



The Test of Time

McLuhan, Space, and the Rise of *Civilization*

Tom Tyler

Rhetoric . . . may be defined as the faculty of discovering the possible means of persuasion in reference to any subject whatever.

—Aristotle, *The Art of Rhetoric*

All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the message. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments.

—Marshall McLuhan, *The Medium Is the Message*

The Second Coming of Saint Marshall

In 1965, Tom Wolfe wondered whether media theorist Marshall McLuhan might be “the most important thinker since Newton, Darwin, Freud, Einstein, and Pavlov” (Stearn 1967, 15). George Steiner described him as “this enormously exciting iconoclast” (236). Even McLuhan’s detractors, and there were many, could grant the value of his provocative interventions: despite considerable reservations, Raymond Williams described *The Gutenberg Galaxy* as “a wholly indispensable” book, and Jonathan Miller was willing to concede that “enough of the doors that he opens are exciting and productive to make him worth studying” (189, 236).¹ At the height of his fame, or perhaps infamy, McLuhan





was declared “the oracle of the electric age” by *Life* magazine, appeared on the cover of *Newsweek*, was interviewed by *Playboy*, and hosted an NBC TV show entitled *This Is Marshall McLuhan*.² Then, following the “McLuhanacy” of the 1960s and early 1970s, and his death in 1980, McLuhan’s work and ideas dropped beneath the critical and popular radar: interest waned, and books went out of print. It was not until the eve of the new millennium that “another quasi-global outpouring of interest and influence tied once again to emerging communications technologies and information systems” developed, and Gary Genosko could proclaim that “For better and for worse, a McLuhan renaissance is in full swing” (Genosko 1999, 1). A raft of new publications on McLuhan coincided with reprints and critical editions of his work,³ while *Wired* magazine verified this “second coming” (ibid.) by canonizing McLuhan as its “patron saint.”⁴

In this chapter I examine whether any of those exciting and productive doors that McLuhan left open might lead to theoretical resources that could usefully inform the consideration of visual and environmental rhetoric. In particular, I will take up McLuhan’s notions of visual and acoustic space and consider their utility for thinking about certain aspects of a relatively new medium whose increasing importance and popularity have largely overlapped with the resurgence of interest in the work of Saint Marshall: that of digital games. I would like to investigate what McLuhan’s iconoclastic ideas can tell us if we consider at one and the same time the complicated visual nature of digital games and the implicit environmental discourses they comprise. Genosko suggests that “the McLuhan legacy was singularly devoid of progressive political ideas and remains largely the same today, with a few exceptions” (1999, 12). This chapter might be considered, I hope, one of those exceptions. My objective is to reflect on what McLuhan has to say about media as environments in order to better understand the nature of the rhetoric, specifically the environmental rhetoric, constituted by the medium of digital games. My suggestion is that digital games, as a distinct medium, work to persuade players of their immediate and continuing participation in the environment of which they are a part. By way of illustrative example, but also in order to complicate the chapter’s own message somewhat, I examine Sid Meier’s highly successful and enduring game *Civilization*.

McLuhan was interested in media not as channels of communication, not as vehicles for conveying a meaning or an idea from author to audience or from producer to consumer, but as environments. A medium will have an effect on us in virtue of the particular material and social changes that it engenders, irrespective of any individual messages that it is used to transmit. The impact of the telephone has been far





more significant than any of the specific uses to which it has been put.⁵ Media, which include for McLuhan an extensive range of technological innovations, touch us, affect us, and alter us. The *medium* is the message, or perhaps the “massage.”⁶ Thus in looking for the possible means of persuasion, for the ways that media work us over, McLuhan finds a rhetorical import and impact within the medium itself, rather than in the message or content it conveys. It is the pervasive, persuasive function of media to shape us—personally, politically, psychologically—by the environments they create. It is this rhetoric of the environment with which we will be concerned, so that we might examine the environmental rhetoric of digital games.⁷ Before doing so, however, it will prove useful to consider McLuhan’s account of the environments created by two of the most important media developments: literacy and print.

An Eye for an Ear⁸

McLuhan was by no means the first to suggest that the development of literacy had a profound effect on culture and society, but the importance he accorded this technological innovation and the particular approach he took to its impact were novel.⁹ McLuhan argues that writing, as a medium, prompted the rise of civilization as we know it, and it did so because it shifted us from one environment into another. With the advent of literacy, we moved from what McLuhan calls acoustic space into visual space. Acoustic space is the environment in which we live insofar as it is accessed predominantly by our sense of hearing. It is characterized, McLuhan argues, by inclusivity and a lack of central focus. “We hear equally well from right or left, front or back, above or below. . . . We can shut out the visual field by simply closing our eyes, but we are always triggered to respond to sound” (1960, 41). As Wordsworth suggested, “We cannot bid the ear be still” (quoted in McLuhan and Fiore 1967, 44). Thus, “The ear favours no particular ‘point of view.’ We are enveloped by sound. It forms a seamless web around us” (111). Members of those cultures who were dependent on speech and hearing for the majority of their communications, which is to say those who existed prior to widespread literacy, were accustomed to living in acoustic space. “Primitive and pre-alphabet people integrate time and space as one and live in an acoustic, horizonless, boundless, olfactory space” (57). Within this “sphere without fixed boundaries” (1960, 41) they experienced a rich, compelling connectivity to the world. With no central focus to this experiential sphere, an interplay between all of the senses remained possible, a “tactile synaesthesia”



(1962b, 17). “Acoustic” space, then, entailed a kind of total inclusivity, an immersion within the environment.¹⁰ This unity was unavoidably lost with the arrival of literacy.

