Life in the Anti-Environment

Learning How to Play

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ABSTRACT: This paper explores the perceptual implications of video games, and gamification in general, by drawing on a number of concepts from the media theory of Marshall McLuhan: primarily his discussion of games as anti-environments and of technologies as extensions of human senses and faculties. Understanding video games in terms of the cultural and psychological significance of play, I argue that video games as a product of the gamification of culture substantially alter the traditional function of play through their diminished capacity to serve as anti-environments. Finally, I offer a brief reflection on the opportunities for awareness and understanding in relation to contemporary gamification.

1. Introduction

The activity of gaming has come to occupy a cultural position which is both dominant and obscure—which is, on the one hand, deeply representative of our technological culture, while appearing, on the other hand, to undercut any consistent framework of values for participating in culture. This is to say, while the figure of the contemporary "gamer", or serious player of video games, seems to represent much of what makes our culture unique and innovative—from the latest online memes to new virtual reality technologies—the same figure articulates a kind of sustained countercultural chaos, whereby the only conventions that carry real psychological weight are not those of cultural tradition, but rather those confined to the behavioral rules of game worlds. This paradoxical status of gaming as an activity that both defines contemporary culture, while negating any possibility for defining culture, will form the basis of my discussion of video games.

For this discussion to be meaningful, however, it will first be necessary to explore the medium of the game in general and of its conventional role as a

social activity. Tracing the ways in which the traditional function of the game has been transformed by the effects of electronic and computational media will help us understand the role that video games play in shaping social attitudes, perceptions, and structures.

2. Cultural function of games

For the influential theorist of play, Johan Huizinga, games are defined by particular criteria: the game must be freely entered into, it must happen within a circumscribed space and time, it must have rules that are binding for all players, it must produce value that is primarily attained in the play itself, and it must temporarily suspend the conventions of ordinary life through constructing a type of imitative world or fiction.[1] Based on these precepts, Huizinga considers play to be formative of human culture as such. For, if playing games consists in constructing and performing an imaginative world in imitation of the real world, then language itself—along with its offshoots of myth, ritual, and, eventually, law—find their originary expression in games.

Following the ethnologist Leo Frobenius, Huizinga locates the origins of human language in the re-play of the archaic human's encounter with existence. He characterizes this encounter as a kind of "seizure" or state of being "seized" by the power of existence in its complexity and order.[2] In response to the overwhelming character of this state, the human condenses it in an expressive form—whether this form be a gesture, a sound, or, later, a word—that can be attended to in a limited and controlled manner. The repetition of this process develops a mental world of signs and concepts that represent or that re-play the raw experience of existing, thereby constituting an ongoing interaction—or play—between human mentality and the world.[3]

The play element of language can be further seen in the fact that every word may be regarded as a kind of metaphor or "play upon words."[4] If metaphor in its original Greek meaning is *metapherien* or "carrying across," then the ability of language to translate and transform experience from one's sensory encounter with the world to one's intellectual conception of the world urges

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[1] Huizinga 1949: *Homo Ludens: A Study of the Play Element in Culture*, 28.
[2] Ibid, 16.
[3] Ibid, 4.
[4] Ibid, 4.

us to bridge the gap between what we sense and what we think, to, in effect, "carry across" the concreteness of existing to the immateriality of thinking. To see language as play means that with each moment of forming concepts about the world we enter into the game of bridging this gap—and other so-called gaps of understanding—through making rule-based connections of various kinds—through making metaphors—that lead us to seize on the words we want. In creating this mental world in imitation of the real world, we gain some control over the feeling of being seized by the world.

But how do we get from thinking about language games to video games? One helpful way is to understand games in their cultural evolution: specifically, in the ways in which different configurations of human sensing and knowing throughout history necessarily construct distinct forms and functions of games. As a basis for this endeavor, I draw on the work of the philosopher of culture and technology Marshall McLuhan.

