W. H. Dray put it already in 1957, "as a rule, [...] historians tend to resist the model as in some way irrelevant to what they are trying to do" (Dray 1957: 11); and F. R. Ankersmit describes both the covering law model and its Collingwoodian alternative as "relatively insensitive to the problems of actual historiographical practice" (Ankersmit 1994: 55).⁷ According to Ankersmit, this insensitivity was one of the reasons for the eventual abandonment of the entire debate in favour of the more strikingly relevant narrativist/postmodernist questions raised by Hayden White. The problem, as Ankersmit maintains, was that, in practice, history interprets even more than it explains, that it is predominantly concerned with painting big pictures and not just confirming regularities on the micro-level of individual statements:

It is as if philosophers of science had never sought to deal with the growth of scientific knowledge and had restricted themselves to the problem of how to ascertain individual data without paying attention to theory and concept formation. For if there is anything in historiography that is analogous to theory formation in the sciences, then it is historical interpretation and not the description or explanation of individual historical facts [...]. (Ankersmit 1994: 73)

Mathematically completely reducible to individual descriptions or explanations (see my church example above), *Civilization*'s indeterminate and counterfactual macro-narratives seem unlikely to qualify as interpretive in Ankersmit's sense. An admittedly complicating factor here are the pre-established victory and defeat conditions of the game, which, despite their multiplicity and relative vagueness compared to the single determinate macro-plots of traditional narrative history, could still be seen as interpretive forms of emplotment that retrospectively – or even, as goals, during the player's worldmaking – impose large-scale narrative structures. Nonetheless, it is safe to say that if a variant of the *Civilization* series were ever to attain the status of acceptable historiographical practice, this would entail a major reassessment of the relationship between individual descriptions or explanations on the one hand and the historical narrative as a unified structure on the other, a reassessment, in other words, that might well resuscitate the old debate about covering laws in history.

⁵ I am not saying here that the historical references in the game do not matter (cf. my final section).

⁶ This is despite occasional attempts at unification – e.g. by Landes and Tilly in *History as Social Science* (1971).

⁷ Considering *Civilization*'s simulation of historical actors (i.e. in the form of the player's opponents) as well as of its privileging, in terms of success, of a certain context-sensitive rationality on the part of the player, the game might perhaps also be seen as incorporating Collingwood's philosophical position and bringing out the latter's similarities with the covering law model (cf. Ankersmit 1994: 53 ff.).

4. *Civilization* as Just a Game

Even though, as we have seen, *Civilization*'s closest generic allegiance in view of its supposedly historical worldmaking is to alternate history fiction, its participatory and simulatory aspects still render it quite distinctive within that genre. The game's continual and intensive co-optation of the player in the worldmaking process and the mathematical rigour with which it models real-life phenomena continually draw attention to both its digital medium and its status as a game. Unsurprisingly, therefore, the latter two have been regarded by some critics as conflicting with its narrative aspects and even as vastly outweighing them in prominence and critical importance. This view is in line with, and gains some institutional support from, the widespread methodological preference among game scholars for regarding the study of computer games as computer games – rather than, say, fiction or history – as the defining practice of their own autonomy-seeking discipline (cf. Aarseth 2001). By downplaying the importance of story and textual interpretation, moreover, it provides ammunition against the public suspicions and fears that, especially in connection with on-screen violence, still shape and reflect many prejudices against the digital gaming community as a whole. These broader socio-political motivations occasionally become apparent in the secondary literature (e.g. in Carr's brief reference to first-person shooters; cf. Carr 2007: 8) and may also play a role in David Myers's already mentioned dismissal of *Civilization*'s historicity. In order to assess the latter's position properly, however, and in the process characterize yet more precisely the peculiarly historical worldmaking in *Civilization*, it is naturally his arguments that need to be engaged with.

