# Video Games Need a Theory of Language

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## Introduction

How does a world emerge from language? This is the fundamental question posed by the medium of the video game, a form literally inscribed in code and in circuitry and thereby experienced as a phenomenal world. Yet this question goes unheard in studies of video games, and the fact that the video game can articulate such a quandary goes unrecognized in theories of language. The reason why is historical. The theories best suited to realize the potential of video games to imagine new relations between world and language were waning in influence just as the popularity of video games was on the rise. Where the link was located, in the niche area of game studies, it was only partially explained. *How does a world emerge from language*? This is precisely the question posed at once by video games and poststructuralism. Realizing this, we are prepared to conceive both apparatuses anew.

Spend time in games-adjacent spaces and you will realize that this essential connection to language is not lost in discourse *about* video games. One often hears game designers and critics speak of video games in terms of "objects," "verbs," and other parts of speech. We talk about jumping in *Super Mario Bros.* (Nintendo R&D4, 1985) as if we were talking about the word "jump." But despite the popularity of these turns of phrase, their meaning is most often

uninvestigated. Why does it make sense to talk about video games as if we were talking about language? Surveying the state of video game scholarship reveals only a partial answer: that these linguistic conceits make surface-level sense because video games, like other media, are *texts*. Of course, what it means to be a text has varied greatly even in the few decades since game studies' emergence as a field. Whereas early theorists extended structuralist linguistics to conclude that video games functioned as codified symbolic machines, more contemporary scholars are inclined to consider games as cultural texts operating on the same discursive layer as novels, movies, television shows, and social media posts.

What is lacking from existing approaches to video game textuality is precisely what is needed to expand the conceptual potential of the medium, namely, an essential connection to language which would explain the particular kind of text out of which the world of a video game is woven. The absence of a theory of language for video games leaves us unable to consider why linguistic metaphors like verbs, objects, and texts make sense for designing and analyzing the medium. Moreover, it leaves us unable to reconcile the medium, on the one hand, with the theoretical apparatus of textuality that preceded it, and on the other, with its own intertextual potential. In other words, video games must be thought of as texts not in the absence of language, but because they are full of language.

Turning to the study of video games, I hope to emphasize that language operates not just overtop what we call texts, in the ways they are discussed or disseminated, but within them. Indeed, language must be regarded as the mediating force of our experience with them. Oddly enough, video games present an opportunity to return language to the forefront of textuality. As a preliminary example, we might take media and literary theorist Patrick Jagoda's recent philosophical introduction to the subject, entitled, "Conceptual Games, or the Language of Video

Games." Even in this instance, Jagoda's use of the word "language" implies the subordinate or secondary: a language of analysis, meaning the words and critical frameworks we use to describe a game, or a conceptual language, used to communicate the concepts by which games uniquely provoke us to new modes of thinking. For our purposes, we might revise the title by emphasizing the genitive, seeking ourselves a language *of* video games—not any given linguistic formation we might use to describe the effects or the form of a game, but a language all its own, a language into which we, as players, are thrust and which we must explore anew.

This essay proposes that an unacknowledged appeal to language is common across game studies literature from early structuralist incarnations to contemporary cultural interventions, and furthermore contends that this pervasive appeal to language is founded on a genuine linguistic ground from which the design and play of video games emerges. In the sections that follow, I provide a critique of historical approaches to video game textuality, highlighting where a more comprehensive notion of language would serve to clarify longstanding problematics. In so doing, I hope for this article to serve as a bridge to the topic of video games for scholars of more established textual forms. Charting the movement of textuality in games and game studies, I demonstrate how these internal problematics can inform broader debates surrounding textual, linguistic, and literary inquiry, not the least of which is the overestimated discontinuity between "new" and "legacy" media.

The procedure of this essay is broadly thematic. First, I ground the discussion of language in contemporary vocabularies of video game design and criticism by turning to the linguistic metaphor of verbs and objects. Then, I give a historical account of why game studies, as a field, emerged from the shuffle of humanities scholarship without a proper reckoning of its relationship to language. In the subsequent sections, I begin with a survey of key writings from

the structuralist approaches to video game textuality, keeping an eye toward their inability to account for language beyond its instantiation in symbols or codes. Next, I examine the work of more recent game studies scholars working broadly within the tradition of cultural studies to describe where the flattening of textuality into socio-cultural discourses falls short of illuminating the unique subjectivities that video games and other virtual worlds engender through language.

Building atop this unacknowledged appeal to language that animates these extant approaches, I propose an understanding of the language of video games most directly inspired by Jacques Derrida's approach to writing. Namely, I theorize the medium's physical inscription in memory and the phenomenal worldliness that arises from the play of that structural inscription. Concluding, I offer a new reading of *Tetris* (Alexey Pajitnov, 1984), a game few would argue has anything at all to do with world-building or linguistic operations, but which for that very reason makes for worthwhile ground from which to lay bare, so to speak, the molten core of language, whose volcanic churn has, until now, been presumed stable.

**Realizing the Linguistic Metaphor of Verbs and Objects**

Given the tendency of game studies to ignore or downplay the linguistic aspects of textuality, it is notable to observe that an especially linguistic metaphor has gained traction. For some time, game designers and critics have taken to describing game mechanics using the term "verbs" (see Sicart; Järvinen; Crawford; Koster). Perhaps the clearest example of this tendency emerges from Anthropy and Clark's discussion of rules. "Games are made of rules," they write (14). "Surround stones of the opposite color with stones of your own color to capture it. Complete a line of

blocks to make it disappear," they continue (14). In their chapter on the subject, they propose "a basic vocabulary with which to discuss and understand rules and how they function in a game—a grammar" (15). Note well the choice of word: grammar. To establish this grammar they liken a game's rules to the characters in a story: as characters develop over time, so do a game's rules. Next, they propose that some rules are more important than others, like the protagonists in a story. I quote at length:

> *Verbs* are a kind of rule; they're the most important rules of a game. By a "verb," I'm referring to any rule that gives the player liberty to act within the rules of the game. Any rule that lets the player change the game state. Any rule that lets the player *do something*. Verbs are the rules that allow the player to interact with other rules in the game: "jump," "shoot," "fall," or "flap" in the case of *Joust* [Williams Electronics, 1982]. Without verbs we have a simulation, not a collaborative story-telling system. (15)

Some verbs, the authors explain, affect other verbs—Mario can *run* before he *jumps* to leap further. Other verbs have multiple effects: Mario's *jump* also breaks blocks above his head. Moreover, verbs exist in a context, and the better integrated they can be with the aesthetics, story, and themes of a game, the stronger the player's understanding of the world and its rules will be. Mario's *jump* would be totally out of place in most action games, but fits its own fantastical tone. Soon enough, the authors propose "objects" as the complement of verbs: "the objects that complete their sentences" (22).