3. Games as communication media

As is well known, one of McLuhan's core ideas (besides his aphorism "the medium is the message") is the notion that technologies are extensions of the human body and senses. The wheel extends the foot, clothing extends the skin, writing extends the eye, and electronic technology extends the central nervous system. Extension is thus, for McLuhan, both an enlargement or intensification of the extended human faculty, and a reaching-out, or externalization, of the faculty into the environment. For McLuhan, these two functions—what I will call 'intensification'[5] and 'externalization'—account for many of the deep-seated psychological and sensory effects of technologies. To take the function of intensification, once the powers of a particular sense or faculty are intensified, all of the other senses tend to re-adjust themselves on the basis of this new sensory stress, creating a new configuration of the human psyche, or, what McLuhan called, a new "sense-ratio."[6] This capacity of technologies to generate new sense-ratios, or new habits and attitudes of perceiving, engaging with, and knowing the world, explained for McLuhan the

[5] "Intensification" is synonymous with the element of "enhancement" in McLuhan's tetrad of media effects.

[6] Marshall McLuhan 1964: *Understanding Media: The Extensions of Man*, 54.

immense psychological and social effects of each major technological extension.

One of the fascinating details of McLuhan's chapter on games in his classic book *Understanding Media: The Extensions of Man* is that the subtitle of the chapter shares the subtitle of the entire book, namely "The Extensions of Man."[7] Thus, in contrast to the witty aphorisms of the other chapters, like the subtitle "Government by News Leak" for the chapter on the Press, McLuhan hints that the medium of the game is structurally equivalent to media in general in some primary way. For McLuhan, this equivalence between games and media seems to lie in the psychological function of art. We are thus reminded of Huizinga's observation that the function of language as the primal medium of human communication is to create an alternative space, alongside the ordinary world, in which perceptions can be, at least temporarily, fixed in words so as to constitute material for mental play and contemplation. What McLuhan adds to this picture is the more specific notion of media, not only as *intensifications* of distinct sensory organs and faculties, but also, as I briefly pointed out, as *externalizations* of such organs and faculties—a function that McLuhan refers to as auto- or self-amputation.

For McLuhan, the human being does not extend a sensory organ into the world solely to master the environment in a new way; more fundamentally, the extension of the human body into the world through technology results from the inherent psycho-physiological need for equilibrium. According to McLuhan, when social systems begin to create unavoidable stress and irritation on a region of the human body and psyche, the nervous system adopts "a strategy of amputation or isolation of the offending organ, sense, or function."[8] This function is then extended into a new technology—a model of the amputated human faculty—which serves as a counter-irritant to the original stress. Thus, the wheel as an auto-amputation of the foot, McLuhan writes, functioned as a counter-irritant to absorb the bodily stress resulting from the social acceleration of trade during the emergence of writing and money.[9]

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[7] Ibid, 207.
[8] Ibid, 52.
[9] Ibid.

The self-amputation of the entire central nervous system through electric technology is particularly significant for McLuhan. A motif throughout his work, this observation was in keeping with a number of authors in the nineteenth century who saw the telegraph's wiring of the world as an externalization of the instantaneous network of communication and control constituted by the human nervous system.[10] McLuhan, however, drew specific sensory and psychological implications from this analogy. He writes:[11]

> with the arrival of electric technology, man extended, or set outside himself, a live model of the central nervous system itself. To the degree that this is so, it is a development that suggests a desperate and suicidal autoamputation, as if the central nervous system could no longer depend on the physical organs to be protective buffers against the slings and arrows of outrageous mechanism. It could well be that the successive mechanizations of the various physical organs since the invention of printing have made too violent and superstimulated a social experience for the central nervous system to endure.

The gravity with which McLuhan discusses the electric extension of the nervous system points to an appreciation of the psychological and social transformation of play through videogames. Before we can adequately

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[10] See, for instance, Hermann von Helmholtz 1895: *On the* Sensations *of Tone as a Physiological Basis for the Theory of Music*. Helmholtz writes, "Nerves have been often and not unsuitably compared to telegraph wires. Such a wire conducts one kind of electric current and no other; it may be stronger, it may be weaker, it may move in either direction; it has no other qualitative differences. Nevertheless, according to the different kinds of apparatus with which we provide its terminations, we can send telegraphic despatches, ring bells, explode mines, decompose water, move magnets, magnetise iron, develop light, and so on. So with the nerves. The condition of excitement which can be produced in them, and is conducted by them, is, so far as it can be recognised in isolated fibres of a nerve, everywhere the same, but when it is brought to various parts of the brain, or the body, it produces motion, secretions of glands, increase and decrease of the quantity of blood, of redness and of warmth of individual organs, and also sensations of light, of hearing, and so forth…" (149).

[11] McLuhan 1964: *Understanding Media*, 53.

consider this situation, however, the connection McLuhan draws between games and technologies as 'extensions of man' must be refined.

