SIMULATION, HISTORY, AND COMPUTER GAMES

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The year is 1967. The cars are monstrously powerful, extremely light, and the tires are so hard that a single set will often last three race weekends! Brakes are terrible. Forty gallons of volatile gasoline surround the driver—contained by nothing more than a thin skin of fragile aluminium—and there are no seatbelts. The circuits are breathtakingly beautiful, supremely challenging, and brutally, lethally, dangerous. Almost forty percent of the drivers on the grid today will eventually die at the wheel of a racing car. It is the golden age of motor racing, and you are at the wheel.

Over two years after its release, *Grand Prix Legends* stands alone among all racing simulations and games as the most uncompromisingly realistic simulator of race car dynamics—and arguably the most rewarding consumer racing software product—ever published.

—*Eagle Woman*

Thrills, speed, and a high likelihood of explosive accidents all enhanced by refined controls and state-of-the-art replication of the driving experience, and is it any wonder that *Grand Prix Legends* has all the makings of a great game? Judging by the comments in various online discussion groups, Sierra Sports has amply satisfied the demands for historical accuracy made by most of its fans. With customers clamoring for more historical simulations—from the 1965 season (the last of the gentlemanly races) to the season just finished—we might inquire into the historical claims and implications of such games. The details of the cars and conditions of the track seem historically accurate, and many of the players come to the game with detailed knowledge of the 1967 race, the drivers' tactics, and so on. Indeed, this wealth of information and historically correct detail seems to be a source of player pleasure, allowing gamers to enter the simulated world of 1967

and relive it in their own terms. But if we take interactivity to be one of the distinguishing characteristics of computer games,[1] the interaction between a present-day player and the representation of a historically specific world would seem to challenge any notion of a unique configuration of historical "fact" and "fixity," giving way instead to the historically inconsistent and ludic. Such an interaction provokes fundamental questions regarding the place of computer games in systems of historical representation, questions that this chapter will address.

One might be tempted to conclude that computer games, in sharp contrast to media such as print, photography, film, audio recording, and television, are somehow incapable of being deployed for purposes of historical accuracy, documentation, and thus representation. Although they can integrate all of these earlier media, computer games might seem closest to historical documentation only when emulating them, in the process suppressing games' defining interactive relationship with the gamer. Of course, one might imagine a fixed progression of events (as in a film or television program) visually or acoustically accessible from different points of view, but this would be closer to computer modeling than ludic experience. Is the computer game thus an inappropriate platform for the representation of history? Perhaps (and the 1967 *Grand Prix Legends* may well be a limiting case were we to pursue this argument). But in this chapter, I want to complicate the relationship of computer games to history, suggesting a fuller set of interactions with the process of historical inscription, that is, with the ways in which human subjects encounter textualizations of the past and are "written into" the past. I would also like to explore the relationship of computer games to the larger cultural processes of understanding history, specifically, with disciplinary debates within the historical profession. In this latter case, I am struck by the happy coincidence of the roughly parallel development of poststructuralist historiography (charged by its critics with upsetting the

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applecart of the historical trade by challenging notions of facticity, explanatory hierarchies, master narratives, and indeed, the interpretive authority of the historian) and computer-facilitated hypertext and games (empowering the user—and in the wake of the author's over-celebrated demise—enabling one to organize one's own text). Together, these two practices coincide within what might broadly be considered the postmodern *zeitgeist*, giving both theory and form to a new way of organizing historical experience, developments that I will briefly sketch later in the chapter.

In the pages that follow, I would like to consider the outer ends of a spectrum of historical computer games as sites to tease out the possibilities and implications of historical representation and simulation. These two extremes have different historiographic appeals. One sort, such as the 1967 *Grand Prix Legends* game or the *Battle of the Bulge*, is specific in the sense that it deals with a particular historical event—a race, a battle—allowing the player to engage in a speculative or "what if" encounter with a particular past. In these games, efforts are usually taken to maximize the accuracy of historical detail, allowing the setting and conditions to constrain and shape game play. At the other extreme are games that deal with historical process in a somewhat abstracted or structural manner. *Civilization III* and *The Oregon Trail* typify these historically situated games in which a godlike player makes strategic decisions and learns to cope with the consequences, freed from the constraints of historically specific conditions. Although games of this sort also elicit speculative engagement with the past, they tend to be built upon particular visions or theories of long-term historical development. That is, in place of the constraining role of historical specificity of the former games (a historical specificity inculcated through encrusted layers of historical scholarship, training, and popular memory), these less specifically situated games tend to be more evidently structured by unspoken historical principle (or better, ideology), rendering them closer to structuralist notions of history. In both cases, history in the Rankean sense of "*wie es eigentlich gewesen ist*" is subverted by an insistence on history as a multivalent process subject to many different possibilities, interpretations, and outcomes.[2] Not surprisingly, some historians and educators have attacked the game industry for its inadequate engagement with the facts and its inappropriate irreverence for the past. And not surprisingly, the industry has responded by limiting its claims ("it's only entertainment") and pointing to its positive effects ("players are rendered so enthusiastic about history that they actually read about it").