What exactly, then, does Myers say about *Civilization*'s supposedly historical worlds? The following passage from his most recent essay on the game shows that while grudgingly acknowledging their historicity as superficial and nominative 'trappings', he emphatically denies it any determining influence on *Civilization*'s generic status:

First, and most specifically as regards the *Civilization* series, the games are neither historical simulations nor historical texts, despite the fact that they are sometimes referred to as such [...]. *Civilization* has been designed and redesigned, beginning with the original Meier and Shelley efforts, to quite clearly conform to an aesthetics of play rather than to construct a realistic model of human history. And, over the succeeding years, the games have retained the trappings of a historical simulation only in the most superficial and nominative sense. (Myers 2005: 7)

By "aesthetics of play", Myers means certain purely ludic principles according to which players make value judgments about particular game elements or rules. His earlier and more general study on the nature of computer games explores the basis of these principles in what he sees as the ultimately "biomechanical activity" of human semiosis (Myers 2003: 151). In the present context, however, the main point is that he contrasts, on the one hand, this aesthetics of play supposedly adhered to by the designers of the game with, on the other hand, the "realistic model of human history"

wrongly demanded of it by "socio-cultural critics" such as those I have quoted earlier (Myers 2005: 7). Is Myers justified in doing so?

In my view, he is not and his opposition is a false one. The evidence he adduces for dismissing *Civilization*'s historical aspects does not hold up to scrutiny and in fact discourages a mutually exclusive understanding of the two ways of worldmaking he invokes (one ludic, the other historical). It comprises, firstly, several authorial pronouncements by Sid Meier and, secondly, various design changes the game underwent during testing and between instalments. Neither, however, is as conclusive as Myers suggests. In the quoted interview with the celebrated creator of *Civilization* (Myers 2005: 6), Meier claims of himself and his colleagues that "we very consciously avoid putting our political philosophy into the game" (Chick 2001) – a claim which, due to the inevitably political nature of all historical representation, irrespective of motifs, may perhaps still be true of 'our', but certainly not of 'any' political philosophy, however neutral the designers perceive themselves to be. To illustrate his point, Meier states further that a politically controversial historical reference to industrial pollution in *Civilization* was actually implemented in order to provide a late-game challenge rather than "a political statement" (Chick 2001). Yet while this may well have been the case not just for pollution but also most other elements of the game – there are obvious counter-examples such as the related but strategically negligible effects of global warming, yet these are relatively scarce –, it does not render insignificant their historico-political import. *Pace* what Meier and, through him, Myers seem to imply, the structural need for a late-game challenge alone could not have fully determined either the designers' selection of pollution in particular or the precise details of how they modelled it. Even though enhancing the formal game-play mechanism as understood by Myers may be of higher priority to designers than (alternate) historical representation, the relationship between the two is not actually one of either-or. Instead, I would suggest that it resembles the relationship between a scientific metaphor and its mathematical expression as characterized by Theodore L. Brown. "The mathematical representation," Brown writes, "which some would call a theory [...], is not really distinct from the model; it is an expression of it in mathematical language. The theory is just as metaphorical as the model" (Brown 2003: 28 f.). Similarly, in *Civilization*, the mathematically rigid structures of the game-worlds and the world as constructed by historiography, or at least certain elements of it, can each be seen as modelling the other. On the one hand, that is to say, *Civilization* encourages us to look at its game mechanics in order to understand history and, on the other hand, to look at history in order to understand its game mechanics. We have already assessed how the quantifiable in-game relationships fare as a metaphor for history in the context of current historiography – namely badly in academic practice though at least potentially able "to guide thinking about a system under investigation" (Brown 2003: 26) – but whereas this lack of institutional endorsement could still be regarded as to some extent supporting Myers's view, the situation is different with history serving in turn as a metaphor for the relationships and events within the game-worlds.

