Genre Trouble: Narrativism and the Art of Simulation

Espen Aarseth

Introduction: Stories and Games

Currently in game and digital culture studies, a controversy rages over the relevance of narratology for game aesthetics. One side argues that computer games are media for telling stories, while the opposing side claims that stories and games are different structures that are in effect doing opposite things. One crucial aspect of this debate is whether games can be said to be "texts," and thereby subject to a textual-hermeneutic approach. Here we find the political question of genre at play: the fight over the games' generic categorization is a fight for academic influence over what is perhaps the dominant contemporary form of cultural expression. After forty years of fairly quiet evolution, the cultural genre of computer games is finally recognized as a large-scale social and aesthetic phenomenon to be taken seriously. In the last few years, games have gone from *media non grata* to a recognized field of great scholarly potential, a place for academic expansion and recognition.

The great stake-claiming race is on, and academics from neighboring fields, such as literature and film studies, are eagerly grasping "the chance to begin again, in a golden land of opportunity and adventure" (to quote from the ad in *Blade Runner*). As with any land rush, the respect for local culture and history is minimal, while the belief in one's own tradition, tools and competence is unfailing. Computer game studies is virgin soil, ready to be plotted and plowed by the machineries of cultural and textual studies. What better way to map the territory than by using the trusty, dominant paradigm of stories and storytelling? The story perspective has many benefits: it is safe, trendy, and flexible. In a (Western) world troubled by addiction, attention deficiency, and random violence, stories are morally and aesthetically acceptable. In stories, meaning can be controlled (despite what those deconstructionists may have claimed). Storytelling is a valuable skill, the main mode of successful communication. And theories of storytelling are (seemingly) universal: they can be applied to and explain any medium, phenomenon, or culture. So why should not games also be a type of story?

In the context of computer games (and in most other contexts as well) stories and storytelling appear to be extremely old phenomena, spanning all of media

Response by Chris Crawford

Three elements of Espen Aarseth's paper dominate my attentions. First is the assumed conflict between interactivity and narrative. This assumption is certainly widely shared, and seems justified by our complete failure to produce a truly interactive storytelling product. However, one need only contemplate the process by which a grandparent might tell a child a bedtime story to realize that interactive storytelling has been with us a long time. Our task is to design algorithms that capture the dramatic rules used in such practices. Such algorithms are certainly beyond our grasp just yet, but we should not be too hasty to assume them ungraspable. Give us some time; we can do it.

A second point that caught my attention was Aarseth's apparent dismissal of interactivity:

> The hidden structure behind these, and most, computer games is not narrative — or that silly and abused term, "interactivity" — but *simulation*.

While I certainly agree that the poor term has been much abused, I still believe that it remains the very essence of the entire computing experience. The computer is not at heart an audiovideo device: videocassette recorders handle that task better. Nor is it a data storage device: paper provides a cheaper and more capacious means of storing data. While computers before 1980 had batch input, processing, and output, the computer revolution that began twenty years ago arose from the ability to close the loop with the user, so that input, processing, and output were

history, and numerous media technologies. Show me a medium not suited to storytelling: it is probably a completely useless one. Computer games, with scarcely forty years of history, represent a mere last few seconds in the long evolutionary history of storytelling. Clearly, when we compare stories to computer games, stories hold a much stronger position, which games cannot dream of reaching in the near future. Well, that is the optimistic version. Some see it in pessimistic terms; in the words of a prominent Scandinavian literary theorist, computer games are a sign of cultural decay. Perhaps they need a new name – how about "interactive narratives"?

There are many types of comparativism. It can be dangerous, especially when one object is cherished and well-known, and the other is marginal and suspect. And in the context of this general story/game discussion, we have the danger of generic criticism. You know the kind that goes: "Traditional music is much better than jazz," or "Novels are a higher art form than movies." If we judge individual works on the basis of their genre, we may have lost already.