Were one to inscribe these critical reactions and responses historically, one would have good grounds to see them as now familiar reenactments of the fears that have accompanied the early years of previous media, such as the motion picture. For example, when used for purposes of historical representation, the once new medium of film was loudly attacked by a historical establishment more familiar with the abstraction of print, and was defended in terms nearly identical to those deployed by the gaming industry.[3] But although these continuities are important to keep in mind, there are also some important distinctions. Unlike film, computer game remakes are seen as improving with each iteration, pointing among other things to the very different relationship of each medium to its underlying technology (film's relatively stable relationship to technology in contrast to the dynamic state of computing technology). Perhaps more fundamentally for the argument at hand, film and the subset of computer games that this paper will consider also differ in terms of their relationship to history. Films, like books, are primarily bound up in a relationship of historical representation, in fixing, for good or ill, a particular rendering of the past. The computer games that I will be discussing, by contrast, are bound up in a process of historical simulation, offering some fixed elements and underlying principles, but thriving upon the creative interaction of the user. The difference, I will suggest in the course of my argument, is crucial.

Homo Ludens—Playing and Prototypes

Although deconstruction, as a conscious, systematic philosophy, has been most prominent among intellectual historians, the mode of thought it represents, even its distinct vocabulary, is permeating all aspects of the new constructivist history. Historians now freely use such words as "invent," "imagine," "create" (not "recreate"), and "construct" (not "reconstruct") to describe the process of historical interpretation, and then proceed to support some novel interpretation by a series of "possibles," "might have beens," and "could have beens."—Gertrude Himmelfarb

The development that Gertrude Himmelfarb describes relates to the poststructural historical turn that is roughly coincident with the emergence of hypertext and games. I invoke her words here because they so

clearly characterize the historical endeavor as play. Think of them as imperatives: invent! imagine! create! Consider them as modes of engagement: the subjunctive, the speculative, the "what if." This notion of play, if I may so characterize Himmelfarb's descriptors before defining the term, also seems to share something very basic with historical computer games, something more than the destabilized hierarchies and subverted master narratives that are held in common between games and poststructuralist history. Indeed, one could easily imagine these imperatives and modes of engagement as promotional descriptors for historical computer games.[4] Although Himmelfarb along with many other respected historians lament this ludic turn in the writing of history, she has articulated the problem in ways that point to the conjuncture of the new history with games.

Play, the *sine qua non* of games generally, has many forms and flavors. Within the community of historians, perhaps the most important intervention on the topic remains Johan Huizinga's, whose now classic *Homo Ludens* asserted that civilization "arises in and as play, and never leaves it" (Huizinga, 1938, p. 173). Huizinga traces this expansive notion of play across various cultural sectors, and although he offers a number of compelling (and at times contradictory) definitions of the term, his most succinct is worth recalling. "Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy, and the consciousness that it is "different" from "ordinary life" (p. 28).

Huizinga's definition covers many possibilities, which is a good thing considering the rich genealogy that historical computer games draw upon. Board games, role playing games, re-enactments, and simulations have all contributed to the formation of historical computer games generally, with a number of more specific references informing the development of particular titles. Wargames (regardless of platform) have arguably had the most influence on historical computer games, particularly because they tend to be event-oriented and historically specific in their references.[5] In the words of the *Wargames Handbook*:

A wargame is an attempt to get a jump on the future by obtaining a better understanding of the past. A wargame is a combination of "game," history and science. It is a paper time-machine.... A wargame usually combines a map, playing pieces representing historical personages or military units and a set of rules telling you what you can or cannot do with them. Many are now available on personal computers. The object of any wargame (historical or otherwise) is to enable the player to recreate a specific event and, more importantly, to be able to explore what might have been if the player decides to do things differently. (Dunnigan, 2003)

Using the past as a way to understand the future, a time-machine, a rule-bound set of possibilities . . . these terms resonate with various definitions of history. As with *Grand Prix Legends*, the tension between the specific and the speculative gives this genre its power, and speaks directly to Huizinga's notion of play even within the oxymoronic context of war. Indeed, the richer the specific historical detail, the more profound and pleasurable the play with the speculative.[6] A good example of the importance of specific detail (and detailed knowledge) as the basic stuff of history and gaming play can be found in Ciril Rozic's description of the Battle of the Bulge as a site for gaming:

The Battle of the Bulge is everything but novel to wargaming. This period of the war in the West has been well documented and there are a great number of publications circulating in the military history realm, which is paralleled by a host of board and computer games, as well as scenarios for generic game systems. Whatever other reasons for the omnipresence of Bulge-related titles, the battle surely doesn't lack in appeal from a historian's and gamer's point of view. On the high operational level, it begins with an overwhelming surprise attack, followed by some intense fighting to contain it, and ends with a steady counterattack to push the Germans back. Meanwhile, the balance of resources changes drastically, as the German pool of supply and replacements diminishes and the Americans inject forces from other regions to help ease the pressure. Historically, the few weeks' clash of arms saw a diversity of tactically and technically interesting situations: fast-paced mechanized thrusts, huge offensive and defensive artillery barrages, river crossings, frantic bridge building and blowing, encirclements which ended in surrender and those that did not, air attacks, German deception unit action, parachute troop and supply drops, assaults on fortified positions, supply depot captures, and sticky traffic jams (this list is not final!). The task before any ambitious game maker is, therefore, quite serious. (Rozic, 2003, p. 1)

The possibilities are countless and the opportunities for obsessively detailed gaming scenarios *and* speculative intervention endless. Historical re-enactors, or role playing gamers, or historians proper would each approach this battle with similarly detailed bodies of knowledge. What each constituency would make of the encounter, how they would frame and deploy their knowledge, and just how much "lift" the ludic would offer their arrangements of the details would, however, differ. The attention to detail within the gaming world can be daunting, and one way to gauge it is through the clustering of games around particular historical moments. The Battle of the Bulge has spawned many, but so too have figures such as Napoleon and events such as the American Revolution. The *Napoleonic Computer Games Anthology* lists forty-four different simulation games and modifications (many more are out there), including titles on particular campaigns (*Napoleon's Campaigns: 1813, 1815*), and the battles of Quatre Bras, Jena, Ligny, and of course Waterloo (Vitous, 2003). In addition, specific titles unpack into further detail. The American Revolution-based *Campaign 1776*, for example, contains some forty-seven distinct scenarios, including four on the battle of Brandywine (September 11, 1777), eight on the first and second battles of Saratoga (September 19 and October 7, 1777), and so on, written from both historical and what-if vantage points (Campaign, 1776).

A quick look at the many reviews of these games and scenarios circulating on gamer websites offers insight into the parameters of play that are highly regarded (or abhorred). "Graphically attractive as an educational tool, its utility as an entertainment device ranked right up there with kidney stones" (*War Collage* by Game Tek, 1996); "Historically accurate and enhanced game play place it first among the Napoleonic simulations of the Battle of Borodino" (*Napoleon in Russia, Battleground 6* by TalonSoft, 1997); "the game was commendable for ease of play, but marred by a historical tactics necessary for achieving victory" (*Napoleon at Waterloo* by Krentek, 1984). "It was a failure: there was little of the ambience of the Napoleonic Era, and tactical combat seemed to yield artillery with ranges of 20 miles" (*L'Emperuer* by Koei, 1991) (Vitous, 2003). Generally, as already suggested, those reviewers who look beyond issues of technology and interface (themselves important factors in historical simulation) tend to value both historical accuracy and opportunities for creative intervention. Play emerges in the space between the constraint of detail and the exhilaration of improvisation.

At the other end of the historical gaming spectrum, a very different approach to play appears in those games structured around historical eras rather than particular historical moments. Games such as Sid Meier's *Civilization* series, *Age of Empires*, *The Oregon Trail*, and *Europa Universalis*, although responsive to certain historically relevant parameters, make no claims to historical specificity. Simulation games along the same lines as *Sim City*, *Civilization*, and so forth require strategic management of resources, investments, and populations in order for the player to progress to the next stage of gameplay. One might argue that these games differ from the historically specific games just discussed only in terms of the amount of detail they contain, but detail makes all of the difference in terms of the historical claims involved. Historically specific simulation games address a particular event; and even though the nature of that address can differ—although it generally centers on correct period detail—the game's claims offer a framework for play, meaning, and critique. By contrast, nonspecific simulations of the *Civilization* type are abstracted from the particularity of historical event, allowing the impact of decisions to be played and tested out in various worlds, but without bearing the burden of any specific referent. Although the principles and details may seem just as fine grained as in a specifically specific simulation, the referential claims are absent. Rather than a what if simulation with a known case study as the referent, nonspecific simulations provoke a wider range of interrogations, encouraging a more abstract, theoretical engagement of historical process.

Small wonder that games of this genre such as *Hidden Agenda* would be used for the training of CIA agents or that *SimCity* would be used at the 1994 Mayors Conference in Portland for planning purposes. Sid Meier, a key developer of historically oriented games, put it best: "We're not trying to duplicate history. We're trying to provide you with the tools, the elements of history and let you see how it would work if you took over." A *New York Times* interview with Meier revealed the crux of the extremely successful *Civilization* strategy: to achieve the greatest effect, developers of historical strategy games try to inject just the right dose of reality. Often this is achieved not so much by deciding what to include in the game, but by deciding what not to include. David Kushner, author of the *Times* story, concluded "Too much information can make the game too arcane or controversial for its own good. For that reason, the historical data used to construct *Civilization*-like simulations seldom run

deeper than the content of an illustrated history book for children" (Kushner, 2001).