To speak again with Brown, the events and interpretations of world history would definitely figure among ‘the more interesting metaphors’ for *Civilization*’s game mechanics:

Although metaphors invite comparisons of two disparate things, the more interesting metaphors do more than this. They stimulate *creation* of similarities between the source and target domains, such that the target domain is seen in an entirely new light. (Brown 2003: 29)

On the part of the game designers, this stimulating power of history shows itself both in their comments on the creative process and in the actual modifications of the game from version to version. In his prefatory ‘letter’ to the *Handbook of The Chronicles of Civilization*, even the structurally minded Meier maintains that “we simply set out to create a fun game that covered all of human history – a pretty ambitious endeavor – but it was a topic I really enjoyed and very much wanted to bring to life on the computer screen” (2006: 2). And, of course, there are the many game-aesthetical reflections of his successor Soren Johnson, who consistently emphasizes history’s *ab ovo* influence on the creation of in-game phenomena. Upon asking him via email about the relevance of historical sources and expertise in the designing process, I received the following unequivocal response:

Well, I was a history major in college [Stanford], so I had a pretty good background for designing *Civ4*. Also, our writers, Paul Murphy and Michael Soracoe, each had a good history background as well. We have a bunch of general history reference books and atlases lying around the office. I’ve always been partial to the *Times History Atlas*, myself. I was in the process of reading John Robert’s *History of the World* during development, so that influence [sic] me too. *Guns, Germs, and Steel* is, of course, a great book with a lot of overlap. However, it highlights the limits of the endeavor because a game based solely on Diamond’s theories would not be much fun as everything would be determined by your starting geography. [...] btw, I just wrote about how my historical philosophy influenced my game design on my blog (<http://www.designer-notes.com/?p=57>) so you might want to check that out. (Personal correspondence with Johnson)

Unequivocal as this statement is regarding the authorial practice of at least the game designers’ collective worldmaking, I would like to analyse yet another interview comment here, in which Johnson talks about the handling of religion in the game. This is not just because of its illustrative value and intrinsic topical interest, but because at first sight the last sentences of a generally very straightforward passage seem to conflict with its overall import and lend some support to Myers’s views:

We’re always looking for big topics to add, and I’m not sure how many are left, but religion was one that we knew could be a big part of *Civ*, and we just never addressed it. There are two challenges there, one was how do you make it fun? [...] The other challenge was to make it fun and *to not offend people*. I just decided early on that I was just going to treat the religions as names only, and that there wasn’t going to be fundamentally any difference to them. [...] There was a little bit of fear of even just having the names of religions in. But I think eventually people saw that these were largely just *cosmetic* things that made the game better. I think *Civilization* is fun because we name names. There’s

real people in there, there’s real wonders, real technologies. It allows people to make this final sort of history connection with the world, where if we had made up stuff I don’t think it would be anywhere near as fun. (Take-Two Interactive Software 2006: 60 f.; my emphases)

Johnson’s brief account of introducing religion into the game obviously confirms my claims about history’s formative involvement and even highlights the designers’ conscious struggle to be politically inoffensive – which is itself a political stance, of course. Yet what about his subsequent reduction of history to merely, as Myers would see it, ‘cosmetic’ nomenclature? This, I would argue, applies exclusively to the highly sensitive subject area of religious differences, where, unlike in other fields (cf. Johnson’s own tech tree example or the church-cathedral opposition above), it is virtually impossible to imagine universally inoffensive generalisations. Looked at more closely, the relevant passage actually implies that because of Johnson’s deliberately unusual, unrealistic, and unhistorical decision of equalizing the in-game effects of all religions, people regarded their nominal appearance in the game as merely a ‘cosmetic’ improvement and hence did not take offense. The next sentences are then further defending Johnson’s decision to mention actual religions at all by stressing how indispensable familiar historical names are to the game.

One could close here by pointing again to the long list of game features which, although ultimately based on mathematical calculations, are manifestly and consciously represented through familiar historical phenomena, concepts, imagined scenarios, and even value judgments – starting, perhaps, with the peaceful victory alternatives to military conquest that so notably differentiated the first *Civilization* from contemporary conquer-the-world strategy games (cf. Take-Two Interactive Software 2006: 5, 55). Yet there is an important second part to Myers’s argument that still needs to be addressed. For, obviously, it is not only the game designers who determine *Civilization*’s narrative constructs, but also the players’ own worldmaking activities during each game. In this regard, too, Myers dismisses all references to history as practically irrelevant and extrinsic to the semiotic process of play:

Second, and more importantly as regards computer game play in general, interactive game *play* – not game readings and not isolated game components and structures – most definitively map, measure, and give meaning to the signs and symbols within a game. The best test of this claim lies in the experiences of – and choices made by – game players. Do these choices in any way reflect those cultural values commonly attributed to game components [...] *outside the context of play*? (Myers 2005: 7)

Myers answer to this semi-rhetorical question is a resounding and unconditional ‘no’ – with one important qualification: he does implicitly admit to privileging a certain kind of playing experience, namely that of expert players who, in the natural pursuit of improving their performance through recursive play, have thoroughly familiarized themselves with the functional definitions of all in-game components. These players, he argues with reference to “dedicated player forums” online (Myers 2005: 8), ignore the historical aspects of the game and see it exclusively in structural terms. They have ac-

quired what Diane Carr, in her own recent critique of Myers's position, has aptly called the "representational equivalent of X-ray specs" (Carr 2007: 4). With slightly less competent players, the situation might already be different, but, as Myers notes:

[I]t is only during initial and novice play – which is most compatible with a linear reading of game as text – that *Civilization* game signs and symbols (i.e. game signifiers) might be reasonably associated with those pre-existing – often normative – values corresponding to the use (or misuse) of real-world factories, fossil fuels, and nuclear energies (i.e. real-world signifieds). (Myers 2005: 7)

Now, following Carr (cf. 2007: 7), I would agree with Myers that, as a consequence of both a basic ludic convention – namely that one tries to win a winnable game – and the extreme recursiveness which distinguishes computer game consumption from even the most frequently repeated fiction-reading experiences, expert players might indeed have learnt to neglect the 'real-world signifiers' of most in-game components during their ludic worldmaking. And, unlike Carr, I also think it methodologically legitimate of Myers to privilege as representative a certain kind of playing experience in his interpretive assessment of the game. If one were to follow Carr's rationale of not at all discriminating among the "multitude of ways" in which *Civilization* can be played (ibid.: 7, cf. 9) – a rationale which she even extends to the field of literature (ibid.: 8) – any interpretive endeavour would be doomed from the outset. In the absence of any interpretive norms, after all, one could not even analyse individual player experiences, let alone make political or aesthetic pronouncements about the game. One's situation would be comparable to that of a literary critic absurdly prevented from describing, say, *Uncle Tom's Cabin* as politically effective because of one eccentric reader's habit of reading it backwards, or of reading *Mein Kampf* as anti-Semitic because a minority of readers might regularly skip the relevant paragraphs.⁸

Notwithstanding her problematic interpretive politics, though, the various kinds of play Carr actually describes in her essay do pose a serious challenge to Myers's selective focus. In my view, the problem with his privileging of expert worldmaking over all other kinds is less theoretical than empirical. He fails to sufficiently justify, in other words, why expert players qualify as representative users of *Civilization*. Is it because of their high numbers in relation to the general number of players? The hours or the number of different games they have played? Their ludic competence and success? A combination of these? Or yet other reasons? The experts' domination of 'dedicated player forums' alone is certainly not sufficient. At least since *Civilization IV*, even the most casual Google search yields enough online debates about the game's historiographical politics to counterbalance Myers's example of apolyton.net (cf. Myers 2005: 8) – especially if one presumes a higher likelihood of computer game experts to

contribute to online forums in the first place. Yet even if one or more of the above criteria were convincingly proposed by Myers and known to be fulfilled by the expert players he refers to, there would still be the matter of the actual learning process, of how many sessions it takes to advance beyond the 'novice play' that still grants the alternate historical aspects of the game a formative role in the player's worldmaking. I strongly suspect it lasts longer than Myers suggests – judging simply by the economic resources so manifestly invested in these aspects, their continual importance in advertising also when this is targeting the established fan base, and the fact that even the most hard-boiled *Civ* veteran I could find strongly preferred pursuing his game-play narratives through recognizable metaphors taken from history to interacting directly with mathematical objects.⁹ In any case, it would certainly last long enough for all players to be memorably confronted with generalisations about historical real-life objects and their interrelationships, confronted with these not just once, in fact, but far more often than they would during the reading of non-ludic alternate history fictions.