Here and everywhere, we find a similar elision of grammar and design. Are verbs the metaphors designers use to talk about games, or are they the material of the design itself? This ambiguity is productive, but only hinted at in the book itself. "Rules are how we communicate," Anthropy and

Clark argue. “Verbs are the rules that allow [the player] to communicate back [to us, the designers]. The game is a dialogue between game and player, and the rules we design are the vocabulary with which this conversation takes place” (15). In effect Anthropy and Clark propose a grammar for discussing game design that resembles the grammar of game design itself, which in turn resembles the grammar of language. Yet, the question remains unanswered: is it language? It’s no surprise that this question is not a concern of the authors. They are writing for designers seeking better words to describe their art and their processes. The authors’ intent is not to probe the textuality of the medium. Nonetheless, their work reveals the same gap we observe elsewhere in more rigorously textual studies, namely, the place of language itself. Why does it make sense to discuss video games by appropriating terms from language, grammar, and linguistics? The answer, which I argue brings us straight to Derrida’s doorstep, is because video games themselves are linguistic and grammatical, and are, at base, language at play. This concept will be clarified as we turn now to the idiosyncratic relationship between games and textuality.

**A Historical Overview of Video Games Textuality**

Scholarly attempts to characterize the video game as a kind of text have thus far been partial and disjunctive. Nonetheless, these disparate approaches tend to revolve around a shared vocabulary, centered as it were on the notion of the “text.” Yet the word “text” is deployed most often with little regard to its essential connection to language. Instead, one encounters textuality as a shared function of two principal avenues of games research. In the first place is structuralism, which seeks to anatomize the structure of the video game into its elemental components, such as rules, story beats, or hardware platforms. In the second is cultural studies, which seeks to survey the

video game as a form of cultural production among other cultural productions and systems. The fact that both structuralism and cultural studies make use of the word “text” to define their objects of study, albeit to different ends, indicates the need for a comprehensive theory of language in the case of video games, one which can rejoin the medium to its textual forebears.

In order to synthesize the textuality of these two paradigms, structuralism and cultural studies, we must consider how their division broadly aligns with historical disjunctions in the humanities. Throughout the 20th century, effectively until its final quarter, varieties of literary theory, critical theory, and film theory were contained within what we can imagine as a bubble of structural linguistics, sometimes called (in reference to analogous debates in sociology and anthropology) “grand theory” (see Bordwell and Carroll). Within this mode, such humanistic inquiries sought to understand their respective media by isolating what was most unique and most elemental in each case: the play of color in painting, prosody in poetry, or montage in cinema. The method was indebted to structural linguistics in that it developed generalizable theories about uncountable wholes by analyzing some subset of constituent parts, akin to the way linguists explored syntax and semantics.

Partway through the 20th century, various disciplines began to break away from the central tenets of structuralism, eschewing the kind of grand theory it purported. They differentiated themselves not just from linguistics, but from each other. The result was an explosion of “studies,” each developed in accordance with methodologies tailored to individualized objects and histories. Film theory became cinema studies, critical theory became cultural studies, and out of a conjunction of influences was born media studies, alongside which developed game studies. It should not be assumed that these divisions happened all at once, however, and it is precisely

because they did not happen all at once that we find early experiments with game studies reflecting the structuralist paradigm the discipline would eventually move away from.

Meanwhile, concurrent more or less with the dissolution of grand theory, developments in literary theory and continental philosophy would extend language itself beyond the limits imposed upon it by strict linguistic doctrine, rendering it anew as a material medium by which we experience the world. The basic idea: in that we exist in the world, we make sense of the world through language. It is to this tradition—best known as poststructuralism but including also elements of phenomenology and psychoanalysis—we must turn if we are indeed to get to the bottom of the linguistic underpinnings of both structuralist and cultural studies approaches to video game textuality.

Of course, even the term "poststructuralism" is controversial, or at the very least volatile, enfolding such disparate theorists as Michel Foucault, Jacques Lacan, Gilles Deleuze, Julia Kristeva, and others in and outside the French tradition, several of whom indeed rejected the very label. I therefore use the term here with caution, but necessarily, in order to point to a moment in intellectual history—"an event, perhaps," as Derrida famously announced in "Structure, Sign, and Play"—which holds special relevance to a medium whose study has little acknowledged it. My own inclinations are admittedly Derridean, as I shall soon make clear, because I think Derrida's work makes for an especially productive point of reference in matters of "play"; but where "poststructuralism" shows up in this essay in the generic sense, I hope my reader will take it generously as an invitation.

In effect, the historical shuffle out of which game studies was born, the movement away from structural linguistics and grand theory toward differentiated media and cultural studies, causes

game studies to miss out on the linguistic reconciliation of what, for simplicity's sake, we will call poststructuralism: that is, game studies misses out on the idea that language exists at once as a combinatorial system (in a structuralist sense) *and* as a discursive environment (in a cultural sense). Thus, recuperating the ideas of poststructuralism emerges as a productive way to synthesize our disparate understandings of games. To do so, we must start with text.

It comes as no surprise that the term "textuality" has meant different things at different times: here, meaning the result of linguistic inscription on a material substrate, there, a mode of analyzing an artwork's interweaving with the social fabric. In recent years, the direction of textual analysis in game studies has tended more or less exclusively toward cultural criticism. This movement is analogous to similar trends in literary and media studies more broadly, and there remains a stark contrast between today's discourse of games-as-cultural-texts and yesterday's games-as-formally-textual. The textuality of games presently seems to be regarded like any other meaningful product of culture, which does it a disservice. A grounded analysis of games as texts—not just as cultural productions, but as linguistic texts in their own right—was left undertheorized by the shifting winds of disciplinarity.