Kushner's comments partially miss the point. It is certainly true that historical detail tends to be limited to the broad markers of time and place, and to stay clear of specific events. In the *Oregon Trail*, for example, the date selected for the start of the game has implications for how it unfolds, because the earlier you start, the fewer cities there are to start from, and fewer destinations:

If you start in 1840, you can only start from Independence, Missouri, and your destinations are either the Willamette Valley or Southern Oregon. If you start in 1860, there are several starting points (St. Louis, Independence, St. Joseph, etc.) and you have more destinations that are actually named (Sacramento, Oregon City, Jacksonville, Or. etc.).... A nice feature of this section is that is representative of the time your are travelling, i.e., 1846 itinerary contains only that information that was available in 1846. A nice touch of realism. (Cunningham, 2003)

But the complexity of the game appears in the process of historical simulation rather than in the representation of the historical moment. That is, players are called upon to make difficult choices about what they will bring with them on a westward journey constrained by limits of money and space—farming implements, food, weapons, medicine, spare wheels, and so on. Depending upon what route is chosen, what climactic factors they encounter (flooding, drought), and what sort of trading occurs along the way, users gain first hand knowledge of the struggles to cross the wilderness and the strategies to survive. *Civilization, Age of Empires*, and so on use basically the same structure, focusing more on the epochal development of broadly historical cultures, requiring strategic decisions about allocations of limited resources, and confronting the player with the consequences of their actions.

But how historical is it? In an opinion no doubt shared by many traditionalists within his profession, Martin Ryle, professor of history, found the emphasis on process rather than event problematic:

I find that historical simulations that are based upon manipulation of quantities of things like economic production, religious intensity, foreign trade, bureaucratic development, and literacy indeed fall more into the realm of sociology or anthropology than history. Certainly, these simulations may be quite interesting and

enlightening to the historian, but they are, I think, fundamentally unhistorical. The discipline of history focuses on the particular, on a given time and place and on the particular evidence that remains from that time and place. (Ryle, 1989)

But such a view may reflect a fundamental critique of the efforts of the *Annaliste* histories of Fernand Braudel, Roger Chartier, Emmanuel Le Roy Ladurie, and others with their focus on the broad structures of history such as economics, anthropology, linguistics, and so on. This is not to suggest that games such as the *Oregon Trail* (which lacks hostile Native Americans), or *Colonization* (which lacks slaves), or *Civilization* (which lacks a Hitler in twentieth-century Germany) are historically unproblematic. Rather, it is to say that, at a moment of shifting historical paradigms, the games' thin ("childlike") historical detail and their focus on process as play are not necessarily the main source of their problems.

Rethinking History

History is the most powerful construction of realistic conventions as we have known them since about 1400.—Elizabeth Ermarth

If Elizabeth Ermarth is right,[7] then a great deal is at stake in tampering with the contours of historical representation. The successively linguistic, interpretive, and rhetorical turns in the writing of history have created a quiet panic in some quarters, a panic amplified in the wake of the wars that have played out over the definition of common culture. History has been particularly vulnerable in these conflicts, cursed as it is with a double identity. On the one hand, history refers to the past as a set of lived occurrences. In this sense it has the status of event, of a now gone but infinitely complex reality. On the other hand, the term "history" refers to the *representation* of the past, a snapshot of that vast and multidimensional complexity. In this sense, history is inherently partial, deforming, delimiting, and grounded in a "presentist" point of view. No imaginable set of "historical" representations can do justice to the fullness of "history" as past. Although tacitly acknowledged by most historical practitioners, the limits and inherent subjectivity of history as written tend to be bracketed off from discussion, allowing historians to get on with their jobs. But the poststructuralists made their mark by embracing (and indeed, celebrating) precisely this long-suppressed representational

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uncertainty.[8] In a double move, they challenged the established explanatory master narratives that dominated the field, and at the same time asserted the need for boldly and articulately partial histories, histories embedded in a clearly defined point of view. Poststructuralism, consistent with the broader cultural turn of which it was a part, also posed the challenging question of who speaks for whom in the writing of history? In an era where issues of multiculturalism, gender, class, and generation emerged in the forefront of social policy and academic debate, it was but a small step to connect the dots between the partiality of representation and the issue of who was doing the representation. Robert Berkhofer neatly summed up these twin critiques: "If the first crisis of representation questioned whether and how historical actuality could ever be re-presented, the second crisis of representation undermined both the authority and the objectivity of traditional history. The first crisis of representation is encapsulated in the slogan, 'Question Reality,' and the second in another, 'Resist Authority' (Berkhofer, 1995, p. 3). The result, at least for some within the historical profession, was neatly described by Lyotard as a posture of "incredulity towards meta-narratives." Focus shifted instead to such issues as the exploration of narrative convention and implication, or ways of enabling the subject to construct personal histories, or even the creation of speculative histories.