To conclude, then, Myers's reading of *Civilization*'s worldmaking must be considered both empirically and theoretically untenable. By regarding its aesthetics as purely or even predominantly ludic, as 'just a game' in a sense that grants games complete systemic autonomy from their environment, he misrepresents most players' actual worldmaking practices, which are constantly informed and often guided by the game's manifold historiographical references. Due to various medium-specific constraints, these references fail to amount to a generic and cross-medial hybrid between computer game and historiography proper, yet still firmly place *Civilization* within the field of alternate history fiction. Although less institutionalized, influential, and politically contested than those of academic history, the worldmaking practices in this field should not be dismissed off-hand. Like any form of fiction, the worlds constructed through alternate history interact with and have political consequences in those that are reductively known as 'the real world'. And like other alternate fictions, *Civilization* makes and propagates many different kinds of claims about our past(s), which, ludic framework or not, academically substantiable or not, inevitably have political significance and hence lay themselves open to cultural and ideological criticism.

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For ease of reference and because several key articles on *Civilization* have only been printed in translation or too late to access in paper form, I have followed the general practice of computer game researchers of using, whenever available, original versions

8 If I am using a somewhat drastic *reductio ad absurdum* here, it is for reasons of brevity and clarity – not, that is, to disparage Carr's highly perceptive analysis as a whole. Like Myers, she addresses extremely complex questions similar to those raised, in literary theory, by Stanley Fish's reader-response theory, whose depths I do not claim to gauge in this essay.

9 This last, admittedly anecdotal, example actually casts doubt on the idea of the expert players' 'X-ray specs'. One could object that the historically allusive model through which the mathematical relations in the game are represented is simply more user-friendly than naked formulae and equations and hence preferred by every player. Yet why would it be so, and would not its links to history have something to do with this user-friendliness?

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THE POSTCOLONIAL MUSEUM AS A WAY OF WORLDMAKING

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'Worldmaking' in my title refers to Nelson Goodman's postulate that no given world exists: "Perceiving motion, we have seen, often consists in producing it. Discovering laws involves drafting them." (Goodman 1992: 22) Thus the question of the representation of the world no longer implies its subordination to pre-existing reality, but rather appears as the only access available to what can be called reality.

My essay will focus on the postcolonial museum in order to analyse how museums are institutions which can be considered as ways of worldmaking. I use that notion in an ambivalent way, referring to Goodman's concept and changing its instances to be consistent with the spelling of this article's title. Referring to the theoretical analysis developed by Nelson Goodman, I will work out the way these institutions, part of African countries' colonial heritage, facilitate the reconfiguration of a world through a particular use of narration and archive. The museum is generally presented as a neutral place where objects can be arranged like words in a sentence in order to construct meaning or convey a message. The study of postcolonial museums allows us to analyse how the way of worldmaking is hidden by a discourse based on the objective presentation of a world which is supposed to have an ontological existence. The technical strategies of the museum are very efficient because they are not only based on a discourse but also elaborate an aesthetic experience. The worlds the museums construct and present as 'reality' not only involve the mind of the visitor, but also appeal to them physically. It is precisely this double bind of the museographical institution that enables me to reconsider the question of narration and archiving.

When I compare the museum with the construction of a sentence, it immediately evokes the question of the way the writer arranges the words and how s/he deals with meaning. For narration, as well as for the archive, we can make the distinction between the discourse produced by the institution and the strategies it requires to present that discourse as an objective and neutral one. The same operation is required for the objects the museums present as witnesses of the past, as Derrida shows in his book *Archive Fever: A Freudian Impression* (1996); they are in fact fragments that have no ontological meaning.

The problem of narration is closely linked to that of the archive, because both construct a meaning through their institutionalisation. The analysis of the way the postcolonial museum plays with both leads us to reanalyse the use of the prefix 'post', which suggests that we are beyond both colonialism as well as modernity. In fact, the analysis of the postcolonial museum as a way of worldmaking enables us to distinguish the way modernity produces a theory of itself, one that is replayed by museums, and which allows it to hide its artificiality. The link between narration and archive is