As Ian Bogost has written in "Game Studies, Year Fifteen," structuralism was achieved and more or less reified via the outwardly opposed approaches of narratology and ludology, frameworks for the analysis of games as narrative objects and as rule-based processes, respectively. The two approaches basically endeavored to locate the central structure of meaning within video game play, foregoing Derrida's infamous assertion that any such structure eludes stability with a play of its own. Indeed, as Aubrey Anable has argued in *Playing with Feelings*, game studies at large appears to have left off without fully reckoning with any of the implications of poststructuralism: the disappearance of reference, the infinite chain of signifiers, and, most importantly for our

purposes, the linguistic ground of our phenomenological experience of the (or any) world. Whereas Anable locates the missing link in the relationship between cybernetics and affect theory, I propose its location to be amidst language itself.

**Structuralist Approaches to Playable Texts**

One of the earliest and most influential treatments of digital media and textuality is Espen Aarseth's *Cybertext*. This work pioneered and popularized much of the terminology by which early debates in game studies were fought; in some cases, it introduced the debates themselves. Aarseth's principal contributions are, as he calls them, "the two neoteric terms, *cybertext* and ergodic" (1). The former combines information feedback loop of cybernetics with structuralist notions of textuality: input and output merge with signifier and signified within "the mechanical organization of the text" (1). The word "ergodic" for its part refers to the kind of interaction afforded to a user by such an organization. Derived from the Greek *ergon* and *hodos* ("work" and "path," respectively), ergodic literature requires "nontrivial effort […] to allow the reader to traverse the text" (1). In other words, cybertexts operate on a feedback loop whereby input mechanically or digitally determines significant output, and whereby this input, that of the reader or user, is one way or another more involved than reading through pages in a book or passively receiving audio-visual stimulus. Aarseth goes on to describe his frustration with contemporary literary theorists, most of them poststructuralists (receiving what may be their most robust intellectual engagement only in this earliest of works), who confuse "the variable expression of the nonlinear text" he attempts to describe with "the semantic ambiguity of the linear text" with which they are familiar (3). In the latter case, the meaning of the work is simply contingent on

the experience and interpretation of the reader, whereas in the former the very structure of the work is contingent on the experience.

Aarseth points on several occasions to non-digital, non-mechanical examples, such as the work of Raymond Queneau, who developed combinatorial algorithms for writing poetry, or the *I Ching*, an ancient Chinese divination practice and its related commentaries. In contrast to the ordinary reader of an ordinary text, who "however strongly engaged in the unfolding of a narrative, is powerless," Aarseth emphasizes that "the cybertext reader *is* a player, a gambler; the cybertext *is* a game-world or world-game; it *is* possible to explore, get lost, and discover secret paths in these texts not metaphorically, but through the topological structures of the textual machinery" (4–5). Yet while Aarseth admits that the ergodic line between text and cybertext is by no means clear-cut, what remains curiously absent from his conception is an explanation of the role of language itself, something essential to figures like Roland Barthes and Derrida, pivotal to the turn from structuralism to poststructuralism and to whom Aarseth admits the very concept of cybertext is indebted. If the cybertext is to be understood as the proper topological and phenomenological incarnation of the literary labyrinths of Umberto Eco, Italo Calvino, and Jorge Luis Borges, then we cannot ignore the material out of which they are, physically or virtually constructed. The language must be free to play.

A later work of textual criticism, Astrid Ensslin's *Literary Gaming* endeavors to define textuality by way of the literary, or the pretension thereof. To do so, her work builds on Barthes' distinction between "readerly" and "writerly" texts, proposing "playerly" to describe "digital books that can be played," and "readerly" to describe "digital games that can be read" (Ensslin 1). The term literary gaming refers to both of these possibilities: "where literariness in the sense of linguistic foregrounding is part of the authorial intention and where human language (spoken

or written) plays a significant aesthetic role" (2). Thus, Ensslin's definition is at once inclusive and narrow. Inclusive, in that it accounts for multifarious forms: console games to combinatorial poetry. Limited, in that it relies on a vague notion of literary intent: easy to find in Queneau, harder for Nintendo. Indeed, this self-consciously literary approach leaves aside the profitable critique of language in the most mundane cases, overlooking the everyday ludicity of, say, a common cookbook, or the understated literariness of a mindless phone game.

Ensslin develops a "literary-ludic spectrum" to account for these variations within her admittedly narrow band (43–44). Building on a distinction outlined by Huizinga and Caillois between unregulated play and its codification into rule-based games, she takes her readers on a tour of ludic literary styles—modernist stream of consciousness, the Oulipo group's algorithmic poetry (see Terry), postmodern pastiche—arguing that what have been deemed game-like texts are more properly "playful activities: literary play between reader, writer, and text" (27). Elsewhere, in a most intriguing reading, Ensslin applies her ludic logic to an overview of "play" as a concept in philosophy: Kantian imagination, Nietzsche's Dionysus, Wittgenstein's language games, Gadamer's aesthetics, Fink's play as world-symbol, and Derridean bricolage and deconstruction (20–22).

From these precedents, Ensslin concludes that "ludic (print) literature in the traditional sense […] does not provide the ludic mechanics […] needed for an artifact and users' interactions with it to merit the terms *literary game*, *gameplay*, or *gaming*" (28), and she subsequently derives a definition for proper "literary games," which "have to be seen as a highly regulated, rule-bound, and structured subtype of literary play" (41). Yet in spite of her engagement with these thinkers, Ensslin appears to miss or disregard the bigger point that Wittgenstein, Gadamer, Fink (and so on) are making, namely, that the whole reason to be concerned with language is not because its

play is separate from other kinds of human play (like games), but because its play is fundamental to our being in the world. If this were indeed our starting point, taking language as the ground of worlds actual and virtual, we would find that play emerges in ways far more nuanced than the introduction of rules, points, and win-lose conditions. Ensslin claims "to conceptualize the main phenomenological differences between reading and gaming" (39), but this phenomenological difference reveals itself to be artificial once language itself emerges as a common ground of both these forms of play.