I am struck by the broad coincidence between these developments within the historical profession (and, as mentioned, parts of the larger culture) and the emergence of a new set of representational possibilities centered on the computer. Over the long haul, we will no doubt see the connection, but for the moment it remains coincidence (though a mutually reinforcing one), devoid, as far as I can tell, of specifically shared causality. That said, digital technologies have found a ready market among historians, facilitating a quiet transformation in the writing and conception of history. Cleometrics, digitally enhanced access to archival documents, and Internet–facilitated discussion groups typify relatively noncontroversial applications that have had an accelerating effect on the flow of ideas. Other technologies, by contrast, have found more restricted embrace and engendered more controversy. For example, hypertext-based historical essays have permitted rich multimedia linkages of data and analysis, yet have implicitly subverted the authority of the historian and master narrative, instead ceding the creation of coherence and meaning to the reader. Simulation technologies have engendered similar problems, emerging as

they do from programming intensive efforts that assume a high degree of historical speculation and give rise to wide-ranging user structured meanings.

Digital technologies have not only offered historians new ways to pursue their research, communicate with one another, and give form to their ideas; they have also opened access to wider publics. This can be seen both in the relatively easy access that lay audiences have to online data and debates, and particularly to the newly empowered position that ordinary readers have when encountering hypertextual historical documents. The turn to the reader common to both of these extensions parallels developments that may be found in very different ways on the gaming boards of dedicated historical "players" or in the reenactments staged by members of (usually war-related) historical societies or even participants in living historical museums (Williamburg, Skansen, etc.). These sites attest to an engagement of the popular historical imagination, and to their participants' active construction of historical meaning. Gabrielle Spiegel has argued that

If one of the major moves in post-structuralist thought has been to displace the controlling metaphor of historical evidence from one of reflection to one of mediation (that is, a shift from the notion that texts and documents transparently reflect past realities, as positivism believed, to one in which the past is captured in the mediated form preserved for us in language), then we need to think carefully about how we understand mediation and how that understanding affects our practice. (Spiegel, 1992, pp. 197–198)

What happens if we push the notion of mediation beyond language, to the domain of game, enactment, or simulation? Does this allow us to slip out of the well-critiqued trap of representation? And if so, where does it land us?

Representation and Simulation

Historical sims recreate a past event or time period as accurately as possible. Many of the games are also included in other genres with simulation game, like combat or flight. This is a great genre for history buffs.—C. Marchelletta

Representation has emerged as a central term in the critical appraisal of history (as text), and the concept has served as the grounds upon which contestations over accuracy, adequacy, and notions such as objectivity

and consistency have been waged. These precarious but well-charted shoals need not be revisited here, for literature on the topic is rich (Iggers, 1997). The previous section simplified the current debate over historical representation in terms of two opposed positions. One position assumes that responsible research efforts have the potential to provide an accruing and ever-more accurate understanding of the past, and that somehow, with enough effort, the space between history as past and history as text can be minimized. The other position assumes an unbridgeable gap between the events of the past and the ever-shifting representational efforts of an ever-changing present, an assumption that instead reflects upon the contours of the present (and the position of the subject within it) and their relationship with the process of constructing an understanding of the past. The implications for computer games seem evident enough. As previously suggested, games' capacities for historical articulation turn on the relationship between a set of possible resemblances familiar from other media (image, the word, sound) and the notion of interactivity (and thus, representational variation or instability) at the core of the game form. Games by definition subvert the project of consolidation and certainty associated with the former brand of history. Instead, predicated as they are upon a reflexive awareness of the construction of history, they seem relevant to the notion of history as time-bound meaning situated in an ever-changing present.

"Representation" is not a term one often sees in the description of historical games. Genres such as wargames are sometimes invoked, but even here there seems to be a preferred level of abstraction occupied by descriptors such as simulations and role playing games. Kevin Robert Burns of The Historical Simulation Boardgamers Society of Japan offers at least one pragmatic reason:

To attract more people to the hobby, I suggest we use the term "historical simulation games," rather than wargames. Historical simulation is really what they are about after all. History involves many things, only one of which is war.... Admittedly, the subject matter of the games "Third Reich" and "War and Peace" amongst others, are the Second World War and the Napoleonic Wars respectively.... (but) they are historical games, and that is what I hope to learn about, when I sit opposite you, and roll the dice. (Burns, 2003)

The use of the terms "simulations" and "sims" is widespread within the gaming community—whether

role playing, board gaming or computer gaming— particularly that portion of it that is concerned with history. Some within the theoretical community, the *ludologists* in particular, have subsequently embraced this term, extracting games from a discursive framing as narrative or a conceptual framing derived from film or television studies.[9]

