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Narration in the Video Game

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<u>Abstract</u>

Situated in the aftermath of the ludology versus narratology debate that shaped the early years of video game studies at the start of the 21st century, this thesis erects the foundations of a narratological conception of video games. The author attempts to determine whether narrativity is intrinsic to the video game medium, in what ways it appears, and what its use is in gaming terms. To this end, he presents and amends the definitions of many problematic concepts, such as interactivity, story, narration, and narrative. Inspired by film studies, the author adapts theories of narratology to take into account the interactive nature of video games.

<u>Keywords</u>

Narration, narratology, narrativity, video game studies, ludology, video games, game, narrative, interactivity, interactive narrative.

<u>Résumé</u>

S'inscrivant dans la suite du débat entre narratologie et ludologie qui a animé les études du jeu vidéo au tournant du XXI$^{\text{ième}}$ siècle, ce mémoire érige les bases d'une conception narratologique du phénomène vidéoludique. L'auteur cherche à déterminer si la narrativité est intrinsèque au jeu vidéo, de quelle façon elle s'y retrouve, et quel est son rôle général au sein du jeu. Pour ce faire, il présente et amende des définitions de plusieurs concepts problématiques comme l'interactivité, l'histoire, la narration, et le récit. En s'inspirant du travail effectué dans la discipline des études cinématographiques, l'auteur adapte les théories de la narratologie filmique pour tenir compte de la nature interactive du jeu vidéo.

<u>Mots-clé</u>

Narration, narratologie, narrativité, études du jeu vidéo, ludologie, jeux vidéo, jeu, récit, interactivité, récit interactif.

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Unless noted otherwise, all images from video games presented herein
have been taken from the *GameSpot* and *Mobygames* websites.

The exclusive usage of the masculine pronoun in this thesis stems from the
absence of a gender-balanced norm in French writing. As I had several other
concerns when translating the original version into English, I overlooked this
aspect of writing. My apologies to anyone who might be offended by this.

Introduction

*

Enter the Game

> *"To me [...] the computer looks more each day like the movie camera of the 1890s: a truly revolutionary invention humankind is just on the verge of putting to use as a spellbinding storyteller."*
>
> - Janet Murray, *Hamlet on the Holodeck*

1. The cover: preamble

On a video game's cover, as for books or movies, lies the synopsis. This summary of

the content awaiting inside, often written with the goal of making the product

appealing, serves one chief purpose: to put the actions to be accomplished in context.

The arrival of the computer in our society during the last quarter of the

twentieth century has spawned a vast digital revolution that has had a profound

impact on all human activities. Games, a multi-millennium phenomenon found

among all peoples of mankind[1], have also undergone a renewal at the hands of the

computer, adding to their manifestations a new category: video games. These are

marked by an opposition inherent to their dual ancestry. On one hand, they are a

transposition on a screen of existing games of skill, chance, strategy or traditional

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[1] Cf. Huizinga, 1951.

board games[2], like *Pong* (Nolan Bushnell/Atari, 1972). On the other hand, as heirs of tabletop role-playing games such as *Dungeons & Dragons* (Gary Gygax & Dave Arneson, 1974) or "choose-your-own-adventure books"[3], they give the player the possibility of living his own story, in the tradition of *Adventure* (Will Crowther & Don Woods, 1977[4]).
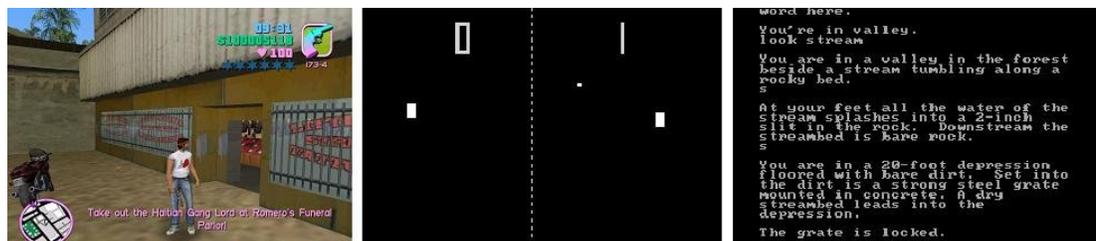
Figure 1: *Grand Theft Auto: Vice City* (Rockstar North, 2003), a modern descendant of early video games like *Pong* (Nolan Bushnell/Atari, 1972) and *Adventure* (Will Crowther & Don Woods, 1977).

These two incarnations of the new game object, while clearly separated at the onset, have progressively worked toward a fusion. The first action video games were of the "unwinnable" variety, their objective being to accumulate the most points before dying at the hands of the infinite waves of obstacles thrown at the player. Then game designers started to develop "winnable" games, in which the player could attain a goal and finish the game instead of endlessly amassing points before dying. Thus stories started to appear in games, up to the point where, according to François Graffard (lead game designer on Visiware's 2001 *Planet of the Apes*), "the dominant

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[2] Thus, for example, the video games *Chessmaster 9000* (Ubisoft, 2002) or *Solitaire* (Wes Cherry, 1989) – which one can find on any Windows-based computer – are reproductions of already-existing games (that is, chess and the Klondike solitaire card game).

[3] Typically, these books are segmented in numbered "paragraphs". The player, who becomes the story's hero, must make choices at the end of each paragraph (for instance: "to go left, turn to paragraph 17; if you would rather go right, flip to paragraph 23"). In most of these books, a rudimentary game system governs dangerous situations: the player is given scores such as skill and endurance, can buy equipment, etc.

[4] A family tree of the different versions of *Adventure* (initially named *Colossal Cave Adventure*) is available online at http://www.io.com/~ged/www/advent.html (accessed February 24th, 2007).

tendency is to put the player in a story. Nowadays, the simplest action game has a story going on."[5] [in Bas, 2000: 45]

If we observe the present offerings of the video game industry, at first glance it would seem that virtual ping-pong and interactive storytelling have finally achieved some sort of harmonious balance. Games like *Max Payne* (Remedy Entertainment/Gathering of Developers, 2001) position themselves both in the logic of actions of stories (by featuring a protagonist with a psychology of his own who must fight other characters to attain a goal) and in the tradition of games (since it is the player who must make Max progress through the levels, shoot enemies, and so on). But an in-depth examination of the link uniting game and narrative reveals an ambiguity. In most games, narrative information is transmitted to the player by way of non-interactive cinematic "cut-scenes", a practice that does not seem fit to call "interactive narrative". Moreover, these sequences can often be skipped by pressing a button. Does that mean they are not important?

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[5] My translation: « la tendance lourde est à la scénarisation des jeux. Il faut impliquer le joueur dans une histoire. Aujourd'hui, le moindre jeu d'action est scénarisé. »

Figure 2: Cut-scene in *The Simpsons: Hit & Run* (Radical Entertainment, 2003). The player is given the possibility of pressing a button to skip this non-interactive segment.

The gaming press certainly seems to share this belief. The IGN (www.ign.com) and GameSpot (www.gamespot.com) websites, references in video game reviews, do not keep track of a game's story in the score they give them, their evaluation being rather based on graphics, presentation, gameplay, music, replayability and originality.[6] We can question how much of a role a game's story plays when reading Ivan Sulic's review of *God of War* (Sony Computer Entertainment America, 2005) on IGN.com, which starts with a lengthy exposition of the game's story followed by: "That's the basic synopsis, but *God of War* could have just as easily been summed up with one quick line, 'If you like to kill freaky things with your giant serrated knives, you'll love the s*** out of this'" [Sulic, 2005].

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[6] GameSpot uses a "Tilt" factor in its game scoring system, which represents the reviewer's interest. This factor is used to lightly modify a game's score, the example given being: "a game with a truly outstanding story but an unremarkable presentation may be tilted high". This is the only mention made about a game's story on the page "About GameSpot's Reviews and Ratings", which confirms the little importance that a game's story seems to play in its global quality. This page can be browsed at the http://www.gamespot.com/misc/reviewguidelines.html (accessed February 24th, 2007).

When we factor in various observations like this one found in Jeff Gertsmann's review of *Metal Gear Solid* (Hideo Kojima/Konami Computer Entertainment Japan, 1998), a game recognized for the quality of its script and praised to that end by the author, who nevertheless concludes his review with: "[…] do we really want games that are more like movies? If Hideo Kojima, the game's producer, was so set on this type of cinematic experience, he should really be making movies instead of games" [Gerstmann, 1998], we start seeing a major problem in the promised union of game and narrative in the video game medium. The complex stories found in games can often be summed up in a few lines, as if their only use was to establish an appealing context for the game itself; additionally, the opinion that Gerstmann puts forth tells us that gamers like well-weaved stories, but that they are playing video games first and foremost to play games, not to be told stories.

Video games thus seem to be riding on the two horses of game and narrative. This vivid opposition is represented in video game studies by the clear splitting of two schools of thought. The first, which is the narratology camp, consists in seeing video games as a new way to express and respond to the "desire for fiction"[7] that inhabits humanity. As was the case for film at the end of the 19th century, video games are to be seen as a new expressive form whose narrative potential has yet to be developed.[8] Consequently, the theories of narratology developed in literary and film studies serve as basic analytical tools to study this new medium: to play a video game is essentially to play the part of the main character in a story and to experience an

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[7] I borrow this expression from Roger Odin [2000: 11].
[8] This idea is at the origin of the seminal works of Brenda Laurel [1991], Janet Murray [1997] and Marie-Laure Ryan [2001].