McLuhan argues that this technological innovation, particularly the phonetic alphabet, caused a shift in the relative significance of the senses. Writing promoted the eye rather than the ear. “Its use fostered and encouraged the habit of perceiving all environment in visual and spatial terms” (McLuhan and Fiore 1967, 44).¹¹ This emphasis on the visual, and the insistence of the distinct, uniform characters of an abstract, phonetic alphabet, brought with it a new kind of separation, of segmentation, unknown to the inhabitants of acoustic space. Modes of perception and patterns of thinking became increasingly linear, distinct, departmentalized. Print exacerbated and extended this predominance of the eye and the fragmentation it entailed.¹² The printing press, which McLuhan calls “a ditto device,” provided “the first uniformly repeatable commodity, the first assembly-line, and the first mass-production” (1962b, 124; McLuhan and Fiore 1967, 50). This mechanization of writing continued the process of abstraction begun by the individually meaningless characters of the phonetic alphabet. Crucially, the foregrounding or isolation of the visual, and the consequent “separative and compartmentalizing or specialist outlook,” tended to produce a “fixed point of view,” on which “the triumphs and destructions of the Gutenberg era” would be made (McLuhan 1962b, 126–27).¹³ McLuhan pins on printing a host of varied historical developments, including the rise of the nation-state: in rendering the vernacular visible and unified, print “created the uniform, centralizing forces of modern nationalism” (199).¹⁴ This consolidation of the linear homogeneity of visual space was “the making of typographic man.”¹⁵ The culture of the West, the rise of this particular species of civilization, McLuhan suggests, was due in large part to the operation and effects of literacy: “Civilization is built on literacy because literacy is a uniform processing of a culture by a visual sense extended in space and time by the alphabet” (1964, 86).¹⁶

The Renaissance thus saw the creation of a new environment in which the visual ruled as tyrant. The “interplay of all the senses in haptic harmony” (McLuhan 1962b, 17), characteristic of oral culture and enduring into the age of the manuscript, was stamped out by the ditto device. Something of the seamless web of acoustic space was recaptured, however, with the onset of the “electronic revolution.” Telephone, phonograph and radio all extended the oral and acoustic, of course, but so too, McLuhan argues, did a congregation of other technological innovations: “even our visual electronic forms, the telegraphic press, teletype, wirephoto, and TV are oral in character” (1958–1959, 169).





Like the immediate communication between members of oral culture, the instantaneity of electronic communication, now on a global scale, created an “auditory spatial structure [which] is a simultaneous field of relations,” since “the oral is accidentally the spoken but essentially the instantaneous” (169). The successive, linear segmentation accentuated by the visual supremacy of typography gave way to an instant electric inclusivity in which all of the senses are involved, so that “[o]ur extended faculties and senses now constitute a single field of experience” (McLuhan 1962b, 5). With the electronic restoration of a tactile synesthesia, we become immersed within a new kind of acoustic space.¹⁷

The speed of communication in the electronic age renders the centralization characteristic of the mechanical age redundant. Information moves too fast for any center to keep up, ensuring that “[t]he new situation is not the old sponge pattern of intake from the margin and output from the centre, but of dialogue among centres” (1962a, 37). The “electronic conditions of implosion” thus create decentralized “centres-without-margins” (26, 23).¹⁸ As McLuhan famously suggested, this electronic, dialogic interdependence “recreates the world in the image of a global village” (1962b, 31). The multiple centers are brought into direct contact with one another, so that everyone is involved and connected to everyone else. “We live in a single constricted space resonant with tribal drums” (ibid.). This newly recaptured “tribal web” (1964, 84) does not ensure cooperation or conformity, however. In fact, the conditions of the “tribal-global village” (Stearn 1967, 280) produce more discontinuity, diversity, and disagreement than the uniform consistency of visual space ever did.

War and Peace in the Global Village¹⁹

Digital games illustrate McLuhan’s notion of a new acoustic space especially well and thereby provide an opportunity to explore the utility of his particular understanding of the rhetorical effects of new media.²⁰ Digital game genres are many and varied, but all such games create, as a result of their technological modus operandi, a distinct kind of environment that participating players must inhabit.²¹ Immersed within this interactive game environment, a player’s experience is qualitatively different, not just from reading a text or viewing an image but also from watching television or film.²² By inviting, or, rather, requiring of the player, an immediate engagement with and connectivity to the medium, games are, in McLuhan’s terms, more acoustic than they are visual. Online gaming provides perhaps the best, or most obvious,





example of the inclusive, decentered nature of digital gaming. In role-playing games such as *World of WarCraft* and *Lineage*, or action games such as *Counter-Strike* and *Quake*, millions of players from across the globe meet within vividly realized virtual environments, communicating and interacting instantaneously. In order to illustrate fully the acoustic quality of digital games, however, I turn to an example from a rather different genre, a game that began life as an offline, single-player, turn-based affair, and that upon first appearances seems, therefore, to be an altogether more visual experience.

Based in part on an intricate 1980s board game of the same name, Sid Meier's *Civilization* was released by MicroProse in 1991. The computer game was initially only modestly successful but went on to secure a series of awards and increasing popularity. A new version, *Civilization II*, with tweaked gameplay and improved graphics, was released five years later, significantly increasing the number of players and prompting in turn two further expansion packs. *Civilization III* (2001) and *Civilization IV* (2005) followed, each time to widespread critical and popular acclaim within the games industry, making the series one of the most successful ever. The rise of *Civilization* has been unremitting and continues to this day.²³

Players of *Civilization* start the game in control of a settler, the sole representative of their chosen tribe, in 4000 B.C. Their immediate goal is to found a city, but from here the ultimate objective over the centuries to come is to establish a globe-spanning civilization. Play unfolds on a huge world map, which is gradually revealed over the course of successive turns. The game belongs to, and indeed helped define, the now-popular "4X" strategy genre: exploration (of the world), expansion (of your empire), exploitation (of resources) and extermination (of rivals).²⁴ Players pursue their imperial agenda by founding additional cities, constructing military units, researching science and technology, building Wonders of the World, trading with competitors, and so on. By these means, players hope to "Build an empire to stand the test of time," as the game's original strapline urged (Figure 13.1).