Simulation is a curious word in the English language. From the mid fourteenth century until the mid twentieth century, it was associated with meanings ranging from "false pretense" and "deception" to "the tendency to assume a form resembling that of something else." After World War II, the term finally gave way to the more familiar "technique of imitating the behavior of some situation or process by means of a suitably analogous situation or apparatus, especially for the purpose of study or personnel training."[10] This rather dramatic shift in meaning, located by the *Oxford English Dictionary* in 1947, indicates a move away from simulation both as willful *misrepresentation* and something akin to *representation*, to a modeling of behavior that is dynamic in nature, analogous in relationship, and pedagogical in goal. Unlike a representation, which tends to be fixed in nature, a simulation is a process guided by certain principles. Simulation is capable of generating countless encounters that may subsequently be fixed as representations, fixed, that is, as narrative or image or data set summations of a particular simulated encounter; whereas representation does not necessarily generate or include within it simulation. The difference is a crucial one, and speaks to just how radically the term transformed over the past half decade. A simulation is a machine for producing speculative or conditional representations.

Simulations have a history older than the recent change in the term's meaning (and older than the computer). Flight simulators, for example, can be dated to within a decade of the Wright Brother's first airplane flight, and economics, physics, and engineering have far deeper histories of relying upon carefully scaled models (whether physical or mathematical). But the simulations most relevant to the study of history played out in the arena of cold war politics (both political and wargames), or were imagined as a possible future for historical pedagogy (Clemens, 1976, pp. 109–126; Corbeil, 1988, pp. 15–20; Shafer, 1977, pp. 9–10). What qualities should be accentuated in a historical simulation? Professor Cary's "Formats and Tips of Effective Historical Simulations," although pertaining to roleplaying simulation games, offers several indications relevant to computer games.

First, it is important to be historically accurate—to be true to what the people of those times, whose roles you are playing, would have said. You should not take your present-day attitudes into the presentation. Rather, you should *become* the person whose role you are playing. Give that person's views, not your present-day critique of those views. For example, if you are debating the peace treaty to end World War I, you should *be* Wilson. *Be* Lloyd George. *Be* Clemenceau. *Be* Lenin, or Keynes, or Churchill (critics of the treaty *at the time*). (Cary, 2003)

Simulation through the alignment of subjectivities (knowledge, motives, perceptual horizons) has a proven track record, predicated as it is upon a compelling mode of address. But Cary's dictate about historical accuracy can also be deployed more fundamentally. The *Wargames Handbook* reminds us that computer wargames are more difficult to learn than other computer games because "wargames are, at heart, simulations of real life events. A simulation is, by its nature, a potentially very complex device. This is especially true of historical simulations, which must be capable of recreating the historical event they cover. Recreating history imposes a heavy burden on the designer, and the player who must cope with the additional detail incorporated to achieve the needed realism" (Dunnigan, 2003). The burden of history weighs heavily upon both the construction of the subject-player and the environment that defines and constrains the player's possibilities.

These twin considerations find clear articulation in the discourse surrounding historical simulation games. Consider *Versailles, 1685*.

The game is set in the late Seventeenth Century with French nobility at its zenith in power and prestige. The player assumes the role of Lalande, a valet of the King's inner chambers. Monsieur Bontemps, sort of a chief-of-staff has discovered a plot to destroy Versailles. Limited by his high visibility, Bontemps entrusts Lalande with gathering information to foil the coup. In his position as valet, Lalande is able to discreetly access the most private areas of the grand palace. Lalande has exactly one day to complete his task.

Versailles is a learning opportunity as much as an entertainment product. Beatrix Saule, Chief Curator of Versailles for over twenty years had strong input into accurately translating the Palace to the computer screen. The Chateau has been reconstructed as it was in 1685, down to the very paintings and wall hangings

present at the time. Not only will the player be able to access rooms of the Palace which have been closed to the public for decades, but even areas that no longer exist such as the Ambassadors' Staircase are brought back to life.

Also faithfully recreated is a day in the life of the King. Almost every moment of the King's day was ritualized into a ceremony that the player will experience as his valet. These are cleverly divided into the game as "Acts." Here player will have a multitude of tasks to accomplish and leads to explore. (Klimushyn, 1997)

Point of view, domains of knowledge and access, and motivation all speak to the construction of the role playing subject, just as the text situates that construction within the possibilities and constraints of "authorized" period detail (spatial and visual regimes, temporal cycles). Together with events (and thus the progression of play) structured around royal ritual, these elements combine to produce to the twin appeals of entertainment and education that the game addresses. *Versailles 1685* provides near endless possibilities, and thus outcomes for the king and his minions within the confines of the palace, allowing the player to experience various scenarios and to use those experiences for purposes of understanding, entertainment, and for re-telling in the form of narrative representation.