But what about stories and games? To address computer games as a consistent genre or medium is highly problematic. From *Tetris* on a mobile phone to *Super Mario* on a Gameboy to *Everquest* on a Midi-tower Windows machine there is a rather large span of different genres, social contexts, and media technologies. It cannot be repeated often enough that the computer is not a medium, but a flexible material technology that will accomodate many very different media. Hence, there is no "computer medium" with one set of fixed capabilities, not is there "the medium of the computer game." Games are, at best, a somewhat definable cultural genre.

No doubt the same can be said for stories. However, if we compare them as cultural traditions, their positions become more equal. How can that be? Well, computer games are games, and games are not new, but very old, probably older than stories. It could even be argued that games are older than human culture, since even animals play games. You don't see cats or dogs tell each other stories, but they will play. And games are interspecies communication: you can't tell your dog a story, but the two of you can play together.

So, rather than being a newcomer, computer games are games in a new material technology, just as print novels were literature in a new technology 500 years ago. Yet, it seems, "we" only discovered games as cultural artifacts a few years ago. Before that, games were not an object for aesthetic study, but relegated to the study of children and primitive cultures, with a very few notable exceptions, such as Brian Sutton-Smith (Sutton-Smith 1997). However, games are not camera-

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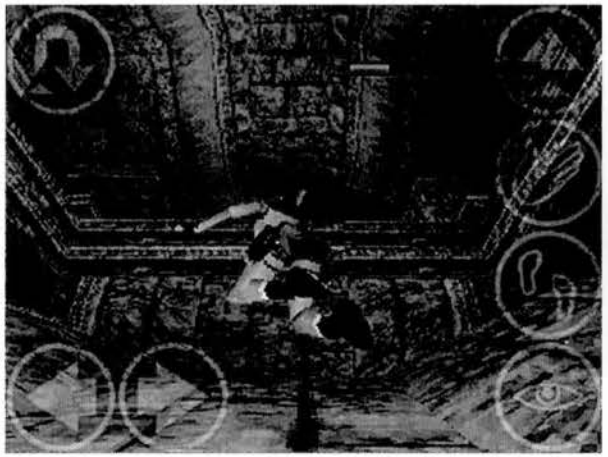
part of a continuous interaction. Pre-personal computers could handle budget calculations, but the spreadsheet (an interactive budget) caught fire. Pre-personal computers had text-formatting programs allowing users to print out documents, but it was the advent of the interactive word processor that made PCs so compelling.

Last, I would agree with Aarseth's recommendation that we pursue simulation — if we expand the notion of simulation somewhat. Traditionally, simulation has been gauged by its technical accuracy. For the purposes of entertainment, we need to expand the notion of accuracy to include the expectations and thought processes of our audience. I sometimes use the phrase *dramatic laws of physics* to express this notion. Just as a flight simulator must be true to the laws of physics, so too must an entertainment product be true to the laws of drama. For example, most games use spatial algorithms that correspond to geometric laws but violate dramatic laws. Characters cannot travel from point A to point B without traversing all the terrain between those two points, no matter how boring that terrain might be. In drama, a character who must travel between two points simply disappears from one location (stage) and reappears at the other. This conforms to dramatic standards, but completely defies all conventions of what we normally think of as simulation.



5.sidebar.1–2. Two screenshots from the PDA version of *Tomb Raider*. (Eidos Interactive, Core Design)

ready pieces of art either. Because games are not one form, but many, they cannot be one art form. And why would aesthetics be the most relevant perspective? Some games may have artistic ambitions, others do not. Games are games, a rich and extremely diverse family of practices, and share qualities with performance arts (play, dance, music, sports) material arts, (sculpture, painting, architecture, gardening) and the verbal arts (drama, narrative, the epos). But fundamentally, they are games. The artistic elements are merely supports for what the Finnish avant garde writer and game theorist Markku Eskelinen calls "the gaming situation," the gameplay (Eskelinen 2001).

Are games texts? The best reason I can think of why one would ask such a crude question is because one is a literary or semiotic theorist and wants to believe in the relevance of one's training.