Drawing on his notion of amputation, McLuhan describes both games and technologies as counter-irritants—as "ways of adjusting to the stress of the specialized actions that occur in any social group."[12] The distinction he draws between games and technologies is that "games, like institutions, are extensions of social man and of the body politic," while "technologies are extensions of the animal organism."[13] Games, therefore, in both archaic and modern forms, are often an artificial extension of some kind of existential struggle that gives meaning to a society, whether that struggle be the very maintenance of the natural universe portrayed in various archaic rituals[14] or the performance of modern forms of competitive individualism in games like poker. Just like the wheel acted as a counter-irritant through artificially extending bodily stress, so does the game of poker act as a counter-irritant by artificially extending the pressures of modern individualism through the passive aggressive and deceitful machinations of the game play;[15] enclosed within an alternate world, involving the full participation and creativity of individuals in the performance of this shared existential drama, such pressures can be detached, re-integrated with, and finally purged from the human sensorium in a state of catharsis.[16]

It is this psychic detachment afforded by games that more significantly differentiates games from technologies. For, what is crucial in McLuhan's theory of technology as an autoamputation of human faculties, is that detachment is precisely what technological extensions do not afford. Indeed, McLuhan notes that when confronted with the amplification of a human

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[12] Ibid, 208.

[13] Ibid.

[14] Ibid. McLuhan writes, "Ancient and nonliterate societies naturally regarded games as live dramatic models of the universe or of the outer cosmic drama. The Olympic games were distinct enactments of the *agon*, or struggle of the Sun god. The runners moved around a track adorned with the zodiacal signs in imitation of the daily circuit of the sun chariot" (209).

[15] Ibid, 212.

[16] Ibid. McLuhan notes, "Do not our favorite games provide a release from the monopolistic tyranny of the social machine? In a word, does not Aristotle's idea of drama as a mimetic reenactment and relief from our besetting pressures apply perfectly to all kinds of games and dance and fun?" (210).

faculty through technological extension, the intense new stimulus of that encounter puts the human psyche in a state of shock, compelling the nervous system to numb awareness of the extended faculty.[17] Importantly, for McLuhan, this numbing process prevents us from seeing technologies as extensions of ourselves, putting us in a state of blindness that McLuhan calls "Narcissus-narcosis";[18] as a result, in order to adjust to the new psychological and sensory order—the new sense-ratio—extended by technologies, we tend to treat each major technological extension, not as a limited way of seeing and feeling—or, in other words, as a game—but rather as an autonomous idol. We thus serve our technologies, McLuhan writes, "as gods or minor religions,"[19] remaining oblivious to the widescale social and psychological effects of each technological form.

For McLuhan, liberation from this unconscious state of existence, which numbness to our technologies creates in us, is the precise function of play, whether in games or in art. It is thus significant that McLuhan refers to games as "collective and popular art forms," suggesting that high art, from the Greek tragedy to the modern novel, is a sublimation of play, replacing magical games and rituals when literacy obsolesced the oral tradition and private contemplation became a widespread cultural form.[20]

It is this identity between games and art that allows both to function as, what McLuhan calls, anti-environments[21] to the unconscious psychological dominance of technological environments. We have already seen how one of the essential aspects of games (along with the element of play in ritual and language) is the constitution of a distinct space that can model a foundational struggle or drama shaping the psychological life of a community. For

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[17] Ibid, 52.
[18] Ibid, 63.
[19] Ibid, 55.
[20] Ibid, 209-210.
[21] See McLuhan 1966: "The Relation of Environment to Anti-Environment in *Media and Formal Cause*". McLuhan explains, "Any new technology, any extension or amplification of human faculties when given material embodiment, tends to create a new environment." It is the "ground rules, the pervasive structure, the overall pattern [of this environment that] eludes perception except in so far as there is an Anti-environment or a counter-situation constructed to provide a means of direct attention" (12).