Civilization, the game, seems to exhibit all of the hallmarks of a visual form according to McLuhan's schema, as his comments concerning civilization, the process, begin to suggest:

A goose quill put an end to talk, abolished mystery, gave us enclosed space and towns, brought roads and armies and bureaucracies. It was the basic metaphor with which the cycle of civilization began, the step from the dark into the light of the mind. The hand that filled a paper built a city. (1969a, 14)



Figure 13.1. *Civilization IV* Map

Most importantly, the game plays out on a map, that supremely visual medium which reduces all the world to a homogeneous, geometric space and entails thereby a kind of sensory blindness (McLuhan 1962b, 11).²⁵ This playing area is, in effect, a sophisticated, animated board, not unlike those used for traditional board games, and the playing pieces are similarly restricted in their linear, sequential movement. The game even simulates line of sight for these units, a favored point of view that permits players to see only those parts of the board that have been visited, and only those enemy units that are close by (the so-called “fog of war”). Ted Friedman has argued that in simulation games such as *Civilization*, the map itself thus becomes the protagonist in a geographical narrative (Friedman 1999). Space is conceptualized by abstract images, and the games operate as maps in time, “dramas which teach us how to think about structures of spatial relationships” (ibid.). These structures are *visual* spatial relationships, of course, and the map’s movement through time accords with the strict linearity described by McLuhan. The game progresses in rigidly sequential turns: players must await their go and must move each of their individual units one at a time, one after another. Even a tribe’s scientific development proceeds in strict order: any given





advance (wheel, gun powder, electricity, etc.) cannot be researched until prerequisite technologies have been mastered, and progress is represented by a branching, arborescent “technology tree.”²⁶

Further, *Civilization* has remained, at least until its recent incarnations, an essentially single-player experience. Multiplayer functionality has been available since *Civilization II*, but the measured, turn-based pace and extremely lengthy course of each game has, for the most part, made the involvement of several players impractical.²⁷ Just as, according to McLuhan, the alphabet and its mass-produced texts resulted in a largely solitary communicative experience, at least compared to the simultaneity of dialogic interchange, so *Civilization* gives rise to a predominantly isolated mode of play. Finally, in taking the role of a near-immortal sovereign, forging a homogeneous empire under their personal, direct command, players manage a highly centralized state.²⁸ Those nomadic settlers with which the game begins swiftly set down roots, founding a capital city complete with imperial palace. The tribe becomes a nation, unified under absolute, central control.

Civilization is altogether more acoustic than it would initially appear, however. First, there is for the player no favored point of view. Where first- or third-person action games such as *Counter-Strike* or *Tomb Raider* require the player to assume a single, fixed perspective, *Civilization* allows continual access to any part of the world that has been revealed. There is thus no central focus but rather equal perception in all directions.²⁹ Further, despite the fact that your first city is a nominal capital, the cities that you go on to found are no less important in terms of the resources they exploit and the improvements they build. In the early stages of the game they can remain relatively autonomous, self-contained centers in their own right, but once conjoined by road or rail, they form a network, a web even, of mutually supporting bases. This single space, resonant with the “tribal drums” of instantaneous communication, facilitates a dialogue among centers without margins.³⁰ In McLuhan’s terms, then, the empire established by a tribe is not so much a centralized nation as a growing, meshlike global village.

Moreover, there is a good deal more to the playing area, the space of *Civilization*, than the margin-free world map. Images may well be, as Friedman suggests, the clearest way to represent visual space, but an aspiring emperor must command more than a scenic view. In addition to the map, players also have access to a large number of charts and tables that relate all manners of essential information. Each “city display” conveys statistics regarding population, food stores, trade and corruption, building projects and improvements, and so on. (Figure 13.2), while various advisors or “ministers” report on the nation’s defenses, relations





with foreign powers, the morale of the populace, the status of scientific research, and so on. Play does not stop at the map in time, then, but incorporates numerous charts in time (Friedman, 1999, n. 8), immersing the player in a multidimensional, acoustic experience. Friedman argues that digital games reorganize structures of perception by requiring players to internalize the logic of the program, to “think like a computer” (Friedman 1999). The immersive pleasures of an effective game of *Civilization* are due at least in part to the effortless, instantaneous way in which an experienced player will begin to access and manipulate the heterogeneous maps, charts, and tables.³¹ Players come to identify not with the tribal leader they purportedly control but, rather, with the roles and functions carried out by the game itself. The player’s perspective is not that of a God’s-eye view, a prospect from above that surveys a uniform, geometric visual space, but rather of a computer, an exploration from within the sphere of instantaneous electronic communication. Just as there is no single geographical center to the player’s expanding empire, so there is no single, privileged subject-position for the player who is dispersed across a varied and changeable acoustic environment.³²



Figure 13.2. *Civilization III* City Display





McLuhan argues that the sheer volume and diversity of information with which consumers are faced in the electronic age necessitate a “producer-oriented” approach, whereby consumers become discriminating co-creators of their own media experiences (1958–1959, 167). The particular kind of interaction in which player and computer engage certainly requires that the former take a proactive part in the construction of the gaming experience. Immersion within the medium of the game ensures that the process of play is no hermeneutic matter of discerning *Civilization*’s “message.” The environment, both geographic and otherwise, changes during the game as a direct result of the player’s actions. Terrain is mined or irrigated, taxation is raised or reduced, and governments are replaced or restored. The game continually demands decisions from the player, at both the local and global levels, and every one will have consequences for the success of the tribe, sometimes within just a year or two of game time, sometimes decades or centuries later.