"interactive narrative". The second is the ludological approach, which is based on the observation that games are not narratives, since games like *Pong* and *Tetris* (Alexey Pazhitnov, 1985) do not share many of the traits of narratives. For the ludologists, the study of video games necessitates the development of new analytical concepts tailor-made for games in general and video games in particular[9], since theories developed for other mediums can not account for their specificity; according to them, game and narrative are two concepts which are either incompatible, or outright opposites.

This ludological line of thinking is echoed by many thinkers and game designers, such as Jesper Juul [1999] or Greg Costikyan. The later expressed it thus:

> Story is the antithesis of game. The best way to tell a story is in linear form. The best way to create a game is to provide a structure within which the player has freedom of action. Creating a "storytelling game"(or a story with game elements) is attempting to square the circle, trying to invent a synthesis between the antitheses of game and story. [2000]

Costikyan does not reject the importance or interest of having a story in a game, but rather holds that games are not intrinsically narrative; his point of view, which is shared by ludologists in general, can be summed up with two overarching arguments:

1) Video games are not essentially narrative, because they are essentially interactive: all games are interactive, but many do not try to communicate stories.

2) When a video game wants to tell a story, it does so using cinematographic or literary techniques. This means that video games do not possess the necessary tools to put forth a narration by itself.

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[9] This is the point Gonzalo Frasca attempts to make in his paper « Ludology Meets Narratology: Similitude and differences between (video)games and narrative » [1999].

In order to evaluate the truth of these statements, we must reflect on two questions: are video games an intrinsically narrative medium? How can they communicate stories?

I can not answer simply to these complex questions. I will therefore make an in-depth investigation of the concepts of story, narration and narrative based on a number of texts from film studies and narratology, which I will attempt to apply to the specificity of the video game medium. My work will in many respects echo Marie-Laure Ryan's *Avatars of Story* [2006] chapter on the narratology and ludology debate, in which she confronts the main arguments invoked by ludologists to deny narrativity to video games. Though this debate is practically over (or at least a lot less heated than in the past), I believe that confronting two radically opposed viewpoints can be very fruitful. That is why I present my thinking in the form of a debate. I use the terms "ludologists", "ludology" and "narratologists" in a broad sense. When I refer to "a ludological argument", it does not mean that anyone in particular has said this in the past, but rather that it is an argument one *could* use if one follows the ludological thinking line. Similarly, when I use the word "ludologists", I am talking about a group of fictive (archetypal) beings, who push the idea that "video games have nothing to do with narratives" unconditionally, to the extreme.

The goal of this argumentation exercise is not to make the real, flesh-and-bones ludologists abandon their theoretical approach, (for I believe a theory of gameplay mechanics completely disregarding narrative content certainly has a use), but to help me articulate and define my narratological conception of video games. My

starting hypothesis is simple: far from being useless to the gaming experience or even conflicting with it, the narrativity of the video game is intrinsic to the nature of the medium. For a player who wants to satisfy a desire for fiction, it is both essential to and inseparable from his experience, and supplies all the necessary elements to establish an "interactive narrative". Let us then begin our thinking by defining three concepts which appeared in the first ludological argument: games, video games, and interactivity.

Chapter One

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Power-up[10]: Interactivity, Games and Video Games

> *"Interactivity is the sum and substance of the entire revolution that has been shaking our society for the last few decades."*
> - Chris Crawford, "Interactive Storytelling"

2. The instruction manual: defining concepts

The instruction manual is a document inside the game's case that details to the player the notions required to understand how the game works.

2.a) Interactivity

The concept at the heart of the digital revolution, "interactivity", can be understood in a variety of ways. Chris Crawford uses a very simple and metaphorical definition: "I define interactivity to be 'a cyclical process in which two actors alternately listen, think, and speak to each other.' A good conversation provides the ideal example of rich interactivity." [2003: 262] Lev Manovich, in *The Language of New Media*, uses the term in a very broad sense that includes the mental and cognitive activity of a reader:

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[10] In a video game, a *power-up* is an item that increases the power of the player's avatar or gives him new abilities. Early video games were almost all based on a general model: the player had to collect power-ups to acquire the means necessary to overcome the game's obstacles.

> All classical, and even more modern art, was already "interactive" in a number of ways. Ellipses in literary narration, missing details of objects in visual art and other representational "shortcuts" required the user to fill-in the missing information [2001: 56].[11]

If we understand the phenomenon in this way, then indeed the computer offers nothing revolutionary – it supplies matter to be interpreted and solicits our faculties of reception, like all other mediums. But this does not allow us to account for the computer's specific interactivity, for it offers possibilities that the reading of a book or the viewing of a movie can not reproduce.

The distinction has been traced by Eric Zimmerman [2004]. According to him, interactivity can be divided in four types:

- *cognitive* interactivity occurs on the level of interpretation, and is made of the "reading effects" evoked earlier by Lev Manovich. A book or a movie thus is "interactive" because it provides information to the reader, who can use it to construct meaning and "fill the gaps".

- *functional* interactivity comprises all the actions that a user can perform on the text's material support without altering it directly. Flipping the pages of a novel, turning up the volume knob of a sound amplifier or stopping the projection of a movie are all examples of functional interactivity, since in all cases the text (as a sequence of signs) is not affected.

- *explicit* interactivity is designed by the object's creator. This object requires manipulation by the interactor and the signs that make up the text are affected by it.

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[11] Marie-Laure Ryan also mentions this conception [2001: 16-17].

- *meta*-interactivity consists in acting on the text from its outside. Players can engage in this form of interactivity when they claim ownership of the text and create a variation of it, for example by writing fan fictions.

Of the four types of interactivity mentioned above, explicit interactivity is the one that interests us in this discussion since it is on that base that the computer can be distinguished from traditional media. Zimmerman's definition being somewhat blurry (explaining interactivity isn't the main goal of his text), I will use Espen Aarseth's concepts of cybertext and ergodicity from his seminal work *Cybertext: Perspectives on Ergodic Literature* to make it more precise:

> The concept of cybertext focuses on the mechanical organization of the text, by positing the intricacies of the medium as an integral part of the literary exchange. However, it also centers attention on the consumer, or user, of the text, as a more integrated figure than even reader-response theorists would claim. The performance of their reader takes place all in his head, while the user of cybertext also performs in an extranoematic sense. During the cybertextual process, the user will have effectuated a semiotic sequence, and this selective movement is a work of physical construction that the various concepts of "reading" do not account for. This phenomenon I call "ergodic" [1997: 1].

A cybertext can be defined as a text (still in the broader sense of "sequence of signifiers") that, to be read, requires an active intervention from the part of the reader. By traversing the text, the reader makes choices and determines a semiotic sequence, which means that two readings will not give access to the same signs. The text can manifest itself in different ways: it is *variable*. We must also keep in mind that cybertexts existed well before the arrival of the computer (one has only to think of the "choose-your-own-adventure books" I mentioned earlier, or Raymond Queneau's *Hundred Thousand Billion Poems*), and thus is not bound to new media.

If interactivity can be understood in general as an "ergodic activity effectuated on a cybertext", we must still further clarify its functioning. To that end, I will use the definition given by Jeffrey Allan Ward in his master's thesis *Interactive Narrative: Theory and Practice*: "Interactivity is a process in which participants take turns (cyclically) presenting tailored responses to tailored actions." [2004: 15]. This definition provides two advantages.

First, it excludes simple "reactivity": for interaction to take place, both participants must provide responses. When viewing a movie, we react to its content by formulating hypotheses and making meaning, but the film inexorably progresses forwards, unaltered by the viewer's response. For true *inter-activity* to take place (and not simply *re-activity*, or, to use Zimmerman's classification, "cognitive interactivity"), it is necessary that, following Chris Crawford, "two actors alternately listen, think, and speak to each other" [2003: 262]. Thus movies and films are not interactive since they never "listen", do not "think" (they do not have to interpret the "responses" of their readers/viewers), and "talk" all the time. I will thus synthesize by saying that interactivity has to be reciprocal: no interactivity can be possible without the "inter"!

Next, Ward's wording uses the concept of "tailored responses to tailored actions". Having a text respond to an action effectuated on it is not enough to conclude that interactivity took place; its response must not be completely random, and engender another coherent response (or action) afterward (which can nevertheless be very different than what was expected by the interactor, as long as the "surprise" is

minimally tailored to the action). Thus, we can say that interactivity is an *exchange*. In the end, it is explicit interactivity between a human and a system that is of interest to us in this discussion on video games. Barring special notice, when I use the words *interactivity* and *interactive*, it will be in the sense of an *ergodic process of reciprocal exchange between an interactor and a cybertext*.

<u>2.b) Games</u>

The second term on which we must reflect is games, a concept harder to define than can appear. Wittgenstein said that games could not be identified because they shared a certain number of common characteristics, but rather because they present some similitudes, a sort of "family resemblance"[1995: 147-148]. However, this argument is invoked by the author to demonstrate his philosophy of language rather than for its inherent, provable truthfulness. Johan Huizinga [1938], Roger Caillois [1958], Elliot Avedon and Brian Sutton-Smith [1971], Bernard Suits [1978], Chris Crawford [1984] and Greg Costikyan [1994] have all offered their own definition of what "games" are.

Rather than presenting and analyzing each of these authors' propositions – a work already done by both Katie Salen and Eric Zimmerman in *Rules of Play* [2004: 71-83] and Jesper Juul in *Half-Real* [2005: 23-54] – I will skip ahead to the classic game model that the latter offers:

> A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable [Juul, 2005: 36-54].

