

Ensslin, the LDL Spectrum, page 44



Figure 3.1

Literary-ludic continuum, combined with the spectrum between deep and hyper attention. The vertical line marks the conceptual boundary between texts that are primarily read (to the left) and those that are primarily played (to the right).

Murray, the active audience, page 40

skillfully setting up plot patterns that encourage speculation on which possibilities will be developed. Comic book franchises acknowledge and encourage the audience's free-form fantasies by publishing special series devoted to events that are contrary to the official history of the characters but full of interesting narrative possibilities. Marvel Comics uses its "What If . . . ?" monthly series to explore such questions as "What if Spiderman's uncle had not died?" and "What if Spiderman had never gotten superpowers?"; and DC Comics uses its forty-eight-page *Elseworlds* issues (twice the size of the usual monthly) to imagine Superman transported to the Metropolis of Fritz Lang's 1926 film or Batman born into Victorian England and fighting Jack the Ripper. These efforts assume a sophistication on the part of the audience, an eagerness to transpose and reassemble the separate elements of a story and an ability to keep in mind multiple alternate versions of the same fictional world.

Are there non-fictional games? There may be some games that do not have such a fictive component; specifically, very abstract games that lack robust representational elements. It is not clear that the early game OXO (Alexander S. Douglas, 1952) or video game versions of Sudoku present a fiction; rather they seem to allow one to play these games in a computer setting. Similarly, we might question whether *Tetris* (Alexey Pajitnov, 1985) depicts a fiction; Juul thinks that *Tetris* is ambiguous in this respect (2005, p. 167). But even *Tetris* seems to make it fictional that there are objects falling down the plane of the screen. Indeed, the philosophers Aaron Meskin and Jon Robson argue that given Walton's rather inclusive theory of fiction, it is difficult to conceive of video games that are not fictional (Meskin and Robson, 2012).

Nevertheless, most video games are rather more obviously fictions because they unambiguously include depictions of places, events, and characters with an imagined existence. John Marston is fictional in being imaginary. Equally, the world of this game is an imagined one, even if its locations bear a resemblance to real places in the American Southwest. The player of *Red Dead Redemption*, guided by the depictions of a fictive prop, imagines that a man named Marston exists and that he has the various features ascribed to him in that fiction. We subsequently learn Marston's story, and also about the fictional world of the game.

But critically, this account of fiction also means that the activities that the player carries out in the game world, activities that constitute the gameplay, are fictional. Even though players routinely speak about their own activities in game worlds in the first-person, the player of *Red Dead Redemption* does not really ride horses, hunt coyotes, or have gunfights. It is fictional that these things occur because the player imagines that his or her character engages in these activities on the basis of the depictions produced

Bogost, Procedural Rhetoric Definition, page 3

of creating, explaining, or understanding processes. And processes define the way things work: the methods, techniques, and logics that drive the operation of systems, from mechanical systems like engines to organizational systems like high schools to conceptual systems like religious faith. *Rhetoric* refers to effective and persuasive expression. **Procedural rhetoric, then, is a practice of using processes persuasively.** More specifically, procedural rhetoric is the practice of persuading through processes in general and computational processes in particular. Just as verbal rhetoric is useful for both the orator and the audience, and just as written rhetoric is useful for both the writer and the reader, so procedural rhetoric is useful for both the programmer and the user, the game designer and the player. Procedural rhetoric is a technique for making arguments with computational systems and for unpacking computational arguments others have created

sion. A theory of procedural rhetoric is needed to make commensurate judgments about the software systems we encounter every day and to allow a more sophisticated procedural authorship with both persuasion and expression as its goal.