At the same time, David Myers has further argued that it is precisely the “transformative” aspect of *Civilization*’s gameplay that makes it such a compelling experience (2005). With each technological advance, with each change in government, and especially as the powerful Wonders of the World are secured by one tribe or another, the rules of the game are significantly transformed, requiring players to reassess their immediate goals and perhaps modify their style of play. A full understanding of the far-reaching effects of these transformations can only be gained by replaying the game and by experimenting with different strategies and tactics, many times over.³³ The recursive nature of replay, the experimental adaptation that comes with successive iterations, results in an acoustic space that is never consistent but always evolving.³⁴

Players are submerged, then, in an environment that molds their actions, prompts their responses, and works them over: the medium is the message. But at the same time, as we have seen, they work to shape their environment, actively modifying their surroundings, pursuing “the tilling of virtual landscape” in the broadest sense (Myers, 2005). Players are not subsumed into or absorbed by this virtual, acoustic environment, and thinking like a computer need not mean that they become one with the software: there is still a useful distinction to be drawn between the masseur and those massaged. Players of *Civilization* exist within the game environment, experiencing a rich, compelling connectivity to the world, but, engrossed as they may be, connection is not assimilation.³⁵ If the medium is the *message*, then the directive or intimation here is that the player is an active, involved part of the environment. Every decision will impact on the state of the game, provoking consequences that the player will in turn experience.³⁶





Digital games, including the seemingly linear and visual *Civilization* series, provide an illuminating illustration of McLuhan's notion of a new, inclusive, acoustic space. Players are immersed in an engaging, centerless, electronic environment. Strictly speaking, if we are to follow McLuhan, then an individual game such as *Civilization* simply illustrates this environment: each time we take up Sid Meier's challenge, we invoke in miniature the wider acoustic space of which the medium as a whole is a part. Digital games in their entirety comprise one contributing component of the distinctive acoustic environment that has emerged since the nineteenth century, with the advent of telegraph, radio, television, and so on. McLuhan thus provides a productive probe with which to explore digital games, but, at the same time, a close examination of this particular electronic medium helps to clarify our understanding of the new acoustic space to which he draws our attention. The inclusivity and immersion that characterize acoustic space should not be conceived as an assimilation or absorption of individual subjects into that space. Notoriously compelling as *Civilization* is, and much as the game works us over personally, aesthetically, and even psychologically, the player, like the denizens of the wider acoustic space, remains an active participant within the environment.



Talk to the Media, not the Programmer³⁷



In his analysis of *Civilization*, Myers's focus on the transformative, recursive nature of gameplay accords closely with McLuhan's insistence on the necessity of analyzing media as environments rather than as vehicles or channels of communication. Both writers distance themselves from textual analysis, concentrating instead on the internal mechanics and physical or psychological effects of their chosen media.³⁸ Myers goes so far as to suggest that, in general, game backstories, the carefully realized social and cultural milieus in which game events take place, "have no real relevance to computer gameplay" (2005).³⁹ What matters is "not the setting or the characters or the plot, but the *relationships* among the game's signs and symbols as adjudicated by the game rules" (2003a, 9). In fact, *Civilization's* particular representation of world-historical development, its backstory in the broadest sense, has been the subject of much discussion and ideological critique. In this final section, I explore the explicit but equivocal environmental rhetoric of the game. Conflicting textual analyses seem to suggest, I argue, that it is important to attend here not just to the message but to the medium itself.

Civilization's rhetoric with regard to environmental issues is, on first sight, unpromising. Even setting aside the imperial and colonialist





objectives that players are required to take up,⁴⁰ and the peculiarly occidental assumptions regarding cultural and governmental progress—factors that between them have borne the brunt of criticism from the game’s always-respectful detractors (Stephenson 1999; Henthorne 2003; Poblocki 2002; Lammes 2003; Bitz 2002; Douglas 2002)⁴¹—*Civilization’s* approach to ecological questions remains problematic. At the start of play a tribe’s nomadic settlers find themselves amidst virgin landscapes: lush plains and grasslands, dense forests and arid deserts, hills and mountains, swamps, jungles, and more. Once settled, however, and as the expanding tribe establishes one city after another, the terrain changes. The land around each settlement is developed: roads are laid to connect urban centers, fields are irrigated beside available waterways, and hills are mined. As technology advances, railroads begin to crisscross an intensively farmed landscape. Gradually but inexorably, the diverse natural environment is replaced by an increasingly homogeneous topography, a highly developed, uniformly industrial conurbation. Only by such expansion and cultivation can players hope to survive and succeed.

One might argue that there is an implicit environmental message here: *Civilization* draws the player’s attention to the fact that increasing urban settlement *does* deplete and destroy the surrounding land. There is a lesson here, perhaps, that the demands of concentrated population growth directly counterpose environmental concerns. And, in fact, swelling populations and escalating production present players with a particular, new problem. The accumulating factories, offshore platforms, and manufacturing and power plants all increase the likelihood of environmental pollution. Represented as a death’s head skull, or a garish blight on the land, pollution not only lowers a player’s final score but nullifies the benefits that industrialization and intensive farming had initially bestowed. The problem of pollution persists as the game progresses and, if left unchecked, can lead to global warming, rising sea levels, and barren coastal farmlands. Only by constructing city improvements, such as solar and hydroelectric power plants, recycling centers, and mass transport systems, can the threat of pollution be averted. Nuclear power stations reduce the likelihood of immediate pollution but bring the possibility of a ruinous meltdown, and the deployment of nuclear missiles has similarly devastating effects. If there is a textual message to be detected within *Civilization*, then it is surely that willful disregard of the environmental consequences of one’s actions results in dire costs and penalties.⁴²

And yet pollution is just one obstacle among many that must be addressed by the player whose key objectives are, as we have seen, exploration, expansion, exploitation, and extermination. There is certainly no





incentive to *reduce* the consumption of resources, or, indeed, to regard the game's geography as anything other than a storehouse of goods and material opportunities.⁴³ It is, in fact, a simple matter to "clean up" polluted terrain: teams of engineers or workers assigned to the task swiftly remove all evidence that a problem ever existed. Even nuclear fallout, from missile or meltdown, can be scrubbed from the map in a few game years.⁴⁴ Though repeated cleaning can become tedious in gameplay terms, the implication is that environmental pollutants, nuclear or otherwise, are an easy matter with which to deal. Indeed, along with civil unrest, corruption, waste, and a number of other elements considered detrimental to smooth gameplay, pollution was removed from *Civilization IV* in favor of a streamlined "city health" system, shifting the ecological focus from global environment to metropolitan well-being.