Games are not "textual" or at least not primarily textual: where is the text in chess? We might say that the *rules* of chess constitute its "text," but there is no recitation of the rules during gameplay, so that would reduce the textuality of chess to a subtextuality or a paratextuality. A central "text" does not exist — merely context. Any game consists of three aspects: (1) rules,

From Stuart Moulthrop's Online Response

With a rigor perhaps born of militancy, Aarseth insists that games "are self-contained," insulated from any intertextuality. "Unlike in music, where a national anthem played on electric guitar takes on a whole new meaning," he writes, "the value system of a game is strictly internal, determined unambivalently by the rules." Seeking to exclude narrativist contraband, Aarseth embargoes all cultural implications. We are not to understand the game of chess as an allegory of feudalism or *Tomb Raider* as misogynist–masochist fantasy. By his reasoning, chess would be the same game even if the pieces were replaced with bottle caps and called minks, warts, and chevrolets instead of bishops, knights, and pawns. Likewise, Aarseth claims, the pneumatic Lara Croft could be traded for a less salacious anatomy, leaving the game intact. In each case the player's engagement with the rule system — the "gaming situation" — matters far more than incidental details of the "gameworld."

If these claims seem indisputable at face value it is only because they are alarmingly narrow. *Mink takes chevrolet* may contain no reference to chivalric hierarchy but it does assert a logic of territorial domination and unequal privilege. No doubt one can play the game without connecting this logic to European history, but such an approach reduces chess to a series of abstract transactions, which may work well enough for mathematics but seems far too narrow for any serious cultural critique. *Tomb Raider* shows even more clearly

(2) a material/semiotic system (a gameworld), and (3) gameplay (the events resulting from application of the rules to the gameworld). Of these three, the semiotic system is the most coincidental to the game. As the Danish theorist and game designer Jesper Juul has pointed out (Juul 2001b), games are eminently themeable: you can play chess with some rocks in the mud, or with pieces that look like the Simpson family rather than kings and queens. It would still be the same game. The "royal" theme of the traditional pieces is all but irrelevant to our understanding of chess. Likewise, the dimensions of Lara Croft's body, already analyzed to death by film theorists, are irrelevant to me as a player, because a different-looking body would not make me play differently (see sidebar). When I play, I don't even see her body, but see through it and past it. In addition to these three components, there is the player's active knowledge of the game, in the form of strategies and performance techniques, and mental topographies, as well as written guides and other paratextual information about the games.

It follows that games are not intertextual either; games are self-contained. You don't need to have played poker or ludo to understand chess, and knowledge of roulette will not help you to understand Russian roulette. (Neither will cultural knowledge of Russia. On the other hand, *Tetris* is also a dangerous Russian game...) Knowing *Star Wars: The Phantom Menace* will not make you better at playing *Pod Racer* (Juul 2001a). Unlike in music, where a national anthem played on electric guitar takes on a whole new meaning, the value system of a game is strictly internal, determined unambivalently by the rules. Among the many differences between games and stories, one of the most obvious is that of ambiguity. In *Tetris*, I do not stop to ponder what those bricks are really supposed to be made of. In *Doom*, there is no moral dilemma resulting from the killing of probably innocent monsters. The pleasure of games is quite different from the pleasures of the novel: for a chess or *Tetris* player, replaying is the norm, while most novels are read only once. You can be an expert chess player without playing any other game, but to understand even a single novel you will need to have studied numerous others.

Certainly many — indeed most — games, use texts much the same way food products do ("boil the spaghetti for seven minutes"), but it seems unreasonable therefore to claim that food is textual. And in driving your car, you are constantly reading the traffic signs and the meters on your dashboard, but we still don't consider driving cars as a subgenre of reading.