Huizinga, as we saw, the archetypal struggle modeled or re-played by language is the very act of being seized by existence. McLuhan called this act "the drama of cognition," signifying the process by which we "recreate within ourselves the exterior world" through the habitual play of our psychological faculties, of our sense-ratios.[22] Precisely as an extension or amputation of this psychological play, however, the cognitive power of language (just like that of any technological form) can only function by repressing awareness of this play so that human perception can be specialized and made subservient to the technology as a perceptual idol or "Narcissus-narcosis." It is, in this sense, only through being consciously played and re-played in the anti-environment constituted by the game that the element of play—the drama of cognition—enacted in any extension of our faculties can become truly available to, and even mastered by, human consciousness. Referring to the playful function of art, McLuhan writes: "The artist arrests his cognition by recognition. He then reverses the process and embodies in an exterior work the drama of apprehension. The stages of apprehension, reversed and embedded in new matter, enable us to contemplate, purge and dominate the drama of cognition, the dance of existence."[23] It is this separate space—this anti-environment—of sharpened perception and mastery that positions both games and art as essential activities for human well-being and, even, survival.

4. The electric gamification of the world

Having reviewed the psychic relation between technologies and games in terms of environments and anti-environments, we can now appreciate how the electronic environment dramatically repositions the social and psychological role of games, so as to produce the form and effects of the video game. If the traditional form of the game is a perceptual anti-environment that re-awakens regions of the nervous system numbed by social institutions and technologies, then the amputation of the entire nervous system—of our very capacity for sensing the world—in electronic technology demands a new kind of game that is no longer circumscribed but total in scope. We can, in this context, begin to see McLuhan's dismay at what he calls the "suicidal autoamputation" of the nervous system in electric media, from the telegraph to the computer. For, when social institutions and

[22] McLuhan 1954: "Notes on the Media as Art Forms," in *Marshall McLuhan - Unbound (15)*, 7.
[23] Ibid.

the world itself become engulfed in electronic networks of communication and control, the entire world takes on the character of an anti-environment, of an artificial game intensifying consciousness such that we remain fixed in a state of constant self-reflexivity. This means that by re-making the world as an extended nervous system of programmable sensory environments, human perception is no longer confronted with any single sensory environment to which it might adapt through play, but rather with the very cognitive process—or drama of cognition—through which any sensory environment or human attitude differentially replays existence.

The social and psychological problem of this situation is that if the anti-environments constructed by games and play provide the necessary function of re-balancing the nervous system and refreshing consciousness from the psychic numbness and sensory distortions of the habitual technological environment, then the merging of the anti-environment of the game with the environment of the world prohibits this function. That is to say, when the habitual human environment is a game-like anti-environment, there is no longer a world or an *environment* which an anti-environment might adapt and re-awaken us to. Conversely, when the anti-environments of games and art become our habitual environment, any given anti-environment can no longer provide us with a detached space of play, through which the stresses of our daily life can be contemplated and purged.

The result of this gamification of existence is a paradoxical state of both hyper-sensitivity and generalized numbness. For, when we are living in a network of anti-environments, each programming real-time models of our sensory and psychological life, every moment becomes a direct confrontation with the fullness of our individual and collective beings—of the experience of being seized by existence. At the same time, due to the process of amputation, this very confrontation of our sensory and psychological depths forces us to block them from conscious perception, adopting a protracted state of sensory shock. This frenzied state of alternating numbness and hyper-stimulation—a state which may be observed in the effects of video games and social media on young people today—is fittingly described by McLuhan as a "suicidal autoamputation" of our sense life.

We might say, however, that it is only in recent years that the effects of this world gamification has begun to define contemporary culture. For, while electric and electronic technologies such as the telegraph, radio, and television extended the central nervous system into the environment, it is

only the computer algorithm that extends conscious thought and decision-making. Thus, while the mass media environment, prior to the social uptake of computers, converted the world into a sensory anti-environment, the functions of conscious judgment were not yet autoamputated from the body. What this means is that the traditional relationship between environment and anti-environment still persisted, albeit in a somewhat reversed form. Namely, the habitual multimedia *environment* came to be used as an immersive *anti-environment* to—essentially, as an escape from—the daily stress and intensification of rational specialization as such.