In *Ecospeak*, Killingsworth and Palmer define rhetoric as "the production and interpretation of signs and the use of logical, ethical, and emotional appeals in deliberations about public action" (1992, 1). Interpretation of the signs that are produced and manipulated within *Civilization* seems to yield an ambivalent message. Player deliberation about public action, about choices concerning development and growth within the game, will be informed by a rhetoric that seems both to acknowledge and to elide environmental concerns. If we are interested in the game's possible means of persuasion, in the ways in which it massages and works us over, however, we might do better to attend to the medium rather than the purported message. Over the decades and centuries, players experience, by their immediate and engaged immersion within the game environment, the direct and long-term consequences of their own actions. Not just the decisions they make concerning industrial growth and development, but every unit or building they construct, every adjustment they make to taxation or scientific research, and every trade or diplomatic negotiation they pursue, will impact on the way in which the game ultimately plays out. Players are participants, actively involved in the medium-as-environment, experiencing firsthand a compelling connectivity to the world. *This* is the key environmental rhetoric of the digital game *Civilization*, the message of the medium.

Raymond Williams suggested, or perhaps hoped, that the "particular rhetoric of McLuhan's theory of communication is unlikely to last long" (1974, 128). The McLuhanacy of the 1960s and 1970s did indeed pass, but as Gary Genosko observes, at the start of the new millennium we find ourselves immersed in a McLuhan renaissance. Is this renewed interest warranted? Does McLuhan's work speak to the electronic revolution he envisaged? The utility of McLuhan's provocative writings lies, I think, at least within the context of environmental rhetoric, with his





insistence on the complicated relations that pertain between the visual and the acoustic. The temptation to sensory blindness, to conceiving digital games as a primarily visual medium—linear, uniform, characterized by sequential segmentation—is contested by the games’ irresistibly acoustic qualities, their inclusive, immersive, decentered interactivity. In the sensory interplay of this digital, acoustic space, participants are engaged and implicated in the suasive rhetoric, the medium as environment, which touches, affects, and alters them. McLuhan’s own rhetoric will more than likely stand the test of time, precisely because he left open exciting and productive doors and provided rich and largely untapped theoretical resources, through which we might yet address acoustic and visual questions of ecospeak and ecosee.

Notes

1. McLuhan’s varied reception in the 1960s is captured well by three contemporary collections: Stearn, Rosenthal, and Crosby and Bond. For an excellent overview of McLuhan and Williams’s contrasting approaches to the study of the media, see Lister et al. (2003, 72–92).

2. *Life*, February 25, 1966; *Newsweek*, March 6, 1967; McLuhan, 1969b; *This is Marshall McLuhan: The Medium Is the Massage*, NBC TV (March 1967), produced and directed by Ernest Pintoff and Guy Fraumeni; a scathing review of the NBC show appeared in the *New Yorker* (Rosenthal 1968, 82–87).

3. On renewed interest in McLuhan’s work from writers such as Baudrillard, Virilio, Poster, Kroker, and De Kerckhove, see Lister et al. (2003, 73–74), Genosko (1999, 8–12), and Horrocks (2000, 14–18). Reprints have been issued by Gingko Press.

4. *Wired*, 4.01 (January 1996) <http://www.wired.com/wired/archive/4.01/>, accessed June 24, 2008.

5. See McLuhan (1964, 265–74) for his discussion of the telephone, and the Preface to the third printing (v–x) for a discussion of media as environments.

6. McLuhan developed a number of variations on this, his most famous sound bite: see Levinson (1999, 35–36). For more on media as environments see McLuhan (1969a, 30–31, 1966).

7. On “McLuhan as Rhetorical Theorist,” see Gronbeck 1981; see also McLuhan’s (2005) work *The Classical Trivium*.

8. McLuhan (1964, 81, 1967, 44).

9. In what follows, I am interesting in exploring the potential uses of McLuhan’s characterizations of acoustic and visual space rather than assessing the validity of his claims regarding their correlation to distinct historical periods. On the impact of literacy, see Havelock (1963) and Ong (1982); for discussion of parallels between McLuhan and previous writers, see Duffy (1969, 26–31); for a critique of the determinacy that McLuhan accords literacy and print, see





Williams (in Stearn 1967, 186–89). Of particular interest within the context of the present chapter is David Abram's discussion of literacy, informed by Merleau-Ponty, which explicitly considers the debt owed to the "more-than-human" writing of the natural world, and whose approach to the relations that pertain between literacy, conceptions of space and time, and synaesthesia mirrors that of McLuhan (Abram 1997).

10. See McLuhan's (1960) "Acoustic Space" for his most sustained treatment of the matter. Duffy provides a concise and accessible explanation of the key characteristics (1969, 22–25).

11. There are distinct parallels here with the thinking of Benjamin Lee Whorf, whose work McLuhan had read. See Whorf (1956), and McLuhan et al. (1977, 182).

12. Note, however, that for McLuhan there are key parallels as well as differences between nonliterate and preprint literate cultures; see Duffy (1969, 23–25).

13. On the uniformity, repeatability, and "fixed point of view" engendered by print, see *The Gutenberg Galaxy* (1962b, 124–27). McLuhan's use of the latter term derives from Gyorgy Kepes's (1944) *The Language of Vision*.