This definition contains six key elements, which Juul lists:

1. Rules: games are based on rules.

2. Variable and quantifiable result: a game can end in a number of different ways, and each of the possible results is assigned a clear and unambiguous value (by use of a score, for instance).

3. Value of result: some of the results are positive, while others are negative (winning or losing).

4. Player effort: for a game to take place, the player must work, or make efforts, to try to win.

5. Player attachment to the outcome: the player desires to win and cares about the outcome.

6. Negotiable consequences: a game can be played simply for fun, or be assigned consequences outside the game (by betting money, for instance).

One of the advantages of this model is that by virtue of the sixth element, all the practices that we call "games" by analogy, such as "the dating game"[12] or "the game of politics", are excluded from this definition of games since in both cases, the consequences cross the boundaries of the game's frame without possibility of negotiation (unless, of course, they are represented in a secondary frame, such as a game simulating dating or politics).

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[12] I am not referring to the ABC television show that first aired in 1965, but to the general analogy that dating people can be like a game. In French the usage is more widespread in *le jeu de la séduction*, but a quick search on the World Wide Web confirmed to me that the analogy also exists in English. See http://www.catb.org/~esr/writings/sextips/dating.html for example (the author has not read this page in its entirety and makes no claims toward truth or pertinence of the content therein). *The Dating Game* show that aired on television obviously is a secondary framing of "the dating game" as a *game per se*.

There is one more thing left to detail: the nature of the relationship players entertain with different types of games. To this end I will sum up the assertions made by Roger Caillois in 1958 in his work *Man, Play and Games*[13]. According to him, games are constructed according to four player desires. *Agon* is a competitive drive that invites players to fight in order to win; *alea*, its opposite, represents passive acceptation to randomness, luck, fate, or in the face of any uncontrollable situation; *mimicry* is the desire to imitate, to pretend being or doing something else (the *make-believe*); finally, *ilinx* is a search for a feeling of vertigo, of strong – or at the least, unusual – physical sensations. These different urges and desires combine to form the whole of play activities, which can be ordered among two poles. On the one hand is the *paidia* ("amusement"), a fun and somewhat chaotic activity where free play and pleasure is the sole concern. On the other hand is the *ludus* that consists in a rigid structuring of actions in a rules system. We can thus use Caillois' typology to better nuance playing activities to which we refer colloquially using the terms "playing" and "game". For instance, chess is a strongly structured game that relies on precise rules (*ludus*) and is based on a conflict between two players that want to win (*âgon*), while children playing with a dollhouse draw pleasure from the pretending (*mimicry*) without bothering themselves with rules, according to their own pleasure (*paidia*).

2.c) Video Games

The last concept that needs defining before we can go on with our thinking on narrativity is the one of "video games". The word is not employed uniformly in popular usage: some use it exclusively when referring to games played on consoles

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[13] Original French title : *Les jeux et les hommes* (labeled as such in the bibliography).

plugged in televisions (such as the Microsoft Xbox or the Sony Playstation) and use the words "computer games" when speaking about games played on a computer, while yet others use "computer games" for any game regulated by a computer processor, whether on a console or on a computer proper.

The classification I will use will be based on Jesper Juul's definition of "video game" from his book *Half-Real*: "games played using computer power, where the computer upholds the rules of the game and where the game is played using a video display."[2005: viii] We can subdivide the whole of "video games" in many different ways:

- according to their material support or reception context: as I have already mentioned, there are *console games* and *computer* or *PC games*[14], but also *arcade games*, or games based on *peripherals* such as light guns, floor mats, skateboards, driving wheels, flight sticks, etc.

- according to their number of players. Historically, there have always been *single-player* and *multi-player* games. *Massive multi-player* games have recently appeared, thanks to the apparition of the internet. These games are based in gigantic virtual worlds where thousands of players each play using a character they created (their *avatar*). They are usually referred to as MMOGs (*Massive Multi-player Online Games*), an expression which can be adapted to different, more specific game genres such as the MMORPG for *Massive*

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[14] PC is to be understood in its strict sense of "Personal Computer", regardless of model or manufacturer. It is not about distinguishing between Apple's line of Macintosh computers and other operating systems or builds.

Multi-player Online Role-Playing Game, MMOFPS for *Massive Multi-player Online First-Person Shooter*, and so on.

Many notions have been tackled in this definition of the three key concepts that are interactivity, games and video games. This presentation has shown the vast scope of domains covered under each of these terms. In this context, it seems clear that hoping to talk about narration while covering all these nooks and crannies of the video games landscape is at best foolish. I will thus limit my study to single-player video games (and so to interactivity between a human and machine, which excludes multiplayer games and MMOGs) in a home context (excluding arcade games), independently of material support (including both console and computer games, as well as games played using special peripherals). By working only on this particular (yet quite broad!) subset of games I will be able to develop a theory of narrativity in video games that has the potential to be adapted to other types of games.

<p align="center">*</p>

3. Opening cut-scene: narratology and video games

Once the player has started up the game, he generally watches the opening cut-scene. This not only provides him with a dramatic context, but also states the rules of the game, establishing a range of desirable actions and thus drawing the boundaries of his space of possibilities and his expectations.

Narratology is the science that studies narrative. Since its apparition in the 1970s, it has known important mutations, as David Herman reminded us in the

introduction to his 1999 work *Narratologies: New Perspectives on Narrative Analysis:*

> No more referring only to a subset of structural literary theory, *narratology* nowadays can be used to refer to any reasoned approach to the study of narratively organized discourse, whether it is literary, historical, conversational, filmic, or other [p.27].[15]

Three terms are central to narratology: story, narrative, and narration (French: *histoire*, *récit*, et *narration*). However, all three are employed in a variety of different senses depending on the approach: for some, *narrative* designates both the recounting text and the events being recounted, and it can be used both as a noun ("the narrative of my travels abroad") and as an adjective ("the study of narrative discourse"). What are the relationships between those three ideas fundamental to narrative theory?

For this discussion, I will use Gérard Genette's classic three-part division from *Figures III* [1972]. As such, the *story* is a series of events happening to one or more characters in a given world, the *narrative* is the organization of this story in a text and the style in which it is produced, and the *narration* is the mode of communication of the narrative: as Vincent Jouve [1999: 24] writes, the narrative encompasses "the order in which the events are invoked, the point of view from which they are told, or the narrator's degree of implication"[16]. This clarifies the position these concepts occupy, but how can we precisely define them?

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[15] Not having access to the original text, I am forced to translate back into English from Gerald Prince's French translation used in « Narratologie classique et narratologie post-classique » [2006]:
« Ne désignant plus tout juste un sous-ensemble de la théorie littéraire structuraliste, narratologie peut maintenant s'employer pour désigner toute approche raisonnée de l'étude du discours narrativement organisé, qu'il soit littéraire, historiographique, conversationnel, filmique ou autre ».

[16] My translation from the French original: « l'ordre dans lequel les événements sont évoqués, le point de vue à partir duquel ils sont rapportés, ou encore le degré d'implication du narrateur »

In video game studies, the debate between narratology and ludology can be attributed in great part to the plurality of definitions used by different researchers. As Marie-Laure Ryan [2006: 184] notes, ludologists will prefer classical narratology since it denies narrativity to theater or cinema. This logic works perfectly to exclude video games from the ranks of narrative mediums. Markku Eskelinen [2001], for example, bases his argument on the definition of narrative given by Gerald Prince in 1987:

> Narrative: the recounting (as product and process, object and act, structure and structuration) of one or more real or fictitious events communicated by one, two or several (more or less overt) narrators to one, two or several (more or less overt) narratees [p.58].

Clearly, someone who adopts these conditions to qualify something as a narrative will have a hard time debating with someone else who, following Tzvetan Todorov [1978: 66], understands a narrative as something much more global (a succession of units in transformation). Without necessarily resorting to such a minimalist definition, most video game studies narratologists nevertheless think of the narrative in a broader sense. Ryan [2006: 185], for instance, says she follows cognitive film theorist David Bordwell, who wrote in his book *Film Art: An Introduction*: "We can consider a narrative to be a chain of events in a cause-effect relationship occurring in time and space." [quoted from the 1997 edition: 90]. As such it will be important to clearly define what I mean by story, narrative and narration before diving in these dark waters. But first I will finish my observations with an overview of the main arguments used by the ludologists, based on Marie-Laure Ryan's work in a chapter of her book *Avatars of Story* [2006]. Some of these arguments relate to *content* and pinpoint an absence of some element judged essential to a story: "in abstract games

like *Tetris* there are settings, objects and events but definitely no characters"
[Eskelinen, 2001]. The bulk of them, however, concern *expression*:

1) *The argument of temporal distance.* A narrative is defined by a dual temporality:
there is always the time of the narrator, or of the signifier, and the time of what is
told, or the signified. Without this temporal distance, there can not be "telling", but
only "showing" or "description". These two ways of presenting a story do not use the
same principles as narration. In a game, all the player's actions are happening in
present, ongoing time. As such, games do not tell events like a narrative would, but
rather show them.

2) *The argument of the narrator.* For a narrative to take place, there has to be an
authority[17] telling it. If no one is talking, then the events are not told, but shown.