However, the (academic) discovery of computer games over the last two decades is accompanied by the most smothering form of generic criticism: the attempt

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this artificial restriction of focus. Certainly one could swap Lara Croft for a digitized Rowan Atkinson without technically changing the feedback loop between player and program. It seems unlikely, though, that *Mr. Bean: Tomb Raider* would sell nearly as well to its primary audience. Lara Croft's physique may consist of raw data but it cannot be treated as such for critical purposes (see figure 5.response.1). While one may look past or through the avatar body during play, the significance of games as cultural forms goes beyond the player's time in the loop.

http://www.electronicbookreview.com/thread/firstperson/moulthropr1

5.response.1. A promotional image of Lara Croft. (Eidos Interactive, Core Design.)

to reform games into a more acceptable form of art, literature or film; i.e., as narratives. Shakespeare's *Hamlet* was pretty good, but soon we can have something even better: Hamlet the Game. This idea, termed the "Holodeck myth" by Marie-Laure Ryan (2001) with reference to Janet Murray's book *Hamlet on the Holodeck* (1997), was first proposed by Brenda Laurel (1986; 1991) as a form of computer-controlled real-time participant drama, and attempted by research projects such as Joseph Bates' Oz project at Carnegie Mellon University. As a theory, this narrativistic colonialism might seem aesthetically problematic (Aarseth 1997, chapter six), as well as technologically unachievable (Bringsjord 2001), but there are many versions of it, and some are more sophisticated than others.

The Story-Game Ideology

Underlying the drive to reform games as "interactive narratives," as they are sometimes called, lies a complex web of motives, from economic ("games need narratives to become better products"), elitist and eschatological ("games are a base, low-cultural form; let's try to escape the humble origins and achieve 'literary' qualities"), to academic colonialism ("computer games *are* narratives, we only need to redefine narratives in such a way that these new narrative forms are included"). At a recent game conference, it was stated that the difference between films and games was simply the "interactivity" of the games.

This latter motive, the only one of the three mentioned before to concern us here, seems to me to spring out of a certain ideology, much practiced by humanists, and also well beyond our ivory towers; an ideology that we might call "narrativism." This is the notion that everything is a story, and that story-telling is our primary, perhaps only, mode of understanding, our cognitive perspective on the world. Life is a story, this discussion is a story, and the building that I work in is also a story, or better, an architectural narrative. Ironically, most proper narratologists, who actually have to think about and define narratives in a scholarly responsible and accurate way, are not guilty of this overgeneralization.

Yet among anthropologists, business people, technologists, visual artists, media theorists, and other laypersons, this ideology — or what Alan Rauch once fittingly called *story fetishism* — is strong and uncontested. And to us humanists, the (let's face it) lowest caste of the academic world, it is nice to feel important again, for once. Finally, our expertise matters! We don't know much about technology, or biology, but we do know stories and storytelling. So why be critical when we can be important instead?

Aarseth Responds

To paraphrase Moulthrop, the polygonal significance of Lara Croft's physique goes beyond the gameplay. But that doesn't mean it tells us much, if anything, about the gameplay, does it?

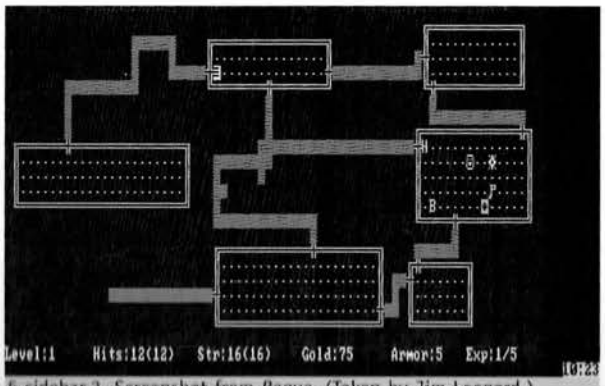
http://www.electronicbookreview.com/thread/firstperson/aarsethr2

So, then, is storytelling the solution to all the world's problems, from business strategies to computer game design? If rhetoric is indeed our game, then we should be able to see through this one. But it *is* a very nice dream.

And this is of course not an attack on the importance of stories. Storytelling has been, and still is, the dominant form of cultural expression. But it is not the only game in town, the only mode of discourse. It is quite possible, not to mention necessary, to identify other modes, games among them, as alternatives to storytelling.