14. "The mechanization of writing mechanized the visual-acoustic metaphor on which all civilization rests; it created the classroom and mass education, the modern press and telegraph. It was the original assembly-line. Gutenberg made all history available as classified data: the transportable book brought the world of the dead into the space of the gentleman's library; the telegraph brought the entire world of the living to the workman's breakfast table" (1969a, 15)

15. This phrase is the subtitle of McLuhan's (1962b) *The Gutenberg Galaxy*.

16. Genosko has discussed the unrepentant logocentrism of McLuhan's account of the transition from oral to literate culture (1999, 36–41).

17. Much has been made of the relevance of McLuhan's ideas on the electronic revolution to considerations of digital and online media; see, for instance, several of the essays in Strate and Wachtel (2006).

18. For an elaboration on this point, see "The Electronic Age—The Age of Implosion" (1962a, 23–27).

19. McLuhan and Fiore (1968).

20. I eschew the term *videogame* for reasons that will become clear in a moment. McLuhan's work has rarely been applied to digital games; for exceptions, see David Miles's discussion of the "multimedia novel" *Myst* (Miles 1996); and Lister et al. (2003, 271).

21. Instructive parallels might be drawn here, if space allowed, between gaming environments considered from a McLuhanesque perspective and Huizinga's notion of the magic circle (Huizinga 1955, 10), the latter having been widely taken up within game studies (Salen and Zimmerman 2004, 94–98).

22. See, for instance, Aarseth's much-cited discussion of the "extraneous effort" required by "ergodic" media (Aarseth 1997).

23. For a history and an informative account of *Civilization*, see Myers (2003a, 131–46).





24. The term is Alan Emrich's, quoted in Myers (2003a, 136). The *Civilization II* manual suggests an alternative configuration of "basic impulses"—exploration, economics, knowledge, conquest—which perhaps provides a better indication of the *variety* of the gameplay (Reynolds 1996, 2–3).

25. For a brief discussion of the map within McLuhan's work, and its relation to nation states, see Neve (2004).

26. In *Civilization III*, technological development is further restricted to successive historical ages (ancient, medieval, industrial, modern), although *Civilization IV* revoked this innovation and indeed made scientific development somewhat more flexible. All versions of the game include *alphabet* as an early technological advance, although, pace McLuhan, it is accorded no greater significance than any of the others.

27. *Civilization III* added a variety of features to facilitate multiplayer: time-limited turns, simultaneous play, hotseat games, play-by-email, voice chat, and so on.

28. From *Civilization III* onward, these leaders are named and depicted as specific historical figures, such as Caesar, Gandhi, Bismarck, and so on.

29. It is worth noting too that there are no extreme eastern or western edges to the animated board: the world map wraps east to west. The 2-D playing area is not quite the acoustic sphere described by McLuhan, then, but it does begin to approach a marginless global space.

30. Admittedly, a nation's capital *is* geographically central, in two regards: *corruption* can increase in distant cities, and, in *Civilization III*, capitals play a small part in the impact of a nation's *culture* on its neighbors. Neither one amounts to the centralized "sponge pattern" of intake from the margin and output from the center described by McLuhan, however.

31. Friedman suggests that we might productively consider this collaboration between player and computer a kind of single "cyborg consciousness" in which the player becomes, on one level, "an extension of the computer's processes" (Friedman 1999).

32. Miklaucic accounts for *Civilization's* heterogeneous, multidimensional charts and graphs, and their part in the player's dispersed and decentered engagement with the game, in terms of Bolter and Grusin's notion of hypermediacy; see Miklaucic (2003).

33. Myer's fascinating analysis in fact concerns the recursive, nonlinear, spiral-like trajectory of replay within *Civilization*. His account of the recursive development of successive editions of the game itself is similarly instructive.

34. For an illuminating account of iterative gameplay, see Atkins (2003).

35. Such a characterization comes close to what Salen and Zimmerman have called the "immersive fallacy," the belief that the goal of digital games, or perhaps entertainment media more generally, is to generate worlds in which the viewer or participant becomes utterly and unself-consciously absorbed (Salen and Zimmerman 2004, 450–55).

36. Poblocki and Miklaucic have both criticized the rhetoric of player omnipotence to which, they argue, *Civilization* subscribes. See Poblocki (2002,





171–74) and Miklaucic (2003, 328–34), and also see Galloway’s argument that *Civilization* operates as an “allegory” of today’s information society, fetishizing control while resisting traditional ideological critique (Galloway 2004).

37. McLuhan and Fiore (1967, 142).

38. In fact, Myers rejects what he calls “text-based” and “tech-based” positions, attributing play to a “natural-historical origin” and associating recursive replay with “basic human neurophysiology and universal cognitive practice” (2005). It is on these grounds that he draws his conclusions regarding the relative unimportance of culturally specific backstories (see below).

39. For an elaboration of this point, see Meyers (2003a), “The Attack of the Backstories (and Why They Won’t Win).”

40. *Colonization* (1994), a successor of sorts to *Civilization*, in which players strive to conquer the New World, unashamedly expanded on this imperial imperative; see the closing paragraphs of Friedman (1999).

41. See also Diane Carr’s response both to textual critiques of the sort leveled by Poblocki (2002) and Douglas (2002), and to Myers’s exclusive focus on gameplay (Carr 2007).

42. Sid Meier has denied that the environmental aspects of the game, such as pollution and global warming, constitute any kind of political statement. A conscious effort was made, he has said, to keep the game free from any political philosophy, and that these elements were included purely for their contribution to balancing the gameplay; see Chick, Meier, and Shelley (2001). *Alpha Centauri* (1999), a narrative sequel to *Civilization*, takes up the game’s story after Earth has been destroyed by war, famine, and disease, and it integrates environmental concerns more firmly still within the gameplay; see Henthorne (2003).

43. Myers argues, moreover, that within the self-contained semiotic system that is the game, signifiers assume entirely separate values from those that might ordinarily obtain in conventional social contexts. The meaning of “pollution,” in other words, is wholly determined by the role that this element plays within the game (2003a, 181–82, note 5, 2005).