3) *The argument of interpenetration.* Modern video games present interactive and
narrative segments in alternation, without having a real interpenetration between the
two. In this way there never is an "interactive narrative", only narrative segments
alternating with interactive parts.

4) *The argument of linearity.* Since video games are interactive, the events that unfold
during a game are not predetermined, whereas a narrative is fixed.

Besides the lack of a common definition to the central terms, it is also because
the arguments used by the ludologists to reject video game narrativity are polarized

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[17] I am at a loss for a word to use here. In French we use *instance narrative*, *instance* being the
juridical term to designate a level or committee of justice. In Québec and Canada, for example, one can
be judged at a provincial or local level, and take the cause in appeal to a higher-level *instance*. I
believe an equivalent term in English would be the *authority*. When I use "narrative authority" I mean
it in this analogical way, as a structured hierarchy of entities responsible for narrating, which is not
exactly and exclusively limited to the specific "narrator", but broader.

among two different axes that the debate is stale. Narratology mainly revolves around two questions. The first concerns content, or the "what": what is a story, and what is it made of? The second seeks to understand the "how": how does a story has to be presented for it to be considered a narrative? When working on video game narrativity, we are trying to answer two questions that often overlap. They can be summed up as:

a) Are video games narrative in the general sense of "communicating a story" (from the *storytelling* word)? What we are trying to do in this case is finding out whether games are capable of delivering content that satisfies the minimal conditions required to be deemed a "story".

b) Are video games narrative in the more narrow sense of the opposition between telling and showing in literature and film? This question essentially is "How do video games communicate stories?"

These two axes of reasoning correspond to the two literary theory schools of thought that are narrative semiotics ("discipline that studies the structures of stories (the content)") and narratology ("discipline that studies the structures of narratives (of the form)")[18]. André Gaudreault sees these same avenues as two subsets of narratology: the *narratology of content* "focuses on the study of narrative content (that is, the story told), *independently* of the medium that portrays it", while the *narratology of expression* considers "narrative expression (that is, the narrative

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[18] My translation from the French original: la *sémiotique narrative* (« discipline qui se penche sur les structures de l'histoire (du contenu) » [Jouve, 1999: 185]) et la *narratologie* (« discipline qui s'intéresse aux structures du récit (du contenant) » [Jouve, 1999: 184])

discourse) […] more important than the content".[19] These two types of narrativity are of greatly uneven importance to the ludologists and narratologists debating on the fate of video games. The narratology of content that Gaudreault speaks of more or less represents a medium's permeability, its ability to communicate stories that exist in themselves. As a result, these stories are of relatively little importance: some of The Beatles' songs, like *She's Leaving Home*, tell stories, while others, such as *Within You Without You*, do not. Music, like virtually all mediums, can thus be mobilized to communicate a story *if the artist so chooses*. But some mediums – like cinema – have a hard time *not* doing so. They are, by the way they operate, *naturally* imbued with narrativity.

> There seems to be on the one hand a type of narrativity we could qualify as *extrinsic* that concerns solely the *narrative contents*, independently of the mean(s) of expression by which the narrative is communicated. On the other hand, narrativity we can call *intrinsic* appears to be a faculty directly related to the *means of expression*, some of which […] can be considered intrinsically narrative [Gaudreault, 1988: 43].[20]

Are video games intrinsically narrative? That is the great question to which this thesis attempts to provide an answer. The implications are profound: if the narrativity found in video games is merely extrinsic, then it is possible that "stories are just uninteresting ornaments or gift-wrappings to games, and laying any emphasis on studying these kinds of marketing tools is just a waste of time and energy."

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[19] My translation from the French original: la *narratologie du contenu* « privilégie l'étude des contenus narratifs (c'est-à-dire de l'histoire racontée), *tout à fait indépendamment* du médium qui les prend en charge », tandis que la *narratologie de l'expression*, elle, considère « l'expression narrative (c'est-à-dire le discours racontant) […] plus importante que le contenu » [1988: 42].

[20] My translation from the French original: « Il y aurait d'une part un type de narrativité que l'on pourrait qualifier d'*extrinsèque* et qui concernerait expressément les seuls *contenus narratifs*, indépendamment de la (ou des) matière(s) de l'expression par laquelle (ou lesquelles) le récit en question est communiqué. D'autre part, la narrativité qu'on dira *intrinsèque* apparaîtra comme une faculté se rattachant directement aux *matières de l'expression* dont certaines […] peuvent être considérées, précisément, comme intrinsèquement narratives »

[Eskelinen, 2001]. On the other hand, if there is proof that narration is inscribed at the heart of the videogame medium by its intrinsic mechanisms, this would mean that any game would be narrative unless its designers actively work to fight this narrativity. Since questioning the way in which a medium presents a story (the expression) necessarily means that a story is present, we must work out these two questions sequentially. Let us then start by confronting the content of video games to the concept of story.

Chapter Two

*

The Quest for Narrativity

> *"1. Rules are what makes a game a game.*
> *2. Fiction is incidental to whether something is a game.*
> *3. A game can be interesting without fiction.*
> *4. A game with an interesting fictional world can be a*
> *terrible game.*
> *5. Therefore, fiction in games is unimportant."*
>
> > \- Jesper Juul, *Half-Real*[21]

4. Level 1: story

The first level of the game appears in all its pixelized splendor. Uncertain of the

tactics to use, the player resorts to his prior knowledge in order to survive.

Early video games were abstract, often devoid of characters or intrigue, and

consisted only in a succession of similar levels of increasing difficulty unfolding

infinitely until the player was unable to continue (usually due to having lost all his

"lives". In *Pong*, two paddles move vertically at each end of the screen to bounce a

ball between them, and in *Breakout* (Steve Jobs/Atari, 1976; see figure 3 below), a

paddle bounces a ball against bricks that disappear once hit. Are these stories? A

ludologist would assuredly reply "No", since this does not correspond to the

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[21] I have to clarify, lest I be accused of misquoting, that Juul does not follow this reasoning but exposes its flaws.

canonical phases common to all stories identified by Claude Bremond [1973] or Paul Larivaille [1974], to quote only these two (initial situation, complication, action, resolution, final situation), and there are no characters anyhow. A narratologist would rather invoke a definition of the story such as "sequence of actions taken in charge by actors"[22] and argue that the goings of the ball constitute "actions" taken in charge by the paddles that are "actors". Or, perhaps, that the players controlling the paddles are themselves actors, but that would be adding a layer of confusion to the complexity of the question at this stage, and so I will return to this later.
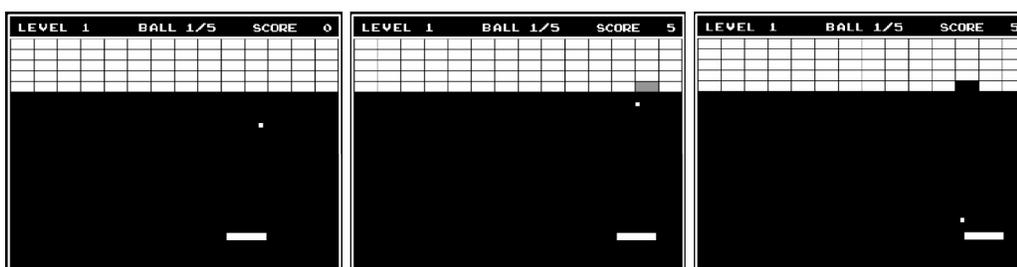
Figure 3: The ball hitting a brick and bouncing back on the paddle in *Breakout*: a story? (Personal captures of a game played on Stef Passigatti's remake, from the 21st Century New Media website, online at http://www.21stcentury.co.uk/games/breakout.asp (accessed February 24th, 2007).

These two sets of minimal criteria are both inadequate because they are respectively too restrictive and too inclusive. Back in 1988, André Gaudreault was working on the "problems of narrative" (in his chapter *Problèmes du récit*)[23]. As he points out, if we opt for minimalist conditions such as "sequence of actions taken in charge by actors", there are very few things that can escape the scope of the story. The proverb "all things come to him who waits", for instance, could be understood as

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[22] My translation from the French original : « suite d'actions prises en charge par des acteurs » [Jouve, 1999 : 45].

[23] Gaudreault considered, for the needs of his discussion, that we could follow popular usage of the word *narrative* as « a sequence of events told ». He sometimes used it as a synonym of *story*, as is the case here. I will personally maintain the distinction between the story (the sequence of events told) and the narrative (the text that tells them).

a sequence of actions ("he" waits, then "all things" come) taken in charge by actors ("he"), and thus would be a "story". However there seems to be a huge gap between statements like this and the type of stories we find in the movies or novels which narratology studies. We must therefore pick a definition that is neither too restrictive to involuntarily exclude things that should be part of the realm of stories, nor too inclusive to lose all specificity of our object of study. I suggest we take as a starting point Jouve's definition ("sequence of actions taken in charge by actors") and narrow it down to attain an acceptable degree of exhaustiveness.

4.a) Action[24]

There are two requirements for a sequence of actions to be perceived as a story: the events must be linked both by temporality and causality. As David Bordwell illustrates in *Film Art: An Introduction*:

> A random sequence of facts is difficult to accept as a story. "A man is restless, paces the room, unable to sleep. A mirror shatters. A telephone rings." This juxtaposition of actions with no apparent causal or temporal links is not normally called a narrative. However, we could fill in the story: "A man argues with his boss. That night he is restless, paces, unable to sleep. The next morning, still angry, he shatters the mirror in the bathroom. The telephone rings: his boss has called to excuse himself for yesterday" [quoted from the 1993 edition: 65].