5. The video game as anti-environment

The genesis of the video game is a perfect expression of this dynamic. For instance, while the video game's interactive technology necessarily relied on computer algorithms, the first commercially available video game *Computer Space* was deeply enmeshed in the perceptions and attitudes generated by the television mass media environment. This can be seen in the game's importance for the psychedelic counterculture in its ideological championing of cybernetic systems as liberating channels of consciousness-expanding and egalitarian social play. Indeed, the legendary tech writer Stewart Brand authored a 1972 *Rolling Stone* article, which documented his visit to the Stanford Artificial Intelligence Laboratory.[24] In this visit, he grouped several programmers together to play the 1962 game *Spacewar*, an early version of the *Computer Space* arcade game. For Brand, the creative, playful, and collaborative possibilities experienced in the game *Spacewar* pointed toward the exact kind of mentality he hoped to foster in his famous journal the Whole Earth Catalog; accordingly, as an experimental collage of communal do-it-yourself technologies and lifestyles, the Whole Earth Catalog was enormously influential to key players in the development of interactive personal computing, such as Douglas Engelbart, Alan Kay, and Steve Jobs.[25]

Importantly, as perhaps the most concrete example of the immersive and collectivizing character of the electric mass media environment, the

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[24] Brand 1972: "Spacewar: Fanatic Life and Symbolic Death Among the Computer Bums," *Rolling Stone*, December, https://www.wheels.org/spacewar/stone/rolling_stone.html.

[25] See Turner 2006: *From counterculture to cyberculture: Stewart Brand, the Whole Earth Network, and the rise of digital utopianism*.

cybernetic play of *Spacewar* was not seen by Stewart Brand and his associates as a potentially alienating integration of human and machine as Norbert Wiener, the inventor of cybernetics, warned.[26] Rather, the Whole Earth Catalog community (or the "New Communalists," as historian Fred Turner has called them) viewed the new interactive unit formed by global human-machine networks as a new collective intelligence or ecological consciousness, akin to the powers of LSD. [27] Brand thus compared *Spacewar* to the multimedia dance parties of the 1966 Trips Festival.[28] Brand himself coordinated this festival with Ken Kesey and his Merry Band of Pranksters, who came together in 1964 to disseminate LSD from a school bus they drove across the United States.

What is significant about this history is that in the very early days of interactive computing, the algorithmic play of video games, and even of cybernetic systems at large, took on the character of anti-environments, in which the specialized and bureaucratic training of often military-funded computer researchers—whom Brand called "planners"—could be countered through the playful and communal inventiveness of game players, whom Brand called "hackers".[29] The video game and its interactive ethos thus

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[26] See Weiner 1964: *God and Golem, Inc.: A Comment on Certain Points Where Cybernetics Impinges on Religion*. Weiner expresses his worry about cybernetic dehumanization by suggesting that the contemporary "gadget worshipper" will use the computer's decision-making capabilities to escape from moral responsibility: "In addition to the motive which the gadget worshipper finds for his admiration of the machine in its freedom from the human limitations of speed and accuracy, there is one motive which it is harder to establish in any concrete case, but which must play a very considerable role nevertheless. It is the desire to avoid the personal responsibility for a dangerous or disastrous decision by placing the responsibility elsewhere: on chance, on human superiors and their policies which one cannot question, or on a mechanical device which one cannot fully understand but which has a presumed objectivity" (54).

[27] Turner 2006: *From counterculture to cyberculture*, 123-127.

[28] Brand 1972: "Spacewar." Brand writes, "Four intense hours, much frenzy and skilled concerted action, a 15-ring circus in ten different directions, the most bzz-bzz-busy scene I've been around since Merry Prankster Acid Tests . . . and really it's just a normal night at the AI Project, at any suitably hairy computer research project."

[29] Ibid. Brand ends the article by writing, "In those days of batch processing and passive consumerism (data was something you sent to the manufacturer, like

served as an anti-environmental perspective, through which large-scale technological environments could be "hacked" from within and disseminated for the liberation of the so-called "whole earth."

6. Video game as anti-game

My argument is that now that the extension not only of the central nervous system but also of conscious thought has become environmental or ubiquitous through the digital computer, the countercultural status of the video game as a liberating anti-environment can no longer hold. This is because, through the digital extension of logical thought and its specialized routines, the electric anti-environment of the world can no longer be effortlessly imagined as an integral and immersive collective intelligence. Rather, as an extension of logical thought, the digital environment divides and subdivides experience into rule-governed game spaces.

It is in this amputation of consciousness that McLuhan's deep concern in relation to the extension of the central nervous system reaches its full meaning. For, when the immersive inclusivity of electronic media can no longer function as an anti-environment to the defined categories of thought, but instead continually suffers internal division through routines of logical categorization, the human person can no longer escape from the awareness of one's extended nervous system through submerging in collective environments of play. Instead, due to the nature of technological 'amputation', the hyperawareness of states of being, conferred by the externalization of consciousness, demands a fundamental repression of consciousness itself, along with its faculties of judgment and agency.