44. The *Civilization II Instruction Manual* warns en passant that “For game purposes, *Civilization II* treats these threats identically to industrial pollution, though in real life their effects might be considerably longer term” (Reynolds 1996, 81).

Works Cited

- Aarseth, Espen J. 1997. *Cybertext: Perspectives on Ergodic Literature*. Baltimore, MD: Johns Hopkins University Press.
- Abram, David. 1997. *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*. New York: Vintage.
- Aristotle. 1926. *The Art of Rhetoric. Aristotle in 23 Volumes*. Vol. 22. Trans. John Henry Freese. Cambridge, MA: Harvard University Press.





- Atkins, Barry. 2003. "The Aesthetics of Iteration: The Plurality of Spectacle in Narrative Video Games." Presented at *DiGRA 2003 Conference: Level Up*. Utrecht, Netherlands: University of Utrecht, Digital Games Research Association. <http://www.uk.geocities.com/barry.atkins3@btopenworld.com/digra.htm>, accessed June 24, 2008.
- Bitz, Bako. 2002. "The Culture of Civilization III." <http://www.web.archive.org/web/20040324004449/http://www.joystick101.org/story/2002/1/12/222013/422>, accessed June 24, 2008.
- Carr, Diane. 2007. "The Trouble with Civilization." In *Videogame, Player, Text*, ed. Barry Atkins and Tanya Krzywinska, 222–36. Manchester: Manchester University Press.
- Chick, Tom, Sid Meier, and Bruce Shelley. 2001. "The Fathers of Civilization: An Interview with Sid Meier and Bruce Shelley." *CG Online*. http://www.crewscut.com/index.php?title=The_Fathers_of_Civilization, accessed June 24, 2008.
- Copier, Markinka. 2005. "Connecting Worlds: Fantasy Role-Playing Games, Ritual Acts, and the Magic Circle." *Proceedings of DiGRA 2005 Conference: Changing Views: Worlds in Play*. Vancouver, British Columbia. Digital Games Research Association. <http://www.digra.org/dl/db/06278.50594.pdf>, accessed June 24, 2008.
- Crosby, Harry H., and George R. Bond, eds. 1968. *The McLuhan Explosion: A Casebook on Marshall McLuhan and Understanding Media*. New York: American Book Company.
- Douglas, Christopher. 2002. "You Have Unleashed a Horde of Barbarians!": Fighting Indians, Playing Games, Forming Disciplines. *Postmodern Culture* 13:1. <http://www.web.mit.edu/21w.784/www/BD%20Supplementals/Materials/UnitFour/douglasall.html>, accessed June 24, 2008.
- Duffy, Dennis. 1969. *Marshall McLuhan*. Toronto: McClelland and Stewart.
- Friedman, Ted. 1999. "Civilization and Its Discontents: Simulation, Subjectivity, and Space." In *On a Silver Platter: CD-ROMs and the Promises of a New Technology*, ed. Greg M. Smith, 132–50. New York: New York University Press. <http://www.duke.edu/~tlove/civ.htm>, accessed June 24, 2008.
- Galloway, Alexander R. 2004. "Playing the Code: Allegories of Control in Civilization." *Radical Philosophy* 128 (November–December):33–40. Rpt. as "Allegories of Control." In *Gaming: Essays on Algorithmic Culture*. 85–106. Minneapolis: University of Minnesota Press.
- Genosko, Gary. 1999. *McLuhan and Baudrillard: The Masters of Implosion*. London: Routledge.
- Gronbeck, Bruce E. 1981. "McLuhan as Rhetorical Theorist." *Journal of Communication* 31:117–28.
- Havelock, Eric A. 1963. *Preface to Plato*. Cambridge, MA: Harvard University Press.
- Henthorne, Tom. 2003. "Cyber-Utopias: The Politics and Ideology of Computer Games." *Studies in Popular Culture* 25:3 (April). <http://www.pcasacas.org/SPC/spcissues/25.3/Henthorne.htm>, accessed June 24, 2008.
- Horrocks, Christopher. 2000. *Marshall McLuhan and Virtuality*. Cambridge: Icon.





- Huizinga, Johan. 1955. *Homo Ludens: A Study of the Play Element in Culture*. Boston, MA: Beacon Press.
- Kepes, Gyorgy. 1944. *The Language of Vision*. Chicago, IL: Paul Theobald.
- Killingsworth, M. Jimmie, and Jacqueline S. Palmer. *Ecospeak: Rhetoric and Environmental Politics in America*. Carbondale: Southern Illinois University Press.
- Lammes, Sybille. 2003. "On the Border: Pleasure of Exploration and Colonial Mastery in Civilization III Play the World." *Proceedings of DiGRA 2003 Conference: Level Up*, ed. Marinka Copier and Joost Raessens, 120–29. Utrecht: University of Utrecht/Digital Games Research Association. <http://www.digra.org/dl/db/05163.06568>, accessed June 24, 2008.
- Levinson, Paul. 1999. *Digital McLuhan: A Guide to the Information Millennium*. London: Routledge.
- Lister, Martin, et al., eds. 2003. *New Media: A Critical Introduction*. London: Routledge.
- McLuhan, Marshall. 1958–1959. "The Electronic Revolution in North America." *International Literary Annual* 1, ed. J. Wain, 165–69. Rpt in Marshall McLuhan, *McLuhan Unbound*. Corte Madera, CA: Gingko Press.
- . 1960. "Acoustic Space." In *Explorations in Communication: An Anthology*, ed. Edmund Carpenter and Marshall McLuhan, Boston, MA: Beacon. Rpt. in *Media Research: Technology, Art, Communication: Essays by Marshall McLuhan*, ed. Michel A. Moos, 39–44. Amsterdam: G+B Arts International, 1997.
- . 1962a. "The Electronic Age—The Age of Implosion." In *Mass Media in Canada*, ed. John A. Irving, 177–205. Toronto: Ryserson Press. Rpt. in *Media Research: Technology, Art, Communication: Essays by Marshall McLuhan*, ed. Michel A. Moos, 16–38. Amsterdam: G+B Arts International, 1997.
- . 1962b. *The Gutenberg Galaxy: The Making of Typographic Man*. Toronto: University of Toronto Press.
- . 1964. *Understanding Media: The Extensions of Man*. 3rd printing. New York: McGraw-Hill.
- . 1966. "The Relation of Environment to Anti-Environment." *University of Windsor Review* 11:1 (Fall): 1–10. Rpt. in *The Human Dialogue*, ed. Floyd W. Matson and Ashley Montagu, 1–10. New York: Macmillan, 1967. Rpt. in *Media Research: Technology, Art, Communication: Essays by Marshall McLuhan*, ed. Michel A. Moos, 110–20. Amsterdam: G+B Arts International, 1997. Rpt. in Marshall McLuhan, *McLuhan Unbound*. Corte Madera, CA: Gingko Press, 2004.
- . 1969a. *Counterblast*. Designed by Harley Parker. New York: Harcourt, Brace & World.
- . 1969b. "Playboy Interview: Marshall McLuhan—A Candid Conversation with the High Priest of Popcult and Metaphysician of Media." *Playboy* (March): Rpt. in *Essential McLuhan*, ed. Eric McLuhan and Frank Zingrone, 233–69. New York: BasicBooks, 1995.
- . 2005. *The Classical Trivium: The Place of Thomas Nash in the Learning of His Time*. Ed. W. Terrence Gordon. Corte Madera, CA: Gingko.