It is these two links that allow a number of actions to be organized in a "sequence". But if a sentence such as "Peter walks, stops to tie his shoelaces, and resumes his walk" indeed installs temporal and causal relationships making it a story, it differs from the contents that are studied by narrative semiotics. Likewise, we hardly

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[24] *L'action* is the whole of the individual actions that make up a story. I think it is akin to the concept of plot in English, but since I am not aware of everything that has been written on the subject, I am offering it only as a means to better understand what I mean rather than making a full comparison.

conceive that an ordinary day of our life can be the subject of a movie or novel[25]. This stems from the fact that the word "story" is subtly polysemic: in its first and very broad sense, it designates any sequence of events; in its second, more specific sense, it is used to refer to the content of novels, movies, tales, etc.

While the cognitive approach studies action at its simplest degree and aims at understanding the "Peter walks" I spoke of earlier, the theorists of classical narratology such as Propp, Genette or Greimas, among others, are for their part interested in the higher-level structuring of these ordinary actions into full-fledged stories. For lack of a better term, I will name these higher-level entities "dramatic stories", not in the sense that they are "designed for theatrical performance" or are the opposite of comical, but because they are a "series of events involving interesting or intense conflict of forces"[26], regardless of the medium used to communicate them. Our expectations in terms of content will not be the same between asking an old acquaintance what happened to her in recent years and going to see a movie. In the first case, we are expecting a story, be it boring or interesting. In the second case, we are looking for a dramatic story. For a sequence of actions to enter this "select club" of stories, it has to satisfy a third requirement: be based on one or more conflict(s). Figure 4 below introduces my classification of stories. Some actions or events can be organized in a sequence, and so become stories. Among these, some are based on the

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[25] This is evidenced by the French equivalent to the English "uneventful day", which is une *journée sans histoire* (literally *a storyless day*).

[26] All of these quotes are from the *Merriam-Webster's Collegiate Dictionary, Tenth Edition*, 1999, from the entries for *drama* and *dramatic*, p.351.

model of conflict, and thus are suitable to being communicated by a variety of mediums.
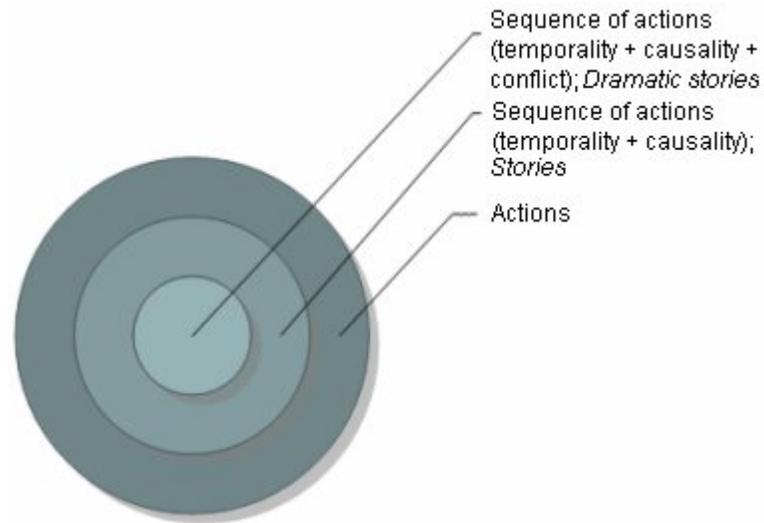
Figure 4: Action, the first component of a story.

Conflict is the most basic shared unity that regulates stories as different in appearance as the adventures of Asterix the Gaul, Luke Skywalker's quest in *Star Wars* (George Lucas, 1977) or the fights of Neo throughout *The Matrix* (Andy and Larry Wachowski, 1999). It also makes possible the application of analytical tools from narrative semiotics: dramatic structure, actantial model, Greimas' semiotic square, etc. The presence of conflict inevitably results in the main phases common to all stories and detailed by Larivaille and Bremond in their dramatic structures. For a conflict to be perceived, it is necessary to have:

1) a world in some initial stage, then

2) the manifestation of the conflict itself, which acts as an inciting moment. This means that

3) the characters will try to restore the situation to normality or attempt to reach some equilibrium in this new reality (if the inciting moment does not effect the characters, then the principle of causality is not respected, and the different actions can not be linked in a sequence), which leads to

4) a resolution in one way or another (success or failure) and

5) a final state.

Thus we can say that narrative semiotics is chiefly concerned with dramatic stories, regardless of mediums: literature, theater, film, or any other narrative cultural object. It is this homogeneity of the structures of content, based on the three prerequisites that are causality, temporality and conflict, that makes possible the phenomenon of criticism (since to judge the quality of a story, it needs to be compared with others) and of adaptation – proof, according to Seymour Chatman, that narrativity exists in itself, independently[27]. The presence of conflicts is one first similitude with video games, since three of games' six constitutive elements outlined in the first chapter are based on this notion: games have variable outcomes, some being good and others bad, and the player must exert effort to reach the positive outcome (winning). The player's position in this structure based on a central conflict is a mirror of the protagonist's place in a story, an idea that Roland Barthes, back in 1966, had already suggested:

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27 « This transposability of the story is the strongest reason for arguing that narratives are indeed structures independent of any medium » [1978:20].

> Many narratives position two opponents fighting to attain a goal […]. This duel is all the more interesting in that it creates similarities between the narrative and the structure of certain games […]; this model echoes the actantial model introduced by Greimas, which should come as no surprise if we can believe that games, being a language, depend on the same symbolic structure found in language and narrative.[28]

Since on the one hand, the "narratology of content" is chiefly interested in stories dealing with conflict, and on the other hand, all games are based on conflict(s), it can be logically concluded that any game whose content can be ordered in a temporal and causal sequence can be studied from a narratological point of view. However, as I have put forth earlier, interactivity is subject to these same two conditions: as Ward's definition mentions, interactivity is based on causality (the game system must not give a completely random response to an action) and temporality (necessarily, the action must precede the reaction). We can then conclude that as far as action is concerned, games and stories share the same requirements and are thus naturally fit for mixing: it appears difficult, if not outright impossible, to think of a game that is not based on causality, temporality and conflict. That is why the main actions of stories are easily translated in a game system, as figure 5 illustrates:

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[28] My translation from the French original : « Ainsi, beaucoup de récits mettent aux prises, autour d'un enjeu, deux adversaires […]. Ce duel est d'autant plus intéressant qu'il apparente le récit à la structure de certains jeux […]; ce schéma rappelle la matrice actancielle proposée par Greimas, ce qui ne peut étonner si l'on veut bien se persuader que le jeu, étant un langage, relève lui aussi de la même structure symbolique que l'on retrouve dans la langue et dans le récit [1966: 24] ».

Figure 5: *Astérix et Obélix contre César* (Cryo, 2000), *Super Star Wars: The Empire Strikes Back* (Sculptured Software & LucasArts, 1993) and *The Matrix: Path of Neo* (Shiny Entertainment, 2005), three games that replicate the action of their namesake movies.

4.b) Actors

Defined as a 'performer'[29], anthropomorphic incarnation of the roles required for the narrative to move forward, the actor is the closest concept to the traditional notion of "character".[30] This narrative semiotics thinking needs further clarification. For instance, a television advertisement by the credit company Visa that ran in the province of Québec in 2005 presented "the story of a lost travel suitcase" that set out to find its owner, went across multiple locales, and was finally reunited with him. This advertisement is undoubtedly a story, and seems to indicate that we can consider any object as an "actor" provided it fulfills the requirements of anthropomorphism. But what exactly are these requirements?

From a video game perspective, it is difficult to consider the paddle in *Pong* on the same level as Mario from *Super Mario Bros.* (Shigeru Miyamoto/Nintendo, 1985): that is because Mario appears to be an entity possessing awareness of the

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[29] In the general sense of "someone performing an action", not the particular usage relating to dramatic or musical performance.

[30] My translation from the French original : « Défini comme 'exécutant', incarnation anthropomorphique des rôles nécessaires au déroulement du récit, l'acteur est le concept qui se rapproche le plus de la notion traditionnelle de 'personnage'. » [Jouve, p.51-52]

world and of the self. As a result, the player can credit Mario with intention (making him the *origin* of the action) or an ability of interpretation of the world (making him the *target*). Thus Mario (as well as the suitcase in the Visa advertisement) is a subject able to take in charge the action. When we refer to a character as an "anthropomorphic incarnation of the roles required for the narrative to unfold", we are referring to any sentient entity – which clearly does not include the paddles from *Pong* or *Breakout*. This is a first roadblock to the narratological approach of games.