It seems to be this protective numbing of one's own human awareness that is at play both in contemporary video games and in the overall gamification wrought by social media platforms. The media theorist Jay David Bolter notes that due to the procedurality of the computer – or the ability of algorithms to

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color film), Spacewar was heresy, uninvited and unwelcome. The hackers made Spacewar, not the planners. When computers become available to everybody, the hackers take over. We are all Computer Bums, all more empowered as individuals and as co-operators. That might enhance things ... like the richness and rigor of spontaneous creation and of human interaction ... of sentient interaction."

simulate actions and environments based on sets of logical instructions (or *procedures*) – our entire interaction with computers takes on the character of procedurality. As Bolter writes, "Today, each [computer] program not only reconfigures the machine, it also reconfigures its human users, offering them a new interface with new modes of interaction. In order to use any digital device, the user must become part of the procedure."[30]

For Bolter, it is in video games that procedurality is represented and engaged with as an explicit form of aesthetic activity. According to Bolter, there are two characteristics of video game procedurality: parameterization and the event loop. Parameterization refers to the discrete values of measurement and categorization that structure one's gameplay (taking the form, for instance, of character traits and powers, and point-systems of various kinds). The event loop, as Bolter describes it, causes "the system [to loop] through a series of actions" to check whether the user has made an input ("generated an event"), which can be processed and translated into an output (e.g. clicking the mouse leading to changes in gameplay).[31] According to Bolter, these two core attributes are able to activate a psychological state that is immensely enjoyable. Drawing on the psychologist Mihaly Csikszentmihalyi,[32] Bolter characterizes this state as "flow." As Bolter observes, one of the defining elements of the flow state is "the pleasure of losing oneself" (or one's self-consciousness) in an activity that generates the sense of continuing or repeating without end.[33] Bolter writes, "[video] games are flow experiences, because they promote a flowing or even addictive relationship between the player and the action. The key to evoking flow is to insert the player so seamlessly into the event loop that she feels herself to be part of the procedure itself and, as a result, wants the loop to continue indefinitely."[34]

In the video game, then, the user enters into the computer's architecture and effectively *becomes* the algorithm being played. If this situation is an example of the contemporary need (or 'Narcissus-Narcosis') to numb one's awareness

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[30] Bolter 2019: *The Digital Plenitude: The Decline of Elite Culture and the Rise of New Media*, 148.
[31] Ibid, 149.
[32] See Csikszentmihalyi 1990: *Flow: The Psychology of Optimal Experience*.
[33] Bolter 2019: *The Digital Plenitude*, 101.
[34] Ibid, 149.

due to the stress of having to continually engage with one's extended consciousness in a digitized environment, then we might characterize the video game, at least in its popular form today, as a kind of anti-game. This is because the contemporary effects of the video game may be seen as directly opposed to the traditional function of games. As we saw, games are anti-environments cordoned off from the habitual psycho-technological environment in order to provide an integral psychological release through the creative refreshing of consciousness from the mechanical routines of everyday life. In contrast, the video game provides an escape from the *anti-environment* of our extended conscious awareness by mis-taking this anti-environment as an immersive but specialized *environment*, in which we surrender our agency to the repetitive action of a particular mechanical routine. In contrast to the awakened powers of consciousness effected by the traditional game, the video game as 'anti-game' further diminishes these powers, relieving us from the responsibility afforded by sharpened perception.

What is particularly troubling, however, is that due to the digital gamification of experience, this reversed function of the game as 'anti-game' seems to permeate culture at large. In Bolter's discussion of the aesthetics of procedurality, we see some of the specific ramifications of this situation. An important one is the loss of a sense of history. Just as there is no easily perceivable limit to the game-like structures of the digital environment, so too is there no concrete limit to the playability and re-playability of the sequence of actions in the video game. Unlike the concrete passing of time which embeds human experience in a shared and meaningful history, the video game provides a simulated world that can be endlessly re-played with little repercussion on historical existence. What matters to the player is not locating oneself in a cultural narrative, but rather mastering the algorithm – or winning the game – through *becoming* the algorithm, through gamifying oneself in a disembodied flow where one's control over experience is seemingly unlimited.[35]