A more explicitly event-centered example may be found in *The Civil War Online*. This military, economic, and political simulation of the American Civil War combines both role playing and third-person wargaming for its impact. Beginning in 1861 and lasting until the end of 1863, when, in the eyes of the game developers, the military fortunes of the Confederacy had doomed it to extinction, *CWOL* is built upon on "historical facts." The game uses the years of 1861, 1862, and 1863 for historical background of the majority of the game, arguing that after the triple Union victories at Gettysburg, Vicksburg, and Chattanooga, the Confederacy had little hope of achieving a military solution. In the words of the developers, "players are challenged to try to alter the outcome, but the challenges each country faced in the 1860's are evident and will remain if the national team does not address the strategic, diplomatic, economic, and political obstacles in their path to victory" (The Distance Simulations Group, 2003). This is simulation in the spirit of the post-1947 turn of the word, enabling a testing and modeling through an analogous situation with the purpose of learning. The game is inspired by various historical representations, yet as a simulation, offers its users the opportunity to

play with variations and speculate what would have happened if.

Virtual Histories, Real Constraints

Narrative history, they [White, La Capra, Mink, etc.] argue, is always written with the advantage of hindsight. The historian's explanations of events are not like scientific hypotheses, subject to disconfirmation by subsequent events but are constructed in accordance with preconceived literary forms.... Sometimes an imaginative or rigorous historian introduces counter factuals ... but we are generally short of methodologies for modeling such scenarios. One of the advantages of the computer, and the hypertext, it seems to me, is that it offers the potential for thinking about historical relationships in new configurations. We can think of multiple beginnings and endings, and exploit the labyrinthine linkages of the hypertext to represent them.
—Graeme Davison

Graeme Davison speaks to a notion of history termed by Niall Ferguson, *virtual history*, that is, what-if or speculative history. Davidson's remarks pertain to written histories, where poststructuralist historians challenged the notion of where familiar histories begin and end, and explored the implications of narrative form for the telling of these histories. Although games are built around radically hypertextual principles, many of the more historically specific games (*The Battle of Jena*, etc.) in fact operate with fixed starting points, in this sense sharing one of the key assumptions of traditional linear histories. True, much of what follows in the games is up for grabs, but it still falls within the terms of the critique posed by White et al. regarding the problem of where a particular historical episode begins. The more process-oriented games (*Civilization*, etc.) are more interesting in this regard, because they permit a radical reframing of familiar events and extend the user's intervention such things as the control over the genesis of an episode. I mention this as a proviso of sorts, because the radicalization of hypertextual form evident in most games doesn't always map onto the critique offered by the community of poststructuralist historiographers. That said, hypertextual form, with its shift in narrative determination from the author to the reader, is certainly capable of calling into question beginnings, endings, and everything in between. The new and improved *Europa Universalis* (version II) for example, supports the following claim: "One of the results of all the additional options is that *Europa Uni-*

versalis isn't as straight jacketed by history as it used to be. You'll see more fantastic outcomes like France getting swallowed by her neighbors, Byzantium beating back the Turks, England knocked out of the seas, or Poland biting off swathes of Russia. *Europa Universalis* goes to new places it couldn't reach before" (Chick, 2003).

As I have already suggested, for the purposes of this chapter we can discern a spectrum of historical engagement in games, defined by two poles. One pole is marked by particular historical events. Efforts are taken to maximize historical accuracy, allowing the setting, conditions, and period details to constrain and shape game play. For all of their efforts to provide an array of ludic possibilities, such efforts also tend to bring with them certain structuring assumptions, such as the starting point for a historical experience. The other pole is marked by historical process, albeit in a somewhat abstracted or structured manner. Although games of this sort also elicit speculative engagement with the past, they tend to be built upon particular visions of long-term historical development. Much as with structuralist histories, games such as *Civilization* are built upon notions such as societal coherence, progression, and increasing complexity as a sign of advance. Indeed, *Civilization* boils down to several ideologically positioned maxims such as the more efficient production, the more advanced the civilization; and the more democracy, the better. There has, as of this writing, been little analysis of the tendencies latent in the structuring logic of the process games.[11] Kacper Poblocki, in an important departure from this trend, offers a detailed analysis of *Civilization* and comes to the following conclusion: "This history is not contingent in any way, but it is the history of the west." "The United States is made the inheritor of all the human advancement and elevated to the position of the most perfect and most 'civilized' state of all" (Poblocki, 2002, pp. 163–177). These tendencies can be found embedded in the basic cause-effect logic of the game, where they are at their most insidious, but they are also remarkably explicit, there in the texture of surface detail.

Virtual history, even if simulated in the ludic space constituted by historical computer games, seems to have a complicated relationship to the poststructuralist critique. On the one hand, whether historically specific or process oriented, the hypertextual foundation of games seems closely to correlate to the demands for historical possibility. Their embeddedness in play and the controlling agency that they cede to the user seems to fulfill the claims for reflexivity and subjectivity so

central to the new history. And yet, it seems as though there are contradictions, sites of stubborn adherence to the historiographic status quo. Historically specific games are sometimes constrained by the sheer detail that gives them specificity, such as having defined and unalterable starting points and falling into the trap discussed by White and his colleagues. And process oriented games, for all their seeming lack of constraint, can be built around organizing principles that reveal a structuralist understanding of historical process. These organizing strategies might be embedded in the logic of the game's progression, or they might be evident in the terms of play, but in either case they work against the apparent freedom celebrated by the games themselves.