**Cultural and Discursive Approaches to Textuality**

More recent textual analyses have strayed from the formal and structuralist precedents set by Aarseth, Ensslin, and others. A work of textual studies by a textual theorist, Steven E. Jones' *The Meaning of Video Games* claims that video games are social texts like any other, and that their meanings are myriad: collaboratively constructed in play and among players. Like other texts, games are necessarily intertextual. "The meanings of video games," Jones writes, "are functions of their use within social networks, which link up to other forms of media, texts, institutions and groups" (2–3). Jones thus preserves the configurative and systemic specificities of games while adapting strategies developed to study other media.

Text, for Jones, is distinct from narrative or story, but not necessarily linguistic. He draws on Gerard Genette's typology of texts to make these claims: peritexts (secondary texts that accompany a primary text), together with epitexts (secondary texts that refer to a primary text) make up the paratext of a text. A paratextual analysis of video games reveals their inherent potentiality. Games "extend" as texts into "a collective and *potential* reality, a transmedia,

multidimensional grid of possibilities" (10). Jones explains the potentiality of text using a metaphor derived from designer Will Wright's conception of games as possibility spaces: the possibility space of a game is like the possibility space of a text in that it can be extended into different directions and configurations. Therefore, playing a game becomes, in part, a negotiation of the boundaries of the text. "Developers and players […] must agree to trace and then play within such a space (or test its outer limits to see if they'll break, which is probably more common" (Jones 15). Accordingly, the work of textual scholars is to trace such trajectories culturally and materially.

A more recent approach to the question of the cultural textuality of video games comes from Christopher A. Paul's book *Wordplay*. Paul combines traditional rhetorical analysis with new media criticism to examine, in equal measure, "the *words* within and surrounding video games, the *design* of games and society, and the practices of *play* in games" (2). He continues, "wordplay is about how games and their surrounding texts participate in a process by which meanings are created, identifications are built, ideas are circulated, and persuasion is attempted" (3). The use of the passive voice in the preceding quote is representative of Paul's approach, which seeks to unite involved criticism with a more detached analysis of social groups and their discourses. In one especially compelling analysis, Paul unpacks the use of the phrase "welfare epics" by a *World of Warcraft* (Blizzard Entertainment, 2004) designer—and subsequently, the game's playerbase—to describe powerful items disseminated as in-game rewards for what was perceived by some players as minimal effort. Paul's analysis of the phrase reveals how "*WoW* players were normalized into a design and play structure that considers work and fiscal metaphors appropriate to describe efforts in online gaming" (128). Nonetheless, whereas Paul writes that "words are at the foundation of both wordplay and video games" (162), in their

content and context, he refrains from making the jump from words themselves to their structurations, that is, to language.

Paul's analyses of such examples seem, more often than not, to consider words, design, and play as interrelated but utterly distinct elements of his methodological frame. Wordplay encompasses all three factors, but treats them separately. Words affect design, but they are not design. Players express themselves with words, but they do not play with them. Language becomes the very thing that wordplay, as a concept, lacks—ironic, given that it's the very thing its name seems to imply. For how else does a pun work if not by the relation between two otherwise unlike concepts, related linguistically? Wordplay, more literally understood, would not be a method or toolset, but a plaything—a game—in its own right.

Still more recent, Clara Fernández-Vara's provides perhaps the best example of the status quo of textuality. Written as an overview of the field and handbook for its methods, Fernández-Vara's *Introduction to Game Analysis* elegantly explains how to approach games aesthetically and culturally. "The foundation to a more sophisticated discourse on games," she declares as a mission statement, "is to understand them as *texts*" (5). She makes clear to her reader that there exists a long history of understanding innumerable objects, artifacts, performances, and activities as texts, even those that aren't necessarily written. "This broad understanding of the term allows us to approach games as texts," she continues, and to engage with them "as a cultural production that can be interpreted because they have meaning" (6). Meaning, that is, not just in themselves or in play, but in their contexts, "where the text is interpreted and by whom" (6).

While Fernández-Vara's guide is eminently useful, it nonetheless demonstrates a confusion, common throughout game studies, as regards the originary claim of textual, structuralist, and

poststructuralist criticism, namely, that the word "text" is merely a metaphor for describing cultural productions that work *like* linguistic texts, rather than being linguistic themselves. On the contrary, Barthes—whose *Mythologies* Fernández-Vara cites as instrumental in broadening the definition of the word text—did not "examine the cultural status of items such as red wine and detergents to activities such as professional wrestling or striptease" (Fernández-Vara 6) in and of themselves. Rather, Barthes did so from the perspective and using the tools of contemporary linguistics. That is, these phenomena were texts, in Barthes' reckoning, because they *actually* existed in or exhibited the characteristics of language. It was not for just any reason that the critical apparatus of linguistics seemed apt, but precisely because Barthes recognized the linguistic grounds of his subjects. This notion was the driving factor in the critique. It is for the same reason, and by no coincidence, that his contemporary Foucault (see *Discipline and Punish*) described the body as discursive, and Heidegger (see "…Poetically Man Dwells…"), existence itself as poetic. If we are truly to treat games as the texts they are we must return to a more judicious meaning of the term. The word "text" is not at fault, but it cannot be separated from the language to which it belongs. To do otherwise is to miss that language has been in play all along.

**Rejoining Text and Language**

Having outlined the absence of language belied by an emphasis on textuality in the study of video games, my goal is to explore what a theory of language might afford. To do so, I now reintroduce poststructuralism, by which I mean a mode of theorizing that synthesizes and moves beyond the rigid formal and cultural significations suggested by the approaches sketched in the preceding sections. I argue that it is precisely this synthesis which game studies, at its founding

as a discipline, missed out on. More specifically, I want to reintroduce poststructuralism here to contextualize the particular thread of theory I intend to pursue, namely, Derrida's notion of writing, which I will soon mobilize toward a provocative understanding of the video game as a kind of physical inscription which mediates the experience of a virtual world through play. Before we get there, however, it makes sense to take stock of the material that poststructuralism in the general sense offers us in our rethinking of the language of video games.