But what exactly is the relationship between games and stories? Is it a dichotomy? A rivalry? Or perhaps a continuum? As Eskelinen has pointed out, both stories and games are medium-independent. A story can be translated from novel to comic book, to movie, to TV series, to opera, etc. A game can be translated from board and dice, to a live role-play out in the woods, to numbers and letters on a screen, to a three-dimensional virtual world. From *SpaceWar* (1961) to *Star Raiders* (1979), *Elite* (1984), *to X – Beyond the Frontier* (1999), not much has happened in the rules and gameplay: the games have increasingly better 3D graphics, but the theme and objectives remain the same. *Rogue* (1980) and *Diablo* (1997) are basically the same game (see sidebar).

What is lost in translation? In the various versions of a story, key events and relationships remain; in the versions of a game, the rules remain.[1] But when we try to translate a game into a story, what happens to the rules? What happens to the gameplay? And a story into a game: what happens to the plot? And, to use Marie-Laure Ryan's example (2001), what player, in the game version of *Anna Karenina*, playing the main character, Holodeck style, would actually commit suicide, even virtually? Novels are very good at relating the inner lives of characters (films perhaps less so); games are awful at that, or, wisely, they don't even try. We might say that, unlike literature, games are not about the Other, they are about the Self. Games focus on self-mastery and exploration of the external world, not exploration of interpersonal relationships (except for multiplayer games). Or when they try to, like the recent bestselling games *The Sims* or *Black and White*, it is from a godlike, Asmodean perspective.



Sidebar 3. Screenshot from *Rogue*. (Taken by Jim Leonard.)

The aim of *The Sims* is to control and shape the interactions and daily life of your characters, not take human form yourself. Nevertheless, games like *The Sims* are sometimes (not often) used as storytelling machines, when particularly memorable moments in the game are retold by the player/god. But this is not translation from game to story, this is simply good, old after-the-fact narration, like the football column in the Monday sports section, the lab experiment report, or the slide show of one's Carribean vacation. Something interesting happened, and we want to tell others about it. Ontologically, the capacity for generating memorable moments is something games have in common with real life, as well as with stories. A story-generating system does not have to be a story itself. In fact, while life and games are primary, real-time phenomena, consisting of real or virtual events, stories are secondary phenomena, a revision of the primary event, or a revision of a revision, etc.

And yet, we do have games inspired by films and novels, and vice versa: *The Hobbit, The Hitchhiker's Guide to the Galaxy, Super Mario Brothers, Tomb Raider, Goldeneye, Blade Runner*; the list is nearly endless. Are they not translations?

Genre theory can help us describe what goes on here: John Cawelti's (1976) distinction between "underlying form" and "specific cultural conventions" would tell us that the underlying form (narrative structure or game rules) remains untranslatable, but the cultural conventions, such as the setting and character types of, say, *Star Wars*, are translated. While, as Jesper Juul has

pointed out (Juul 2001a), the story of *Star Wars* is unextractable from the game of the same name, the setting, atmosphere and characters can be deduced. So, although nonnarrative and nonludic elements can be translated, the key elements, the narration and the gameplay, like oil and water, are not easily mixed.

Story-Game Hybrids: The Adventure Game Genre

And yet, there is a game genre that may also be called narrative. This is the so-called adventure game, a computer game genre that was born in 1976, when Donald Woods turned William Crowther's text-based cave simulation into a fantasy game. This game, *Adventure*, which consists of moving through a labyrinthine cave by solving puzzles ("how to get past the snake," etc.), has a storylike, episodic structure, where the player/hero progresses in a linear fashion through the maze. For a while very popular, this textual genre died out commercially in the late 1980s when graphical computer games took over the market.