Even though as far as action is concerned, video games and stories stand on common ground, things are not as simple with actors. Sometimes, a game establishes a relationship directly with the player instead of transiting through an avatar and a fictional world: it is up to the player to take in charge the action, without an intermediary represented onscreen. Traditional games function just the same: when playing *Monopoly* (Charles Darrow/Parker Brothers, 1935), the player moves around the game board a token representing the character he is supposed to be (although a wheelbarrow or a shoe seem to be dubious choices at best), but he acts without intermediary in a game of chess. We must think it in this way, even if some players can make such surprising declarations as "when I play *Tetris*, I am a tetraminoe" *[sic]*.[31] Despite the impressions of players completely immersed in game universes, we cannot fuse (or confuse) the player with the figure of an in-story actor, just like we distinctly separate the reader from the protagonist of a novel: because one exists on the textual level and the other on the reality. The player does not become a *Tetris* piece or Mario, just as the reader, Harry Potter, or the spectator, Indiana Jones! These

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[31] James Newman [2002] quotes a participant to an empirical study he conducted.

two levels must remain separate in our thinking, even if they are hardly kept apart in our experience.[32]. Figure 6 shows the material level of the game, which implies a player, a computer processor, an input and an output peripheral, and algorithms. This level is clearly distinct from the content level, which contains graphics, text, animations, and possibly story elements: characters, events and settings.
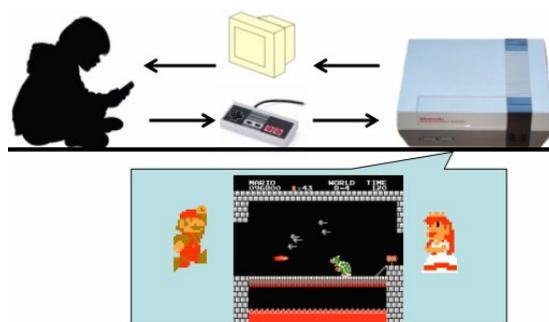
Figure 6: The two levels of a game: material and content.

In this matter my opinion stands with Jesper Juul's, who observes in *Half-Real* that video games take place half in reality and half in fiction:

> Video games are *real* in that they consist of real rules with which players actually interact, and in that winning or losing a game is a real event. However, when winning a game by slaying a dragon, the dragon is not a real dragon but a fictional one. To play a video game is therefore to interact with real rules while imagining a fictional world, and a video game is a set of rules as well as a fictional world [2005: 1].

For example, in *Super Mario Bros.*, mobilizing one's reflexes by pressing the correct buttons at the right time on the game controller (on the material level of reality) has results in the fictional level (of content): Mario runs and jumps on an enemy. All in all, the notion of character is not tied to video games like the notion of action is: just like the traditional games from which they descend, the representation of a fictional world, and thus the incarnation of one or more character(s) by the player, is not

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[32] This is because the work of the filmic apparatus, the novel or the gameplay mechanics aims to make the viewer/reader/player experience the same emotions than those felt by the character he is supposed to identify with. We will work out the details at the very end of this thesis with the concept of *attunement* (*mise en phase*).

automatic, even though it is present in a large majority of video games [Ryan, 2006: 181-182]. It is, after all, frequent enough for Juul to finish *Half-Real* with "Though the fictional worlds of games are optional, subjective, and not real, they play a key role in video games." [2005: 202]

<div align="center">*</div>

5. Bonus level: out with *Tetris*

While exploring an apparently mundane part of the landscape, the player discovers a portal that takes him to a bonus level. This will give him the opportunity to win bonus points or power-ups that will help him get through the rest of the game.

In video game studies, *Tetris* truly is a name that seems to possess the gift of ubiquity. No matter the topic of the debate – heavy user interface versus transparency, simplicity or complexity of the design, photorealistic or abstract graphics –, it always end up appearing, often as the final example from a ludologist. If one participant were to say that graphical realism favors the player's identification with his avatar and thus engenders deeper emotions, the other would reply "Who cares? *Tetris* worked well with only some blocks". And if a third participant were to enter the fray with the speculation that thanks to its multiple processors, the PlayStation 3 will be able to conduct millions of operations every second, which will allow game developers to craft richer experiences for the players, our "tetrinaut" would surely reply that this is rubbish, since his favorite game managed to captivate a whole generation of gamers with a thousand times less technical power.

Naturally, the narratology / ludology debate has also seen this hallmark of video games culture insert itself, like a tetrimino skillfully maneuvered to fill a gap in a pile of blocks. Thus does Markku Eskelinen attempt to flatten out the common elements between video games and narratives by saying that "In abstract games like *Tetris* there are settings, objects and events but definitely no characters" [2001]. But where are the offspring of *Tetris*, twenty years later? One can look over the video games landscape all he wants, but he needs a magnifying glass to find them. For every *Puzzle Bobble* (Taito, 1994; translated as *Bust-A-Move* in North America) that comes out, hordes of *Halo: Combat Evolved* (Bungie Studios/Microsoft Game Studios, 2001) and *Tomb Raider: Legend* (Crystal Dynamics/Eidos Interactive, 2006) seize the market and become the focus of gamers' attention. At the opposite of early video games, and as François Graffard, quoted in the introduction to this thesis, says, modern offerings are replete with stories.[33] However, these stories are not equally important in all games. We could divide the whole of video games in three groups according to the relationship they maintain with narration:

- a small minority of non-narrative games, comprising abstract puzzles such as *Puzzle Bobble* and *Tetris*, and sports adaptations;

- another minority of "hyper-narrative"[34] games that sport an elaborate script and strongly defined characters, and in which one of the primary appeals resides in the story being presented, such as *Final Fantasy X* (Square, 2001)

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[33] While I use the term "modern video games", it refers in truth to quite a broad subset of games. Stories have been systematically part of video games since as early as the days of the NES (Nintendo Entertainment System). Even if we use an hypothetical and conservative date such as 1990 (the year where the console's decline begins), this still represents 16 years out of the medium's 34, starting with Pong in 1972. And since the number of games produced has been constantly on the rise from year to year, what I call "modern video games" are far from being in minority, at the contrary!

[34] To be understood here as "very narrative"; I am not making connections with the notion of hypertext or hyperlink.

or *Fahrenheit* (David Cage/Atari, 2005; translated as *Indigo Prophecy* in North America);

- between these two extremes, a majority of titles where a story is present to a varying degree of importance or necessity, such as *Tomb Raider*, *Halo*, *Grand Theft Auto*, *God of War*, and so on.

In this perspective, one can wonder at the relevance of resorting to video games of the past - *Tetris* chief among them – to discuss of the video game medium in general. In fact, it is a "back to basics" argument: if the ludologists could prove that early video games did not try to convey stories, then they could logically conclude that narratives are not part of the nature of video games, and that game developers have introduced them for artificial reasons – for instance, to cash in on the success of a popular movie or novel by linking their game to it. In his 1999 master's thesis, Jesper Juul used the example of the *Star Wars* (Atari, 1983) video game, that bore no narrative element whatsoever, and from which one could not infer the story without having seen Lucas' movie. [p.32-33]. He conceded that classic action games such as *Space Invaders* (Taito, 1977) or *Donkey Kong* (Shigeru Miyamoto/Nintendo, 1981) used a *framing narrative*, but that its function was accessory: "unlike narratives, where a part of the reader's incentive is the desire to know the ending, the ending of an action-based game is *known* from the start; it is the goal of the player to actualise this good, well-known ending" [p.3].

This argument faces three problems. First, we could mention the popularity of the happy-ending in Hollywood cinema to show that film aficionados, as much as

gamers, can predict to a certain degree the film's ending before watching it: even if we know that Arnold Schwarzenegger's character will save his daughter and defeat the bad guys in *True Lies* (James Cameron, 1994), knowing the "what" does not prevent us from enjoying the "how"[35]. Second, we could also point out that some games do not follow this logic of simple actualizing by offering multiple endings, like *Prince of Persia: Warrior Within*[36] (Ubisoft, 2004), or a surprising finale that cannot reasonably be anticipated, for instance with *Shadow of the Colossus*[37] (Fumito Ueda/Sony Computer Entertainment, 2005). Third – and this is the main weakness of the "back to basics" argument –, the basics are seldom guarantees of anything.

More than a century ago, the Lumière brothers did not consider their cinematograph as an invention capable of conveying (*dramatic*) stories since at the time, early cinema was mainly about films of attraction[38] and actuality films. In the twenty-first century, we look back on these early years of cinema as an incunabula period, a series of experimentations with the medium that allowed filmmakers to develop a variety of processes to steer cinema on a narrative axis that no one questions today. Narrative cinema is now dominant, just like "non-narrative" games

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[35] I owe this observation to Bernard Perron. I would personally add to this that if the desire for the end was so important in enjoying fiction, no one would read books or watch films for a second time!

[36] The player plays the role of the prince, who must go back in time to prevent the empress from creating the Sands of time. If he does not find all the power-ups during the game, he must kill her to reach his goal; if he finds them all, he acquires a new item and successfully persuades her to leave the island with him instead of creating the Sands.

[37] In the introduction the player's avatar, a young warrior, carries a dead young woman to the altar of a mysterious divinity. By talking with this god, he strikes a deal: if he can defeat 16 colossal creatures, his fiancée will be revived. After killing the last colossus, the player learns that he has contributed to the release of an evil spirit that proceeds to possess his body, transforming him into a colossus. A shaman banishes the spirit and leaves the scene, leaving the player's character for dead. When his fiancée awakens, she does not find the hero's body, but rather a baby with two little devil horns, indicating a possible reincarnation of the player's character.