As I see it, the fundamental notion that affords the alignment of such varied theorists as are commonly collected under the big tent of "poststructuralism" involves the implication of language—and by extension textuality—in our experience of the world. Language in this sense becomes the mediating force by which we encounter the world and others in it. In other words, in that we sense, perceive, or cognize the world around us, this is accomplished in and through language. As alluded to above, this phenomenological (or indeed psychoanalytic) function of language is what grounds the poststructuralist predilection for examining the world and its systems (from cityscapes to social programs) as discursive environments, or certain aspects of human experience (from advertising to professional wrestling) as texts. Yet, when this connection to language is severed, when "text" becomes merely metaphorical, rather than intimately connected to the broader discursive fabric of which they are a part, then the point of the critique is dulled.

More than anything else, it is this aspect of the poststructuralist turn that makes the tradition more than relevant—indeed essential—for game studies; thinking through the relationship between our phenomenal experiences and their mediation we finally locate the origin of the question introduced at the start of this essay, *how does a world emerge from language*? But to use video games to explore this question, we must ask another first: why should we take literally

the notion of "language" implied by the use of the word "text" (or "verb") in reference to video games—and what do we gain by doing so?

As we have seen throughout the present work, the basic linguistic operations that underlie all video game play have gone unnoticed as such. For the sake of argument—before illuminating a more abstract, phenomenological layer of language—we can easily outline several ways that video games are linguistic by considering their use of meaningful symbols. Most obviously, video games are coded in programming languages. These special languages translate the higher-level instructions of the programmer into lower-level machine commands to be executed by a computer in sequence, following a scripted logic. The human process of writing code and the computational process of executing code are both linguistic, albeit to different degrees of separation from "natural" human language.

Related to its programming, a computer program also needs a material substrate on which to inscribe, temporarily or permanently, its memory. The memory might be stored, or "written," to internal storage, as in many contemporary game consoles, or it may be stored externally, such as on a game cartridge loaded into a Nintendo Entertainment System (less common these days). Memory may even be uploaded into the cloud and stored in an encrypted form alongside the data of thousands of other computer users on an interlinked series of machines half a world away, ready to be retrieved when needed at a moment's notice. No matter where it is stored, data has to be written in a literal sense, inscribed physically onto a storage medium (like the magnetized platters of a hard disk drive or the floating gate transistors of a solid state drive) in the form of a 1 or a 0—and read in a literal sense, decoded via circuitry according to the programming of an operating system.

At any given moment during a video game program's runtime, its game state—or an instantaneous snapshot of every discrete variable (like the player score or the location of enemies around the screen) currently in use—is inscribed in a computer's impermanent, or volatile, memory. This method of computation is common to just about every program because volatile memory (like RAM, or random access memory) can be written to or read at the same speed, making it useful for running continuous processes. Writing to and reading from RAM is necessary for everything from rendering a game's graphics to registering a player's input. But whereas older arcade and home console games were limited to such volatile memory storage—and were thereby incapable of saving a player's progress once the machine powered off—most video games today can access a computer's permanent, or non-volatile, storage solutions, like hard drives or solid state drives. These drives allow players to store game states as saved games between play sessions, creating a persistent material record of a player's gameplay.

In the case of data storage, we should avoid mistaking the digital for the immaterial. Although saved games are generally illegible by players outside their instantiation in-game, the fact remains that amidst the circuitry of the contemporary computer a logical pathway charting a symbolic course from binary variable to binary variable exists physically in the world as a mode of inscription—that is, linguistically and textually. Indeed, this argument could be extended also to a player's inputs themselves, composed as they are of arbitrary sign interfaces, or even to the varieties of graphical rendering techniques and visual displays, from the electron beam scanlines of cathode-ray screens to modern-day pixel resolutions. Yet what is most interesting about these considerations of material inscription is that, where they have been acknowledged (see Montfort and Bogost, for instance, and their "platform study" of the Atari 2600) the essential connection to language through symbolic inscription has been more or less overlooked. In the case of the

video game, we are dealing with textuality in the form of an actual inscription—a script, in other words, whose machine-reading is facilitated, in part, by the player.

Thus far, we have examined the idea that parts of video games are *inscribed* in a physical or graphic sense. But our mission is not to show that video games *contain* language, in the form of inscription, but that they *are* language, indeed in the form of writing. So how *is* a video game writing? How is a video game *written* not just through the movement of game states and in records of play set to memory, but in and of itself, that is, *in play*? How does one *play in writing*? To answer this question, we must look more specifically at how writing manifests in its own terms, something Derrida helps to explain.

Derrida's exploration of play and writing begins, in most reckonings, with his seminal 1966 lecture "Structure, Sign, and Play in the Discourse of the Human Sciences," widely regarded as inaugurating the movement from structuralism to poststructuralism in the French and Anglophone academy. Here, Derrida suggests doing away with the idea that a structure of meaning could ever provide enough stability to shape a comprehensive understanding of the non-totalizable whole of language. A language constantly changes—it grows here and disappears there—meaning that a linguist cannot simply catalog and categorize every possible utterance. Whereas structuralists hoped to locate and analyze the underlying structure common to all utterances in a given language, Derrida reveals that this, too, is necessarily a moving target. The meaning of any given structural reference is contingent upon its relationships to those structural formations which, at any given time, surround it. Among these relationships are historical, political, cultural, material, and psychological structures. As Derrida explains, the impossibility of comprehending a language as a totalizable whole derives not from its infinitude, but from the absence of a structuring center—or rather, from the endless movement of that center which

Derrida calls its "freeplay." Freeplay characterizes an absence at the center of a system like a language that lends to it the ability to throw off one essential structure of meaning for another. Moreover, it is precisely in the moment of *writing* that the freeplay of language makes itself most evident: for the writer, the reader is necessarily absent, and likewise for the reader, the writer. This central absence at once makes the writing what it is, as writing, but also establishes the essential iterability by which it can move from context to context, from writing to reading to reference and citation.