Structurally, however, it lives on in graphical computer games such as *Myst* (1993) and *Half-Life* (1997), where the same deterministic linearity and rule system dominate the play. By looking at sales figures, it could be claimed that these games successfully demonstrate the potential for combining stories and games. However, sales figures are not a reliable measure of artistic success, or — dare we say — quality. And according to one of the successful designer brothers of *Myst*, Robyn Miller, artistically *Myst* was a frustrating project. Miller, arguably one of the most successful game designers ever, later stopped making games and turned to animated movies, because he felt the game format in conflict with storytelling and character development. And there was this annoying intervening person, the player, to put up with. Most critics agree that the Miller brothers succeeded eminently in making a fascinating visual landscape, a haunting and beautiful gameworld, but to experienced gamers, the gameplay was boring and derivative, with the same linear structure that was introduced by the first *Adventure* game sixteen years earlier. Nice video graphics, shame about the game.

The greatest aesthetic problem for the adventure story-game seems to be believable characters. In the first adventure game there were just animals and monsters, and hardly any dialogue, and in *Myst* there were no characters at all, except for in a few static video sequences. In more dramatic adventure games, the characters' behavior is totally prescripted, with a few lines repeated endlessly and brainlessly. The dramatic ambitions of these games remain unfulfilled and seem as unreachable as ever. What keeps the genre alive is increasingly more photorealistic, detailed three-dimensional graphical environments, but apart from that, it is mostly the same story-game over and over again. Unlike other games, but like most novels, these games are normally only played once, and typically not completed. This makes them very different from other games. Players are often stuck on one of the puzzles, and have no choice but either to buy the solutions book, download a "walkthrough" guide from the internet, or give up. Perhaps we could say that this genre is really only one and the same game, the same rule system repeated over and over with variable cultural conventions and increasingly better technology.

As Robyn Miller suggested, the aesthetic problem in these games is a conflict between the opposing goals of gameplay and storytelling. Adventure games seldom, if at all, contain good stories. Even the most entertaining of these games, like Warren Spector's *Deus Ex* (1999), contains a cliched storyline that would make a B-movie writer blush, and characters so wooden that they make The Flintstones look like Strindberg. The gameplay is constrained by the story in unrealistic ways (in *Deus Ex*, if you try to kill the secretary, it is simply not possible, because it does not fit the storyline). What makes such games playable at all, and indeed attractive, is the sequence of shifting, exotic, often fascinating settings (levels), where you explore the topography and master the virtual environment. The gameworld is its own reward, and the end, if and when it comes, does not offer dramatic satisfaction, but a feeling of limbo. There is no turning back, and no going forward. You are no longer employed by the game. Time to buy another.

The Art of Simulation

Other game genres may also employ storylines. In god-games such as *Civilization*, history itself plays the role of storyline. In strategy games such as *Heroes of Might and Magic*, *Command and Conquer*, *Warcraft*, or role-playing games such as *Ultima Underworld* or *Diablo*, the story is often an episodic progression between levels, with each level constituting a self-enclosed episode, like the individual matches in a football cup. True to their war-oriented themes, these series of levels are often called campaigns. A successful game such as *Heroes of Might and Magic* will offer both multilevel campaigns and stand-alone levels or "maps" (gameworlds), sometimes generated randomly by the game software. A randomly generated map can be just as satisfying to play as a human-authored gameworld or campaign, and this tells us that the real aesthetic quality of these games is in the design of the rule system, rather than in the design of the gameworld.

The pleasures of video games, as James Newman (2001) has pointed out, comparing *Tomb Raider* to the cartoonish-looking *Super Mario Kart*, are not primarily visual, but kinaesthetic, functional and cognitive. Your skills are rewarded, your mistakes punished, quite literally. The game gaze is not the same as the cinema gaze, although I fear it will be a long time before film critics studying computer games will understand the difference. (Alongside narrativism, there is the equally problematic *visualism*.) But pleasure follows function, we might say. When it is there at all, the story in these games is superficial, like a bored taxi driver whose only function is to take us on to the next ludic event. In the case of *Heroes of Might and Magic*, story fragments pop up at specific times in a level. They are completely superfluous, like illustrations in a storybook, and ignoring them will not affect the gameplay at all.