[38] Films of attraction were mainly about using the film apparatus to show uncanny, impressive, or spectacular scenes instead of narratives. See for instance the trick films of George Méliès

like *Tetris* represent, twenty years later, a tiny portion of the video game production. Nick Montfort certainly shares this belief, having written: "If we ban all narrativist consideration of computer games and only look at things that apply to *Tetris*, I'm afraid we will get a useless new field that, rather than being called game studies, should probably be called "*Tetris* studies.""»[39] Once and for all, out with *Tetris*, *Pong* and *Breakout*! They are historically important games, but in respect with the production of the 1990s and onward, they are exceptions: it is rather the models of *Super Mario Bros.* and *Donkey Kong* that have been institutionalized to give birth to the video game industry that we know today, with games like *Star Wars: Knights of the Old Republic* (BioWare/LucasArts, 2003), far from being unable to portray the events of episode IV as Atari's 1983 *Star Wars* game, can convey a story that is just as original and perhaps even more rich and complex than the movies of the franchise.[40]

As this section has demonstrated, the majority of video games set in motion a (*dramatic*) story, that is, actions and actors. The ludological argument that games do not offer all the contents of a story only applies to a minority of games, and even more, a minority of games on its historical decline. Now that is has been established that games are able to convey stories, we must examine the way in which they do so.

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[39] Montfort made this declaration in his review of a conference from Marie-Laure Ryan on the *Grand Text Auto* blog. Available online at http://grandtextauto.gatech.edu/2004/04/25/computer-games-at-ssnls-narrative-conference (accessed February 24th, 2006).

[40] See in this regard an article I have written with Bernard Perron, « L'empire vidéoludique: comment les jeux vidéo ont conquis l'univers de Star Wars » [2006].

6. Level 2: narrative expression

As he progresses in the second level, multiple new enemies appear all at once before the player, backed in a corner. Will he manage to make it?

Even though games can convey stories, it does not mean that they do so in the way of a narrative. This second question is much more complex than the first. Basing himself on the ancient distinction between narration and representation (*diegesis* and *mimesis*) that goes back to Plato and Aristotle, Gérard Genette has taken position by advocating a restricted use of the word "narrative". There would be narrative only in the case of narration, since only the verbal or written language could perform the operations necessary for the structuring of a story in a narrative (such as dilatation or compression of temporality, ellipsis, establishment of a distinct chronology, and so on). Thus theater and film, since they are arts of representation, could not create narratives, but only convey stories in a descriptive fashion. Moreover, when a verbal or written narrative is communicated, then necessarily there is "someone speaking": the presence of a narrator is guaranteed. However, in cinema as in theater, it seems that "no one speaks here; the events seem to be telling themselves".[41] It is because the events seemingly take place there, in front of oneself, in apparent immediacy, that there would be an absence of narrator. And since without narrator there cannot be narration, the story presented would not be a narrative.

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[41] My translation from the French original : « personne ne parle ici; les événements semblent se raconter eux-mêmes » [Benveniste, 1966: 241]

This perspective has ludologists rejoicing, for it allows them to go forth with all their arguments. Though it is true that certain games attempt to make one additional step towards narrativity by presenting their story through a spoken narrative, they are proportionally few in number. *Final Fantasy X* and *Prince of Persia: The Sands of Time* (Ubisoft, 2003) are two examples of this. In both these titles, the characters which the player incarnates narrate their story in a classical fashion: their voice is being heard in the introduction, and then from time to time at certain key points of the intrigue, exactly like a narrator in off-voice in cinema. But if there undoubtedly is a narrative content in these games, it is the expression that is problematic to the ludologists. According to them, and following the narrowness of the definition of "narrative" that they adopt, the presence of interactivity would render these traces of narrativity even more tenuous. Since it is impossible to act on events that are over or have not yet happened, games would necessarily unfold in present time. Moreover, when someone plays, if someone is "telling" a story, it has to be the player himself, since it is his own performance and actions that will determine the outcome of the story. And this brings about another difference: since the player can die at any moment, fail, or do things differently, we cannot say there is a narrative at the heart of the game: the sequence of events is open and anything can happen, which is clearly not the case in a narrative where an author has fixed a specific and unique text. Checkmate?

The player does not manage to defeat his enemies and goes down. He loses a life and must restart the level with a new strategy.

Chapter Three

*

Debugging Narratology

"The actions I perform when I play, because they also have meanings within a pre-configured fictional world, are a part of a symbolic action of someone else. I may not pay any attention to it (being too busy playing), but my own actions speak to me in a voice which is not mine."

-   Rune Klevjer, "In Defense of Cut-Scenes"

<u>7. Replaying level 2: temporality</u>

The player progresses slowly through space to fight the enemies one at a time instead of charging head first.

One of the fundamental hypotheses regarding the nature of narrative is that any narrative is constituted with two different temporalities: there would on the one hand be the time of the telling (of the signifier), which can be measured in pages for literature or minutes for cinema, and on the other hand the time of what is told (the signified), which can last anywhere from a few seconds to many years. As Christian Metz noted following Genette, the clear splitting of these two timeframes allows us to identify the temporal operations on order, duration or frequency, for instance, which the narrator effectuates and which are unique to the narrative:

> This duality not only renders possible all the temporal distortions that are commonplace in narratives (three years of the hero's life summed up in two sentences of a novel or in a few shots of a "frequentative" montage in film, etc.). More basically, it invites us to consider that one of the functions of narrative is to invent one time scheme in terms of another time scheme.[42]

The opinion of narratologists at the time was that theater and cinema, because they used images in motion or actors on stage, were inevitably bound to the space-time continuum. Perfectly synchronous with reality, these mediums were unable to signify the past, the repetition, or any other temporal variation. As a consequence, their action always unfolded in present time, and as such could not be qualified as "narrative" since it lacked this dual temporality.

Metz has invited us to examine a unit (a film shot, a sequence, etc.) in its global context rather than on its own. By applying this methodology, he demonstrated that cinema was able to convey narratives: even if film does not have an equivalent to literature's verb tenses that bear the sense of "past" or "future" in themselves, a motion blur or fade-out can in some situations mean a jump in the past or to a future moment [1968:111-137]. Likewise, montage can stretch the duration of an action to create suspense, for instance by showing alternately Indiana Jones struggling with a thug on the conveyor belt and the threatening rock crusher at the conveyor's end for a longer time than would be necessary for Indy to be squashed (*Indiana Jones and the Temple of Doom*, Steven Spielberg, 1984). Cinema in this way proved its ability to "invent one time scheme in terms of another time scheme", not because we

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[42] In the French version of my thesis, I quoted Metz directly [1968: 27] (labeled as such in the bibliography). Here, for translation issues, I am quoting from Jesper Juul's « Games telling Stories? », in *Game Studies. The international journal of computer game research*, vol. 1, n° 1, July 2001. Available online at http://www.gamestudies.org/0101/juul-gts/ (accessed February 24th, 2007).

discovered new narrative processes, but because we, in a sense, broadened our view from the film frame to the film strip. The images are prisoners of a present tense when taken one by one, but free themselves of it when taken globally.

The ludological perspective suffers from this same lack of global vision, as this citation exemplifies:

> In a game where the user watches video clips and occasionally makes choices, the three times will move apart, but when the user can act, they must necessarily implode: it is impossible to influence something that has already happened. This means that *you cannot have interactivity and narrativity at the same time*. And this means in practice that games almost never perform basic narrative operations like flashback and flash forward [Juul 1999].

Juul's argument is based on the fact that when the player has to act, all temporalities necessarily need to converge. Of course, in light of this analysis, there can be no narrative in a game, but that would also mean that film cannot be narrative either since each image "is in present time". As Marie-Laure Ryan writes when summing up Kendall Walton's proposition on the problem of repeated suspense, story time can be perceived from a different perspective than its wording implies:

> When Lauren hears the story for the second or third time, she experiences a temporal relocation that places her at the beginning of narrative time and enables her to share the prospective outlook of the hero. She lives the unfolding of his fate in the real time of a shifted present, rather than being merely informed of what happened in a fictional past. [Ryan 2001: 147]

In order to study time in video games, then, I think we must follow in the footsteps of Metz and go beyond a microscopic examination and take a more global approach; in a word, we must broaden our view from the joystick to the game controller, console and screen as a whole. Interactivity, as I defined it in chapter one, is an exchange, a sequence of actions and reactions. We cannot consider the player's actions without their consequences: the smallest unit of interactivity is not the pressing of a button (an

action), but this action *and* the system's reaction to it. In this way, even though story time, narrative time and experience time (I use this term to include reading time, viewing time, etc.) must be synchronous when the player has to press a button[43], they can explode in multiple directions during the system's response to this player input.

As figure 7 shows from *Final Fantasy* (Square, 1987), when the player is in a town, he can take his party of characters to an inn.

Figure 7: A night at the inn in *Final Fantasy* (personal screenshots; a speaker projecting musical notes has been added over the second frame to represent the short music that the player hears at this moment).

Inside, the innkeeper asks them if they want to stay. The player can choose to answer "Yes" or "No" by selecting an answer and pressing a button. A second message appears to tell him how much gold a room will cost him, and he can once more select "Yes" or "No" to confirm or cancel. If he chooses to sleep here, the mentioned sum of money is subtracted from his funds, his characters disappear from the screen and a short music is played. They then reappear and the inn music starts back, another text giving the player instructions on the way to manipulate his game console to safeguard his data. After having pressed a button once more, the player's characters appear in

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[43] And even then, sometimes the player has to act during a scene unfolding in slow-motion, such as when the player initiates the *bullet-time* effect in *Max Payne* and fires at enemies. In such a situation, story time is shorter than experience time.

the town just outside the inn. If the player opens the game menu, he can see that his characters are fully restored, the result of a good night's sleep that the game's designers have judged not important to show in its entirety (and that is certainly an understandable choice, both for narrative and interactive reasons!)