From this point of departure, Derrida's continuing critique of speech and writing responds to the assumptions of Western metaphysics, beginning with Plato and Aristotle, evolving into Christian theology ("onto-theology," as he calls it, meaning the equation of being and God), and influencing even the then dominant paradigm of structural linguistics introduced by Saussure. What holds these metaphysical siblings in common, and what damns them equally in Derrida's vision, is their fixation on *presence*. Being, in metaphysics, requires a thing to be present. It is this grounding in ontological presence which causes metaphysics to privilege spoken language above all other kinds, including writing or otherwise recorded speech. Indeed, the issue is just this, that writing is nothing more than recorded—and necessarily corrupted—speech. Derrida refers to this proclivity as both "logocentrism," from the Greek for "word" or "speech," and "phonocentrism," from the Greek for "voice." In his influential early work, *Of Grammatology*, Derrida enumerates the varied and networked associations of this assumption:

> One already has a premonition that phonocentrism gets mixed up with the historical determination of the meaning of being in general as presence, with all the subdeterminations which depend on this general form and which organize within it their system and their historical concatenation (presence of the thing to the sight as eidos,

> presence as substance/essence/existence (*ousia*), temporal presence as point [*stigmè*] of the now or of the instant (*nun*), self-presence of the cogito, consciousness, subjectivity, co-presence of the other and of the self, intersubjectivity as intentional phenomenon of the ego, etc.). Logocentrism would thus be solidary with the determination of the being of being [*étant*] as presence. (13)

Writing, in the classical sense inherited from Plato's *Phaedrus*, becomes an evil thing in the sense that it dissolves presence. And this is, indeed, what it appears to do. The author of the language need no longer appear beside it. As Socrates argues, a text's author is not even around to defend an argument from criticism, or clarify it in the case of misunderstanding. (Plato, for his part, must have been aware of the irony embedded in his own dramatic accounts of dialectical speech.) As Derrida tells it, playing on the dual meanings of the Greek word, writing causes a "departure of the logos from itself," a departure of word from speech (40). As he goes on to argue, however, the unidirectionality of this equation—whereby writing essentially and always derives from speech—is indefensible and more or less defeats itself. "We would wish rather to suggest that the alleged derivativeness of writing, however real and massive, was possible only on one condition: that the 'original,' 'natural,' etc. language [*langage*] had never existed, that it had never been intact, untouched by writing, that it had itself always been a writing" (61).

The assumption of natural, spoken language—as proposed by the metaphysical tradition and as reiterated by Saussure—is revealed by Derrida, operating through deconstruction, to contradict itself. If speech is composed of signs, and if writing is composed of derivative signs, then writing becomes "a sign of a sign" (46). Within a Saussurean system, each signs are distinguished from each other by an irreducible array of differences, rather than by positive characteristics: "bed" is distinct from "bad" phonetically, by the vowel that separates them, and semantically, as a place

to sleep (distinct from “cot” and “mattress”) and as a maladaptive quality (distinct from “unsuitable” and “evil”), respectively. However, speech is never reconstituted wholesale in the moment of its utterance. No one invents a language on the occasion of speaking it. Therefore, speech must itself be a sign of something, of some other order of sign. That other order of signs, then, must be by far the most essential of all, stretching (with variance) across geography, culture, and time itself. The fact that certain stone carvings remain indecipherable to us is testament to this: in the absence of the most necessary inscription of a sign, only the base inscription on a physical surface remains. Thus, Derrida writes, “if ‘writing’ signifies inscription and especially the durable institution of a sign (and that is the only irreducible kernel of the concept of writing), writing in general covers the entire field of linguistic signs” (48). In other words, in a reversal of the hierarchical operation instigated by metaphysics, writing attains philosophical precedence—albeit a precedence that eliminates the very possibility of metaphysical precedence, as well as “all relationships of natural subordination, all natural hierarchy among signifiers or orders of signifiers” (48). Derrida, achieving his grammatology, continues:

> In that field a certain sort of instituted signifiers may then appear, “graphic” in the narrow and derived sense of that word, regulated by a certain relationship with other instituted—hence “written,” even if they are “phonic”—signifiers. The very idea of institution—hence of the arbitrariness of the sign—is unthinkable before the possibility of writing and outside of its horizon. Quite simply, that is, outside of the horizon itself, outside the world as a space of inscription, as the opening to the emission and to the spatial distribution of signs, to the regulated play of their differences, even if they are “phonic.” (48)

What exists then, in writing, lies beyond opposition, even between itself and speech. To this end, Derrida proposes the neologism "arche-writing," something never to be reduced to "the *object of a science"* on account of its ouroboros-like metaphysicality (61). It can never be the center of something. To do so would be to reinstate what Derrida most often refers to as the "transcendental signifier," that space of absolute orientation in meaning, occupied in traditional metaphysics by the form of the good, by God, or by scientific progress. Arche-writing becomes "that very thing which cannot let itself be reduced to the form of a *presence*" (61). It is the aspect of language that remains removed from presence, remains absent, and finds its instantiation in speech, in graphical inscription, in analog or digital recording, and, as we have seen in the material of computer memory.

At this point, what remains essential to writing—a name, following Derrida, we should continue to use in favor of the arcane appellation "arche-writing"—reveals its most particular relation to the medium of video games. The origin of this relation is in two parts. First, punning again on Greek, Derrida writes that "whether it has essential limits or not, the entire field covered by the cybernetic *program* will be the field of writing" (9). We have already elaborated on this aspect above, but suffice it to say that the Derrida of the mid-century was proven correct by the continued predominance of micro-circuitry and the gravity of an information economy increasingly quantized into binary operators. Nonetheless, reading Derrida with a contemporary perspective on computing reveals just as well a manner whereby, as he says, "the theory of cybernetics can dislodge by itself all the metaphysical concepts—all the way to concepts of soul, of life, of value, of choice, of memory—which until recently served to separate the machine from man" (9). The way forward here, contra Derrida's expressed position, is not to invent a new denunciation of cybernetics, but to re-engage its essential connection to writing.