The hidden structure behind these, and most, computer games is not narrative — or that silly and abused term, "interactivity" — but *simulation*. Simulation is the key concept, a bottom-up hermeneutic strategy that forms the basis of so many cognitive activities: all sorts of training, from learning to pilot a plane to learning to command troops, but also the use of spreadsheets, urban planning, architectural design and CAD, scientific experiments, reconstructive surgery, and generative linguistics. And in entertainment: computer games. If you want to understand a phenomenon, it is not enough to be a good storyteller, you need to understand how the parts work together, and the best way to do that is to build a simulation. Through the hermeneutic circle of simulation/construction, testing, modification, more testing, and so forth, the model is moved closer to the simulated phenomenon.

The computer game is the art of simulation. A subgenre of simulation, in other words. Strategy games are sometimes misleadingly called "simulation" games, but all computer games contain simulation. Indeed, it is the dynamic aspect of the game that creates a consistent gameworld. Simulation is the hermeneutic Other of narratives; the alternative mode of discourse, bottom up and emergent where stories are top-down and preplanned. In simulations, knowledge and experience is created by the player's actions and strategies, rather than recreated by a writer or moviemaker.

Culturally, especially in "high culture," stories dominate still, but are currently losing ground to the new simulation-based discourse-types, e.g., in the entertainment market, where movies are being outsold by computer games. Stories and simulations are not totally incompatible, but the simulation, as a primary phenomenon, must form the basis of any combination of the two, and not vice versa, just as with stories and life. When you have built a simulation, such as a rule-based gameworld, you may use it to tell stories in (or for other purposes); but stories, on the other hand, can only contain simulations in a metaphorical sense, such as the movie *Groundhog Day*, or Tad Williams' *Otherland* novels.

In the adventure games where there is a conflict between narrative and ludic aesthetics, it is typically the simulation that, on its own, allows actions that the story prohibits, or which make the story break down. Players exploit this to invent strategies that make a mockery of the author's intentions. Dead or not, the authors of these games are little more than ghosts in the machine, and hardly *auteurs*. When you put a story on top of a simulation, the simulation (or the player) will always have the last word.

It is time to recognize simulation and the need to simulate as a major new hermeneutic discourse mode, coinciding with the rise of computer technology, and with roots in games and playing.

But What about Literature?

But what about that other type of hybrid: not games with narrative ambitions, but narratives with game elements? Why don't we look at texts that play games?, you may well ask. There is a long tradition of playful texts, from *Tristram Shandy* via detective stories and the OuLiPo, to experimental texts that happen to be digital; and some of these are of course very worthy of critical attention. John McDaid's *Uncle Buddy's Phantom Funhouse* (1991) springs to mind. But here I wanted to address the structure of gaming in its nonmetaphorical form. When we try to guess the murderer in a Poirot novel, we are adding a coincidental game to the story. The guessing game is not necessary, and the narrator doesn't care whether we play or not. If we happen to guess correctly early on, nothing different happens in the novel. Worse, we may even stop reading prematurely, since the ending has become obvious and boring. These novels are games only in a metaphorical sense; they tease us, but we are not real players. In the case of hypertext fictions, we are explorers, but without recognizable rules, there is no real game. To equalize these metaphorical games with a real game is to marginalize an already (academically) marginal phenomenon, to privilege the *illusion* of play over real play. And for game scholars, that is a poor strategy.

Literary experiments are either interesting or they are not. What medium they take place in should have little or nothing to do with it. In a world where practically all the arts use digital technology, it is only natural that literature also should do so, but hardly revolutionary. Generic criticism is a problem, whether it favors or marginalizes digital literature. Either way it is a kind of discrimination.