- McLuhan, Marshall, Kathryn Hutchon, and Eric McLuhan, 1977. *City as Classroom: Understanding Language and Media*. Toronto: Book Society of Canada.
- McLuhan, Marshall, and Quentin Fiore, with Jerome Agel. 1967. *The Medium Is the Massage: An Inventory of Effects*. Harmondsworth: Penguin.
- . 1968. *War and Peace in the Global Village*. New York: McGraw-Hill.
- Miklaucic, Shawn. 2003. "God Games and Governmentality: *Civilization II* and Hypermediated Knowledge." In *Foucault, Cultural Studies, and Governmentality*, ed. Jack Z. Bratich, Jeremy Packer, and Cameron McCarthy, 317–35. Albany: State University of New York Press.
- Miles, David. 1996. "The CD-ROM Novel *Myst* and McLuhan's Fourth Law of Media: *Myst* and Its 'Retrievals.'" *Journal of Communication* 46:2 (Spring): 4–17. Rpt. in *Computer Media and Communication: A Reader*, ed. Paul A. Mayer, 307–19. Oxford: Oxford University Press, 1999.
- Myers, David. 2003a. *The Nature of Computer Games: Play As Semiosis*. New York: Peter Lang.
- Myers, David. 2003b. "The Attack of the Backstories (and Why They Won't Win)." In *Level Up: Digital Games Research Conference Proceedings* (CD-ROM), eds. Marinka Copier and Joost Raessens. Utrecht, the Netherlands: Faculty of the Arts, University of Utrecht. <http://www.loyno.edu/%7Edmyers/F99%20classes/AttackOfTheBackstories.pdf>, accessed June 24, 2008.
- . 2005. "Bombs, Barbarians, and Backstories: Meaning-Making within *Sid Meier's Civilization*." ["Bombe, barbari e antefatti. Progettazione e semantica in *Civilization* di Sid Meier"] In *Civilization: Storie Virtuali, Fantasia Reali*, ed. Matteo Bittanti, trans. Valentina Paggiarin, 165–83. Milan: Costa & Nolan. http://www.loyno.edu/~dmyers/F99%20classes/Myers_BombsBarbarians_DRAFT.rtf, accessed June 24, 2008.
- Neve, Mario. 2004. "Does the Space Make Differences? Some Geographical Remarks about Spatial Information between Harold Innis and Marshall McLuhan." In *At the Speed of Light There Is Only Illumination: A Reappraisal of Marshall McLuhan*, ed. John Moss and Linda M. Morra. Ottawa: University of Ottawa Press.
- Ong, Walter J. 1982. *Orality and Literacy: The Technologizing of the Word*. London: Methuen.
- Poblocki, Kacper. 2002. "Becoming-State: The Bio-Cultural Imperialism of *Sid Meier's Civilization*," *Focaal: European Journal of Anthropology* 39:163–77. <http://www.focaal.box.nl/previous/Forum%20focaal39.pdf>, accessed June 24, 2008.
- Reynolds, Brian. 1996. *Sid Meier's Civilization II Instruction Manual*. Hunt Valley, MD: Microprose. <http://www.replacementdocs.com/download.php?view.365>, accessed June 24, 2008.
- Rosenthal, Raymond, ed. 1968. *McLuhan: Pro and Con*. New York: Penguin.
- Salen, Katie, and Eric Zimmerman. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press.
- Stearn, Gerald Emanuel, ed. 1967. *McLuhan Hot and Cool: A Primer for the Understanding of and a Critical Symposium with Responses by McLuhan*.





- New York: Dial.
- Stephenson, William. 1999. "The Microserfs Are Revolting: Sid Meier's Civilization II." *Bad Subjects* 45 (October) <http://bad/eserver/org/issues/1999/45/stephenson.htm/>, accessed June 24, 2008.
- Strate, Lance, and Edward Wachtel, eds. 2006. *The Legacy of McLuhan*. Cresskill, NJ: Hampton.
- Whorf, Benjamin. 1956. *Language, Thought and Reality: Selected Writings of Benjamin Lee Whorf*. Ed. John B. Carroll. Cambridge, MA: MIT Press/John Wiley.
- Williams, Raymond. 1974. *Television: Technology and Cultural Form*. London: Fontana/Collins.