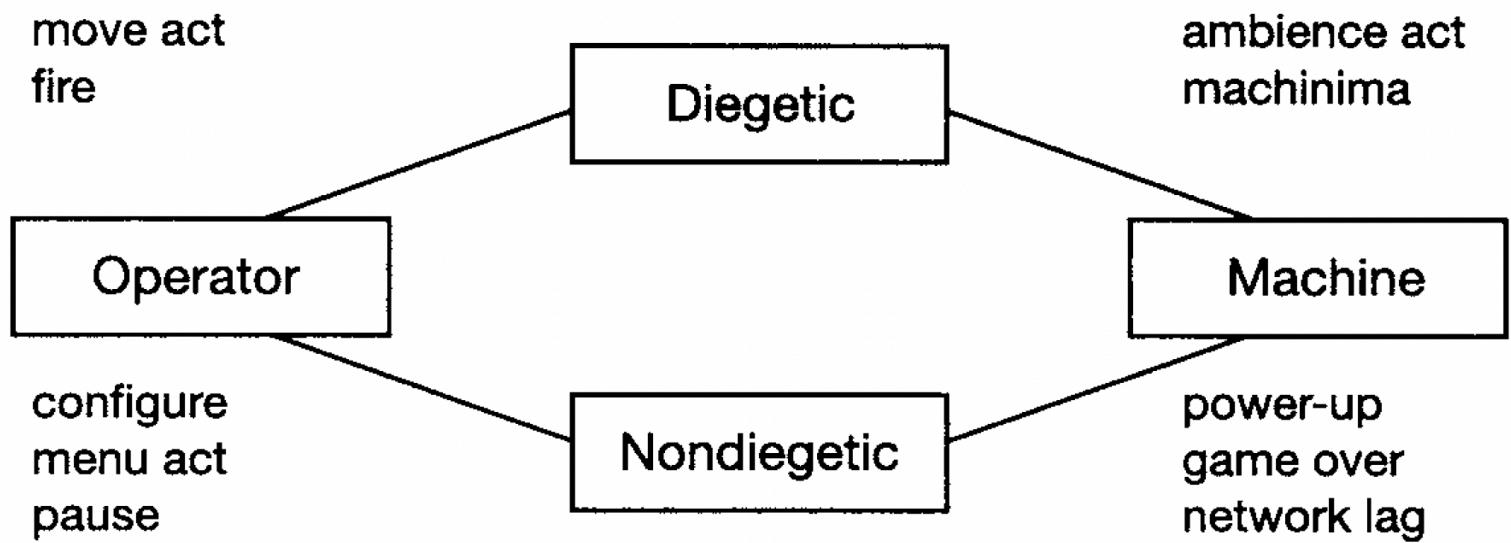
Procedural rhetorics afford a new and promising way to make claims about *how things work*. Consider a particularly sophisticated example of a procedural rhetoric at work in a game. *The McDonald's Videogame* is a critique of McDonald's business practices by Italian social critic collective Molleindustria. The game is an example of a genre I call the anti-advergame, a game created to censure or disparage a company rather than support it.⁷⁴ The player controls four separate aspects of the McDonald's production environment, each of which he has to manage simultaneously: the third-world pasture where cattle are raised as cheaply as possible; the slaughterhouse where cattle are fattened for slaughter; the restaurant where burgers are sold; and the corporate offices where lobbying, public relations, and marketing are managed. In each sector,

Galloway, games are actions, page 2

Begin like this: If photographs are images, and films are moving images, then *video games are actions*. Let this be word one for video game theory. Without action, games remain only in the pages of an abstract rule book. Without the active participation of players and machines, video games exist only as static computer code. Video games come into being when the machine is powered up and the software is executed; they exist when enacted.

Video games are actions. Consider the formal differences between video games and other media: indeed, one *takes* a photograph, one *acts* in a film. But these actions transpire before or during the fabrication of the work, a work that ultimately assumes the form of a physical object (the print). With video games, the work itself is material action. One *plays* a game. And the software *runs*. The operator and the machine play the video game together, step by step, move by move. Here

Galloway's Types Of Actions, page 37



The interpretive framework presented in this chapter aims to be as inclusive as possible. I have deliberately avoided the assumption—incorrect, in my view—that video games are merely games that people play on computers. Such a position leads to a rather one-dimensional view of what video games are. I have also tried to avoid privileging either play or narrative, another tendency that is common in other approaches. There are many significant aspects of gaming that hap-

the best-laid plans fall prey to countermoves.

There need be no loss of variety, then, on moving from mimesis and lyrical effusion to a literature of games. The styles of calculation and the potential array of strategic textures are exceedingly rich. To be sure, the appearance and the effect of a literary work are not the same when one confronts a text made up of “moves” rather than illusions: “they have an information content, or *evidence* content, of a different character from that of speech. . . . moves can reveal information about a player’s value system or about the choices of action available to him.”³⁴ In a gaming situation, communication must be viewed as a tactic, an attempt to constrain another player’s expectations. One must then respond to it tactically, with guarded skepticism, treating narrative devices or the total range of reference in a work as evidence of an opponent/collaborator’s resources. One reads for global patterns of play, for signs of “bluffing” and accidental “leaks” of information.³⁵ One becomes engrossed in a literary game without “believing” in it. Its excitement does not depend on empathy or illusion but on the challenge of strategic dilemmas: when to trust, what to trust, whether to trust at all, and how to proceed with reading in the light of such risk and uncertainty.

Jenkins, Types of Environmental Storytelling

In each of these cases, choices about the design and organization of game spaces have narratological consequences. In the case of evoked narratives, spatial design can either enhance our sense of immersion within a familiar world or communicate a fresh perspective on that story through the altering of established details. In the case of enacted narratives, the story itself may be structured around the character's movement through space and the features of the environment may retard or accelerate that plot trajectory. In the case of embedded narratives, the game space becomes a memory palace whose contents must be deciphered as the player tries to reconstruct the plot and in the case of emergent narratives, game spaces are designed to be rich with narrative potential, enabling the story-constructing activity of players. In each case, it makes sense to think of game designers less as storytellers than as narrative architects.

toward two important critical issues.