Katherine Hayles, the influential U.S. theorist of science and literature, recently rose to defend electronic literature as the endangered hybrid species produced by computer games and literature:

> While it is understandable that scholars fighting for critical turf want to claim all of the territory for themselves, the nature of the beast called electronic literature cannot be adequately understood if it is orphaned on either side of the family tree. From computer games come interactivity, major tropes such as searching for keys to a central mystery, and multiple narrative pathways chosen by interactors; from literary traditions come devices developed over millennia of experimentation and criticism such as point of view, narrative voice and literary allusions. To omit either of these resources would be to reduce electronic literature to something beyond our recognition. (Hayles 2001)

While I share Hayles' concern that electronic literature should not be killed off in the border wars between game scholars and narrativists, I think her paternity case is rather weak. The real father of electronic literature is not computer games, but the computer interface itself. And the result, in the form of hypernovels such as Michael Joyce's *afternoon* (1991), or generative poetry such as John Cayley's *The Speaking Clock* (1995), is no hybrid, it is literature. The real game-literature hybrid, the textual adventure game, still lives on in the prolific amateur groups such as <rec.arts.int-fiction> on the internet, but seems to have little influence on either game culture or literary culture in general.

Digital literature is still literature, pure, if not simple. When I can read a Harry Potter novel on my Palm Pilot, paper is no longer an integral part of literature's material or ideological foundations. Digital literature, whether experimental like Talan Memmott's "Lexia to Perplexia" (2000) or strictly mainstream like Stephen King's "Riding the Bullet" (2000), is still literature, not a hybrid. Like our ATM cards, which are just as real (and just as symbolic) as paper money, digital literature is real literature.

Conclusion: From Multiplayers to Players

The aesthetics and hermeneutics of games and simulations and their relations to stories (and also to knowledge production) pose a rich problem, of which I have only scratched the surface here. This is the kind of problem that makes aesthetic research meaningful and gratifying. Games and stories have distinct teleologies and artistic potentials, and it is analytically useful (for those of us genuinely interested in games as games, at least) to maintain a conceptual terminology that distinguishes between them. As I have argued here, the traditional hermeneutic paradigms of text, narrative and semiotics are not well-suited to the problems of a simulational hermeneutic. Games (as games) might be the best empirical entry point to this new mode of discourse, at least if we continue the humanist tradition of privileging artistic genres in our hermeneutic research.

My warnings about narrativism and theoretical colonialism might seem unduly harsh and even militant. Why not let the matter resolve itself, through scholarly, logical dialogue? The reason for this vigilance, however, is based on numbers. The sheer number of students trained in film and literary studies will ensure that the slanted and crude misapplication of "narrative" theory to games will continue and probably overwhelm game scholarship for a long time to come. As long as vast numbers of journals and supervisors from traditional narrative studies continue to sanction dissertations and papers that take the narrativity of games for granted and confuse the story-game hybrids with games in general, good, critical scholarship on games will be outnumbered by incompetence, and this is a problem for all involved. Hopefully this is just a short-lived phase, but it certainly is a phase that we are in right now. As more scholars from other disciplines, such as sociology, linguistics, history, economics, and geography, start to do research on games, perhaps the narrativist camp (and the *visualist* camp) will realize more of the many differences between games and narratives, and even contribute valuable analyses using (and not abusing) narratology, but until then the narrativist paradigm will but slowly melt.

The weak and repetitive tradition of adventure story-games such as *Myst* and *Half-Life* should not be given our privileged, undivided attention, just because they remind us more of the movies and novels we used to study. Compared to replayable games such as *Warcraft* and *Counter-Strike*, the story-games do not pose a very interesting theoretical challenge for game studies, once we have identified their dual heritage. There are so many more important aesthetic questions to ask of better and more successful games, in particular multiplayer games. What kind of socioaesthetic exchange goes on in the South Korean multiplayer game *Lineage*, with two million active players? These games are not only the future of gaming, they are huge social experiments that will affect and shape the future of human communication. They will probably use stories, too; not as the overarching design principle, but as rhetorical, interplayer communication strategies, like we all do in our ordinary lives. Ever more advanced online, multiplayer games, with real instead of artificial intelligences, and ever more sophisticated simulation-worlds, will set the agenda for game studies in the coming years. But they probably won't be called online, multiplayer games for much longer. Or "interactive narratives."

Just games, once again.

Notes

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1. The following discussion builds on Juul (2001a).

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