Here, it serves us well to quote Derrida at length, attending in particular to his use of the word "play":

> From the moment there is sense there is nothing but signs. *We think only in signs*. Which amounts to ruining the notion of the sign at the very moment when, as in Nietzsche, its exigency is recognized in the absoluteness of its right. One could call *play* the absence of the transcendental signified making play boundless, that is to say as the shaking up of onto-theology and the metaphysics of presence. [...] Here we must think of writing as play within language [*langage*]. (The *Phaedrus* [277e] condemned writing precisely as play—*paidia*—and opposed such childishness to the adult gravity [*spoudè*] of speech). This play, thought as absence of the transcendental signified, is not a play *in the world*, as it has always been defined, for the purposes of *containing* it, by the philosophical tradition as well as the theoreticians of play (or those who, following and going beyond Bloomfield, refer semantics to psychology or some other regional discipline). To think play radically the ontological and transcendental problematics must first be seriously *exhausted*; the question of the sense of being, of the being of being [*étant*] and of the transcendental origin of the world—of the worldness of the world—must be patiently and rigorously worked through, the critical movement of the Husserlian and Heideggerian questions must be effectively followed to the very end, to conserve their effectiveness and legibility. Even if this were done under erasure [*sous rature*], for otherwise the concepts of play and writing to which one will have recourse will remain caught within regional limits and an empiricist, positivist, or metaphysical discourse. The party that the holders of such a discourse would oppose to the thrust of the precritical tradition and to metaphysical speculation would be nothing but the worldly representation of their proper

> operation. It is therefore *the game of the world* that must be thought first; before attempting to understand all the forms of play in the world. (*Of Grammatology*, 54-55)

*Writing itself is play*. Indeed, "the advent of writing is the advent of play" (7). But in what manner, specifically, does this play result in the production of a world? And in what way does this production of a world require writing—require language itself? We encounter language, always, in its movement, in a state of flux. Our every utterance reflects this fact, whether we reproduce a cliché or coin a novel pun. That the cliché is recognized as such depends upon its propagation in language, in the arche-writing of a cultural context—the pun, likewise, upon words, in some sense, having a life of their own, captured in fleeting moments of homonymy or some such coincidental pairing. Language, as arche-writing—the system into which we are born and acculturated—plays off itself, and our subsequent use of it in the forms of speech and graphical inscription is perpetually derivative. A delimited system, the total sum of all possible linguistic permutations in a given language—or in language itself—escapes the closure that would spell its end. Because meaning can never be fixed, Derrida argues, there remains an infinite possibility within a finite space. Some physicists make an analogous claim about the shape of our physical universe: that it is *finite, but unbounded*. This, too, effectively characterizes the state of play—or play of states—in the inscription of the video game.

**The Play of Limits in *Tetris***

Having established through the materiality of inscription why we must take literally the notion of "language" in reference to video games, we are prepared to confront how the play of language (understood as arche-writing) defines our phenomenal experience of the world—something

which productively and necessarily entails the mediation of virtual worlds in language and writing, namely, the play of video games. To do so, we must begin by properly naming the play of a video game as an experience of playing in and with language. When we consider language as a mediating force of our experience playing a video game—when we consider language as the thing in and at play—we are at once engaging the linguistic inscriptions at work in rendering the game and illuminating the play of linguistic constraints we assume as players; it is the illumination of these linguistic constraints which necessarily returns us to the preoccupations of Derrida and poststructuralism more broadly.

Pay close attention to the dialectic of possibility and delimitation employed by nearly every author discussed in this article. Anthropy and Clark: "By a 'verb,' I'm referring to *any rule that gives the player liberty to act* within the rules of the game" (15, emphasis mine). Aarseth: "The cybertext reader is a player, a gambler; the cybertext is a game-world or world-game; it is possible *to explore, get lost, and discover secret paths* in these texts not metaphorically, but through the topological structures of the textual machinery" (4, emphasis mine). Jones: "Developers and players […] must agree to trace and then play within such a [possibility] space (or *test its outer limits to see if they'll break*, which is probably more common)" (15, emphasis mine). Phenomenologically speaking, the language of a video game is one of strict delimitation, and to learn to play with it is to explore, to discover, what language is excluded from the system, what limit marks its breaking point.

This exploration of limits, more than anything else, is what Derrida helps us to understand about our linguistic relationship to this or any world: that we are constrained in our experience of phenomena by the delimitation of our language, but that, far from closing off the possibility of

freedom, this delimitation provides the very conditions for our play in language and in experience.

The precise workings of these mechanisms deserve more extensive theorization, but perhaps it will suffice here to render a preliminary reading of a work few would argue makes claims to representation, to narrative, or to concrete thematics, but which nonetheless functions as a complete, realized language world to be productively critiqued (or even designed) on the grounds of its phenomenal textuality: the play of its language. The game in question is *Tetris* (Alexey Pajitnov, 1984). The game is simple: one at a time, shapes comprising precisely four squares fall from the top of the screen to the bottom. One looks like an "L," another looks like a two-by-two square. Players can rotate these shapes, called "tetrominoes," clockwise and counterclockwise as well as move them laterally from side to side. Once a block reaches the bottom of the screen, or settles atop a stack of tetrominoes, it comes to a stop. Players lose the game when the stack of tetrominoes reaches the top of the screen, preventing any more tetrominoes from dropping. Players score points by completing full horizontal lines of squares across the screen, whereupon all squares in the line or lines completed disappear. Thusly players compete to keep the tetrominoes away from the top of the board in pursuit of ever higher scores.

*Tetris* is a game about making things disappear—and the power to make things disappear is a linguistic operation. To move tetrominoes, players engage in verbal processes: move left, right, rotate, and so on. In one sense, tetrominoes represent the object of these player-motivated verbs, but the verbal fabric of the game extends beyond these actions. The language of *Tetris* is defined by freefall—what *is*, in the language-world of *Tetris*, falls until it hits the bottom of the playfield, whereupon it exists to stop other things from falling. Language and physics, in this respect, are inextricable. In that a game developer programs a simulation of gravity in code, a player

experiences that same gravity, albeit differently rendered, through a linguistic mode of perception.

For Derrida, the play of a given system is the result of the absence of a center of meaning, and *Tetris*, like other video games, comprises one such system. The lack of a center manifests as freeplay within defined limits—a finitude of language. (In spoken language, for instance, we have the nonsensical or the inexpressible.) Limits in *Tetris* are mostly clear. Tetrominoes cannot pass through one another. They also cannot move past the defined boundaries of the playfield. However, two apparent transgressions of these limits (actually contained within them) are definitive to more advanced play of the game. The first apparent transgression concerns advanced movement techniques. For instance, although tetrominoes lock into place once they land either at the bottom of the playfield or atop a stack of their counterparts, certain movements are, counter-intuitively, allowed and, on occasion, even necessary. Tetrominoes can actually move laterally along the ground if a command is input quickly enough. Moving a tetromino in this way allows a square block, for instance, to slide under the overhang of a vertical L-block, something impossible moving straight down. Opening new possibilities for tetromino placement, this technique also discourages players from speeding up their gameplay by pressing the button to snap falling tetrominoes instantly to the ground. Another, related technique allows tetrominoes to be rotated through other tetrominoes, again provided a rotation input is made quickly. A T-block spin is a common way to complete awkward gaps in the playfield.