First, “expressive processing” encompasses the fact that the internal processes of computational media are designed artifacts; in this sense, they are like buildings or transportation systems. As with other designed mechanisms, processes can be seen in terms of their efficiency, their aesthetics, their points of failure, or their (lack of) suitability for particular purposes. Their design can be typical or unusual for their era and context. The parts and their arrangement may express kinship with, and points of divergence from, design movements and schools of thought. They can be progressively redesigned, repurposed, or used as foundations for new systems—by their original designers or others—all while retaining traces and characteristics from prior uses.

Second, unlike many other designed mechanisms, the processes of computational media operate on, and in terms of, elements and structures meaningful to humans. For example, a natural language processing system (for understanding or generating human language) expresses a miniature philosophy of language in its universe of interpretation or expression. When such a system is incorporated into a work of computational media such as an interactive fiction, its structures and operations are invoked whenever the work is experienced. This invocation selects, as it were, a particular constellation from among the system’s universe of possibilities. In a natural language generation system, this invocation might be a particular sentence shown to an audience in the system output. From looking at the output sentence alone, it is not possible to see where the individual elements (e.g., words, phrases, sentence templates, or statistical language structures) once resided in the larger system. It is not possible to see how the movements of the model universe resulted in this constellation becoming possible—and becoming more apparent than other possible ones.

To put it another way, in the world of computational media, and perhaps especially for computational games and fictions, we have as much to learn by examining the model that drives the planetarium as by looking at a particular image of stars (or even the animation of their movement). This is because the model universes of these works are built of rules for character behavior, structures for virtual worlds, techniques for assembling human language, and so on. They express the meanings of their fictional worlds through the design of every structure, the arc of every internal movement, and the elegance or difficulty with which the elements interact with one another.

Trying to interpret a work of computational media by looking only at the output is like

Hayles on Electronic Text and Code, page 5

In the contemporary era, both print and electronic texts are deeply interpenetrated by code. Digital technologies are now so thoroughly integrated with commercial printing processes that print is more properly considered a particular output form of electronic text than an entirely separate medium. Nevertheless, electronic text remains distinct from print in that it literally cannot be accessed until it is performed by properly executed code. The immediacy of code to the text's performance is fundamental to understanding electronic literature, especially to appreciating its specificity as a literary and technical production. Major genres in the canon of electronic literature emerge not only from different ways in which the user experiences them, but also from the structure and specificity of the underlying code. Not surprisingly, then, some genres have come to be known by the software used to create and perform them.

Montfort on the notion of a traversal, page 32

assuming the current state to be restored later on, or perhaps arrive at a conclusion, and then terminates the program. However, one interaction may take place over many sessions, because the interactor may terminate a program and then start it again immediately, interacting with the program repeatedly in what is to her a continuous interaction. Similarly, an interactor can start a session (and an interaction), go on vacation for a week while leaving the computer and the program running, and then return to have another, different interaction that is part of that same session. Of course, the point of many works of IF is to win them, that is, to proceed towards a certain goal or outcome; “winning” can be seen as one analogue to having “read the whole book.” (This is not the only such analogue, though.) Winning cannot be described in terms of *session* or *interaction* alone.

A *traversal* is what happens in one or more sessions, and one or more interactions, when the interactor “completes” a work of IF by going from the beginning until no more can be narrated. The full definition of traversal is given in section 5; to define the term exactly it is necessary to describe more about IF as simulated world and potential narrative. The

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Anyone who has played video games will know that there are some aspects of 'gameplay' (as the playing experience is called) that are unmappable and that are perceivable but not describable. The colloquial description for this is that the player is 'in the game'. The story, the game rules and the machine code constantly intersect and transform each other as well as the emotions, the muscular movements and the spontaneous reactions of the player. A traditional humanities framework cannot grasp these less perceivable elements of the being 'in the game' experience. This is why, despite their popularity, the humanities are hesitant to admit video games into the folds of serious study: within the discourse of traditional and 'major' concepts of literature, video games are 'minor'. In the Deleuzoguattarian sense, minoritarian literature leads to many significant developments in understanding the nature of the literary. The rising importance of video games as a storytelling device, therefore, can no longer be deemed accidental.

The concept of the assemblage provides an important entry-point into analysing video games as a minoritarian literature assemblage: the following chapters will explore this in fuller terms. The video game-assemblage necessarily includes the changes in movements relative to the gameplay and to other people who might be around and the words