But some might respond that this seeming paradox between the radical possibilities of virtual history and the constraints and structuring agencies of traditional history is beside the point. "The historical aspect of these games is just the icing on the cake," said Graham Somers, a twenty-two-year-old college student in Vancouver who runs an *Age of Empires* fan site called *HeavenGames*. "I have a definite love of history, and certainly sending an army of knights and battering rams into an enemy town has a historical basis, but the main thing is it's a lot of fun. They are games, after all" (Kushner, 2001, p. 6). Indeed, they are games. And the extent to which, as both games and simulations, they offer a new means of reflecting upon the past, working through its possibilities, its alternatives, its "might-have-beens," it would seem that they succeed where other forms of history fail.

Where might we look for future developments? Greater investment on the part of the historical community may well hold benefits for the game industry. This is not to suggest (as some historians have), that greater attention to correct period detail or more pedagogical pop-ups will improve the games. Rather, we might think of the rule systems that characterize various brands of history as constituting the potential rule systems for game play. By embedding various historiographic epistemologies as structuring agencies rather than relying implicitly on narratives of truth, progress, and the American way, a new dimension could be added to play, more coherently addressing history's rich complexity and relevance. At the same time, historians would benefit by being more attentive both to the possibilities that simulation—as distinct from representation—holds as a way of coming to terms with the poststructuralist turn in historiography. Moreover, games have spawned communities of interest, debate, and creative investment that have much to offer the interested historian. Particularly because of their participation in historical simulation, players' retrospective process of representation would seem to shed light on the larger uses of history that have proven to be so evasive in other media.

"History has never been so addictive" declared *Time* magazine (Chris Tayloz, "New From E3," *Time Magazine* 20 May 2001), speaking of the computer game revolution and *Civilization* in particular. Perhaps. But considering the pace of ongoing changes in computing and transmission technologies, considering how recent the development of computer games, and considering the generational demographic of the heaviest computer game users, the future of things past has never been more promising.

Notes

1. For the purposes of this chapter, I use the term *computer games* broadly and do not distinguish among the various available platforms.

2. Ranke's notion of "what really happened" has been the battle cry of those historians who see their profession as objective, accretive, and teleologically governed as each generation of scholarship refines the truth and contributes additional data. One counter-critique is that such a historical notion leads inevitably towards the idea of reconstruction.

3. For a detailed case study based on the early U.S. film industry, see William Uricchio and Roberta E. Pearson, *Reframing Culture: The Case of the Vitagraph Quality Films* (Princeton: Princeton University Press, 1993), chapter 4.

4. For a developed discussion of play in terms of computer games, see Gonzalo Frasca, "Videogames of the Oppressed," MA Thesis, Georgia Institute of Technology (2001), http://www.jacaranda.org/frasca/thesis/.

5. Indeed, their relevance is implicit in the very definition of the war games genre. See Rex Martin, *Cardboard Warriors: The Rise and Fall of an American Wargaming Subculture, 1958–1998* (Ph.D. dissertation, 2001, Pennsylvania State University).

6. Although differently mediated, the historical novel also derives its power from a mix of rich period detail and narrative invention.

7. Although there is reason to challenge her: consider such discourses as physics and sociology, not to mention conventions in visual representa-

tion such as perspective, as "realist" alternatives to history's interpretive strategies.

8. The literature on poststructuralist historiography is extensive. See among others, Hayden White, *The Content of the Form: Narrative Discourse and Historical Representation* (Baltimore: Johns Hopkins, 1990); Michel de Certeau, *The Writing of History* (New York: Columbia University Press, 1992); Keith Jenkins, ed., *The Post-Modern History Reader* (New York: Routledge, 1997); Keith Jenkins, *Rethinking History* (New York: Routledge, 2003).

9. One of the central debates in computer game theory regards the epistemological framing of the game encounter: as narrative (a mode of representation familiar from film or television studies or literature or art history) or as something distinctive. Some advocates of the latter have seized upon "simulation" as the nonrepresentational alternative. For more, see Espen Aarseth, *Cybertext. Perspectives on Ergodic Literature* (Baltimore: The Johns Hopkins University, 1997); Marie-Laure Ryan, *Narrative as Virtual Reality. Immersion and Interactivity in Literature and Electronic Media* (Baltimore: Johns Hopkins University Press, 2001). The Ludologists have at least two clearly demarcated camps, one interested in the study of games-as-such (Jesper Jull), and the other interested in the study of games as systems (Gonzalo Frasca). See Frasca's site www.ludology.org/.

10. Oxford English Dictionary Online (2002).

11. Kurt Squire's dissertation, *Replaying History: Learning World History Through Playing* (Ph.D. dissertation, Indiana University, January 2004), is an important exception; unfortunately, it was not consulted for this chapter.

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