Learning these advanced maneuvers is one way players build the language-world of *Tetris* in their minds. What once seemed beyond the limits of the game world is revealed to be within them. In this way, players probe and explore the frame of delimitation, always in language, using the grammar of a language that has always already been scripted for them. In this way, expert

players of *Tetris*, like grandmasters in chess, are able to play the game several moves ahead of what is rendered on-screen. Their ability to do so is explained by an internalization of the language-world of the game: the possibility space of sensible moves and the grammar by which they can execute them. The discovery of what is and is not possible within the constraints of a video game—what is and is not, as it were, *sensible*—is fundamental to its play.

Yet the clearest illustration, in *Tetris*, of the constitutive properties of delimitation is given by the most fundamental limit of all: the top of the playfield. If the stack of tetrominoes at any point goes beyond the upper boundary of the playfield, if there is no more room to place a new block, the game ends. To be clear, the matter of going beyond this limit is somewhat contained, linguistically, within the possibility space of the game-world. It is, after all, the nature of a limit to be, at once, contained and transcendent, within and without. The upper limit of the playfield makes for one such case, as it marks the boundary of what cannot be transgressed, namely, the Game Over, that which tells players that they have failed to do what has been asked of them and that they cannot play anymore (without restarting, that is).

Still, if the Game Over screen represents the paradigmatic example of the delimitation of a game world's delimitation, it does not dissuade the player from approaching it over and over again. In fact, one might conclude that every individual session of *Tetris* is simply an approach, at one rate or another, to this limit. Or, more properly, one could say that the play of *Tetris*, or any video game, only ever occurs at this limit—at the boundary of what is possible within its linguistic space. Players circle this limit, learn to navigate it, explore the system in search of a novel approach, a new high score, but always within the confines of a language that precedes them. Indeed, the pleasure and the burden of any video game adds up to this: that the player can do nothing that is not always already scripted, already programmed, already contained within the

possibilities outlined by the text. If we take the idea of the textuality of a video game seriously, as language, this is our conclusion. And what a theory of language gets us is a way to find freeplay in spite of it.

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**Bibliography**

Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature*. Johns Hopkins University Press, 1997.

Anable, Aubrey. *Playing with Feelings: Video Games and Affect*. University of Minnesota Press, 2018.

Anthropy, Anna, and Naomi Clark. *A Game Design Vocabulary: Exploring the Foundational Principles Behind Good Game Design*. Addison-Wesley Professional, 2014.

Barthes, Roland. *Mythologies: The Complete Edition, in a New Translation*. Translated by Richard Howard and Annette Lavers. Hill and Wang, 2013.

Bogost, Ian. "Game Studies, Year Fifteen." *Bogost.Com*, 2 Feb. 2015, http://bogost.com/writing/blog/game-studies-year-fifteen/.

Bordwell, David, and Noel Carroll, editors. *Post-Theory: Reconstructing Film Studies*. University of Wisconsin Press, 1996.

Caillois, Roger. *Man, Play and Games*. University of Illinois Press, 2001.

Crawford, Chris Crawford. *Chris Crawford on Interactive Storytelling*. New Riders, 2012.

Derrida, Jacques. *Of Grammatology*. Translated by Gayatri Chakravorty Spivak. Johns Hopkins University Press, 2016.

Derrida, Jacques. "Structure, Sign, and Play in the Discourse of the Human Sciences." *Writing and Difference*. Translated by Alan Bass. University of Chicago Press, 2017.

Ensslin, Astrid. *Literary Gaming*. The MIT Press, 2014.

Fernández-Vara, Clara. *Introduction to Game Analysis*. Routledge, 2019.

Foucault, Michel. *Discipline & Punish: The Birth of the Prison*. Translated by Alan Sheridan. Vintage Books, 1995.

Genette, Gerard, and Richard Macksey. *Paratexts: Thresholds of Interpretation*. Translated by Jane E. Lewin. Cambridge University Press, 1997.

Heidegger, Martin. ..."...Poetically Man Dwells..." *Poetry, Language, Thought*. Translated by Albert Hofstadter. Harper Perennial Modern Classics, 2013.

Huizinga, Johan. *Homo Ludens: A Study of the Play-Element in Culture*. Martino Fine Books, 2014.

Jagoda, Patrick. "Introduction: Conceptual Games, or the Language of Video Games." *Critical Inquiry*, vol. 45, no. 1, Sept. 2018, pp. 130–36. *DOI.org (Crossref)*, https://doi.org/10.1086/699584.

Järvinen, Aki. *Games without Frontiers: Methods for Game Studies and Design*. VDM Verlag, 2009.

Jones, Steven E. *The Meaning of Video Games: Gaming and Textual Strategies*. Routledge, 2008.

Koster, Raph. "Every Genre Is Only One Game." *Raph's Website*, 12 Apr. 2013, https://www.raphkoster.com/2013/04/12/every-genre-is-only-one-game/.

Montfort, Nick, and Ian Bogost. *Racing the Beam: The Atari Video Computer System*. The MIT Press, 2009.

Paul, Christopher A. *Wordplay and the Discourse of Video Games: Analyzing Words, Design, and Play*. Routledge, 2012.

Plato. "Phaedrus." *Plato: Complete Works*. Edited by John M. Cooper and D. S. Hutchinson. Hackett Publishing Co., 1997.

Saussure, Ferdinand de. *Course in General Linguistics*. Translated by Roy Harris. Open Court, 1998.

Sicart, Miguel. “Defining Game Mechanics.” *Game Studies*, vol. 8, no. 2, Dec. 2008. *Game Studies*, http://gamestudies.org/0802/articles/sicart.

Terry, Philip, editor. *The Penguin Book of Oulipo: Queneau, Perec, Calvino and the Adventure of Form*. Penguin Classics, 2020.