We see the fruits of this gamification quite clearly in contemporary culture. As Bolter rightly observes, social media platforms are like video games in that they too allow us to enter into the computer application's event loop.[36] They

[35] Ibid, 108, 152-160.
[36] Ibid, 105-109.

do this through the endless generation of virtual interactions specifically designed to keep us engaged in the feeling of being suspended in time as we continually cycle through the sensation of algorithmic control.[37] Like video games, then, social media platforms divert our perception of them as finite anti-environments generating distinct ways of knowing the world and instead draw us into specific algorithmic routines as environments in themselves. Thus, like the video game, the goal of the social media experience is to indefinitely extend one's virtual interactions through becoming the algorithm with which one engages, and dominating the algorithmic environment. In this situation, culture becomes about winning a game, about socially replicating a procedure—often encapsulated by an internet meme—and throwing one's algorithmic universe (one's 'memetic tribe')[38] against another's in order to perpetuate the so-called "culture wars"—or, better, cultural 'wargame'—in an endless loop. The unsustainability of this way of life is demonstrated more and more by the seemingly endless cultural and psychological grievances—from identity politics to covid policies—generated by the conflict of mental procedures online.

7. Learning how to play

While such a situation may seem dire, there is ample reason to hope. Taking a cue from McLuhan, if contemporary culture appears apocalyptic, we may be heartened by the fact that the original meaning of apocalypse is revelation (or 'to uncover'). This is an uncovering not of the end of the world but rather of an end which is the sign of a beginning.[39] For McLuhan, this beginning was learning to engage with technological culture through a form of play that is both old and new—or, to put it in McLuhan's language, that is both a "retrieval" of past consciousness and an "enhancement" of new powers.[40] It is a *retrieval* of the past because such 'play' is anchored in the habits of pattern recognition and analogical perception applied by Classical poets and

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[37] See also Galloway 2006: "Allegories of Control," in *Gaming: Essays on Algorithmic Culture*, 85-106.

[38] See Limberg and Barnes 2018: "The Memetic Tribes of Culture War 2.0," *Medium*, 13 Sep 2018, https://medium.com/s/world-wide-wtf/memetic-tribes-and-culture-war-2-0-14705c43f6bb.

[39] McLuhan 1977: "Our Only Hope is Apocalypse," in *The Medium and the Light*, 57-65.

[40] See Marshall and Eric McLuhan 1988: *Laws of Media: The New Science*.

patristic biblical commentators.[41] It is an *enhancement* of new awareness because such powers of pattern recognition require the arduous task of learning and adopting the habit of consciously engaging with the entire world as an anti-environment—as a platform for the playing of different kinds of cultural, conceptual, and perceptual games through which existence itself can be variously seized and communed with.

It is significant that it was his Catholic faith that seems to have allowed McLuhan to appreciate the anti-environments of various ancient and modern cultural traditions *as anti-environments*—that is to say, not as Reality itself but as particular ways or *games* of knowing Reality. For McLuhan, the Reality which all anti-environments reconstitute as play was the One Environment, which sustains the world—the Environment constituted by the concrete Thing-ness of the incarnation of God, the Essence who is Existence itself.[42] It is in this sense that all cultural, conceptual, technological, and linguistic systems can be fully and deeply appreciated as extensions of man or, as McLuhan says, "games people play."[43] For in sharpening awareness of the "technologies of the word," such games, McLuhan found, could bring us into a closer encounter with the Word, the very joy and intelligibility of Being.[44]

It is with this literally apocalyptic vision that we might approach the design of video games. For, if the computer's procedurality allows us to directly engage—or 'interface'—with any perceptual mode of being that can be algorithmically programmed, then we can harness the power of pattern recognition in playing and replaying distinct shapes of consciousness or "dramas of cognition." This might develop in us an empathy for the human condition that transcends the cognitive burden of living in an environment saturated with our own extended consciousness. The fragmentary logical routines behind different computer programs might then be seen in their distinct intelligibility to mediate Intelligibility itself.

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[41] See McLuhan 1943: *The Classical Trivium: The Place of Thomas Nashe in the Learning of His Time*.

[42] McLuhan 1977: *The Medium and the Light*. McLuhan asserts, "The revelation is of *thing*, not theory" (81).

[43] Ibid.

[44] Ibid, 87.

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Suggested Key Words:

Play, *Marshall McLuhan*, *Electronic media*, *Gamification*, *Perception*, *Video Games*