Thus, when he answers "Yes" to the innkeeper's invitation, the player triggers both a *summary* (a full night's stay at the inn is summarized by a music lasting barely a few seconds), and an *ellipsis* (the monetary transaction is not represented at all, even though it did happen since the characters possess less money than before)[44]. When he presses a button to leave the inn, he launches a second ellipsis, the party instantly appearing outside the inn without showing the characters moving through the doorway. Finally, if he opens the game menu to look at his inventory or review his characters' abilities, he causes a pause in story and discourse time while experience time invariably goes on.

As evidenced by this short exposition, time in video games can be more complex than it would seem as first. But even if temporal variations on duration are commonplace, it is not the same for order or frequency. In *Prince of Persia: The Sands of Time*, the player must guide the prince through a series of rooms in a palace. Each of these rooms serves as a puzzle to be solved, since the player must figure out the correct way of using the architectural elements to reach the exit by swinging

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[44] The summary and ellipsis are two temporal variations on duration. In the first case, story time is greater than discourse time; in other words, the text takes less time to describe the events than their duration (DT < ST, where DT stands for "Discourse Time" and ST for "Story Time"). As regards ellipsis, the text passes over events that logically happened in the story (DT=0, ST = n).

himself between horizontal bars, running on walls to get across pits, and so on. From time to time, the player discovers sand fountains that, if he touches them, will show him visions of the future, with the prince executing a few precise maneuvers in an upcoming room. These hints are *flash-forwards* (or prolepses, according to Genette's terminology): they present events that will happen sooner or later, depending on the speed at which the player advances through the palace. (Of course, these temporal distortions are only possible because in each room, some maneuvers are mandatory for progressing, and these are the ones appearing in visions.)

Prince of Persia's *flash-forwards* still remain the exception rather than the rule. Even if most video games feature ellipses and summaries, they rarely mix up the chronology of the story's action. But if a process like this can only appear in narratives, it does not mean that a story conveyed without using it is automatically not a narrative, as ludologists may seem to think. Their comparative analyses could be summarized as such:

1) Literature and cinema are mediums able to communicate narratives;

2) Narratives are based on a dual temporality;

3) Video games do not instate a dual temporality;

4) Therefore, video games cannot communicate narratives.

However, this line of thinking has its flaws. Namely, it is based on a definition of narrative that appeared before the popularization of "modern" video games (incarnation of a character by the player, quest, spatial exploration, etc.). It should come as no surprise then that this definition is not very inclusive of a reality that didn't even exist at the time it was set. Just as in the beginning of film there was no

concept of "film narrative" because movies differed from written or verbal narratives, and people have later redefined the domain of narrative to include them, we must consider today that if video games do not feature a dual temporality as film or literature does, it is possible that it is simply because this way of working, that we thought until now was mandatory for a narrative to exist, is indeed only a *method*, a *means* among others to "tell a story". Can we find an example of narrative without "invention of a time scheme in terms of another time scheme" from outside the domain of video games to prove this hypothesis?

Let us take a look at the American television series *24* (Joel Surnow & Robert Cochran, 2001). Each season is based on a period of 24 hours in which agent Jack Bauer attempts to counter a terrorist attack, and is presented in 24 episodes of one hour each. All the action unfolds in real-time (a clock sometimes appears onscreen to reinforce this motif), and the technique of the split-screen is used regularly to show different characters while maintaining synchronism between story, discourse and viewing time.[45] Does this make the *24* episodes less of a narrative than, say, those of the animated series *The Simpsons* (Matt Groening, 1989), in which *flash-backs* abound? Would they be as much of a narrative as them if a single, no matter how little, temporal variation was introduced to escape the continuous present? If one replies "yes" to the above question, it is worth noting that each episode of *24* lasts only actually 42 minutes because of commercial breaks. When the action resumes

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[45] One could object to my argumentation that viewing many separate scenes simultaneously constitutes a sort of freedom from the space-time continuum, and so my example would not be appropriate. In truth, the split-screen used in *24* joins only spaces, without initiating temporal distortions, and it is temporality that is considered constitutive of the narrative, not spatiality.

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after each break, the time that passed during the advertisements is considered as having passed in the fiction as well, a one-hour episode thus telling one hour of fictional events with a few blank spots. Does this mean that it is the commercial breaks that, by forcing ellipses, make *24* a narrative?

In the end, it is of little importance that a video game, a movie or even a novel contains operations on temporality to consider its content as being a "narrative". The only thing that is absolutely necessary is the presence of a timeframe moving forward to link the actions represented in a series to obtain a story, whether it is perfectly synchronous with the time devoted to tell it or not. We must thus consider the operations on temporality as a means used by certain mediums to convey stories instead of a *sine qua non* condition for narrative. But is there not even a single absolutely necessary requirement for the existence of "narrative"?

<p style="text-align:center">*</p>

8. Replaying level 2: narration and narrator

By going through the same environment a second time, the player realizes that the game space has been carefully crafted to form a trap in which he fell the first time. He imagines the designers had some wicked fun ordering the level in this way…

If it seems difficult (or even outright impossible[46]) to define the narrative as is, there is nonetheless a solution: resorting to narration itself, since all theorists agree

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[46] This is notably the opinion of Espen Aarseth, who shared it with me in the course of a personal conversation during the *5th Symposium on Art and Multimedia: Metanarrative(s)?* conference, Barcelona (Spain), January 28th, 2005.

that independently of content, a narrative is always communicated by "someone". When I use the term "narration", I am referring to the process by which an entity (the narrator) transmits to another entity (the narratee) a particular message (a "dramatic" story, as defined in chapter two) in a specific fashion: by "telling", which means "to say what happens to someone or something, to enumerate the succession of predicates that its becoming confers it"[47] The traditional narratological conception traced a fundamental distinction between two modes of communication: narration and description, telling and showing, *diegesis* and *mimesis*. As such, in a sentence like "Peter showed him the exit", the words and actions of the character are narrated, whereas in a second hypothetical sentence "Peter said, 'The exit is this way.'", his words are represented directly, without the intervention of a narrator. Thus the first sentence would be a narrative, but the second, only half a narrative: once Peter "opens his mouth", we are taken outside the realm of narration and into its opposite, representation.

In this way, it is easy to see narrativity in games like *Prince of Persia: The Sands of Time* or *Final Fantasy X*. Both titles start with the protagonist's *off-voice* narrating their story and quickly being interrupted to let the player act out in the environment. Their voices frequently appear throughout the game[48] to comment the events in which the player takes part, as if to remind him that his actions are part of a told narrative. *Prince of Persia* pushes this logic at its utmost: if the player dies after

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[47] My translation from the French original: « dire ce qu'il advient d'une personne ou d'une chose, énoncer la succession des prédicats que son devenir lui confère » [Bremond, 1973: 132-133].
[48] A video game "game" has to be understood as "one full play-through of the whole game", not as "one session of game-playing". A single run-through of a game usually is the result of many sessions.

making a mistake or because of grave wounds received in a fight gone awry, a screen appears with the options "Try again" and "Quit", and the narrating prince's voice is heard: "No, wait…it didn't happen this way!"[49]. But these examples are only a minority (or at most, only a certain subset) of all video games. The question that is of interest to us here is whether video games are intrinsically narrative. Where would be the narrator in *Pong* or *Super Mario Bros.*? Could these games be "representative"[50] instead of narrative?

8.a) In film and literature

The divide between narration and representation may not be as absolute as it seems. André Gaudreault in his book *Du littéraire au filmique. Système du récit* [1988][51] went back to Aristotle and Plato to argue that their notions of *diegesis* and *mimesis* have been misunderstood. The original texts rather seem to place the "simple narrative" which is verbal only (*haple diegesis*) and the "dramatic reenactment", or "narrative with imitation" (*diegesis dia mimeseos*) as two categories part of the greater domain of narrative (*diegesis*). As such, in the example I used previously, Peter's voice may be presented as autonomous in the second sentence, but it nevertheless remains dependent on the narrative authority's voice that decides under which circumstances it relinquishes the right to speak. Despite the impressions of Benveniste, Peter does not jump out of the book's pages to appear in front of us and deliver his line with his vocal apparatus: the narrator *quotes* him, exactly like a

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[49] The exact wording may be a little different, as I am quoting both from memory and from the French version of the game. ("Non…attendez, ça ne s'est pas passé comme ça!")

[50] In the sense of "built with the tools of representation (as opposed to narration)" or belonging to the *showing* instead of the *telling*, not "to be a part representing a whole".

[51] It would translate to something like: *From the literary to the filmic. The system of narrative*.

storyteller takes a lower, harsher voice to relay to the audience the words of the Big Bad Wolf without making him appear before them. In both cases, the narrator does not stop talking: it is not sufficient, to paraphrase Gaudreault, to have a narrator simply open quotation marks for the text to escape from the realm of narration. The narrator is a filter through which the entire story's events pass:

> He may shroud himself in the highest transitivity and transparency, nonetheless the narrator remains present, like a thin plastic film creating blurs, a translucent window or a magnifying glass, as is the case, situated by writing necessity between the narratee and the narrated world. And it is on this film, this window or this glass, truly a focal plane, that the elements of the narrated world inscribe and refract themselves to be filtered by the one who is necessarily forced to engage in a process of trans-semiotization (he translates into verbal, or rather written, to be more precise, non-verbal facts: events, movements, attitudes, actions, etc.) or, at the very least, to a process of transcription (he transfers in written form all that, in the narrated world, is supposed to be oral). The *story* told may be more preeminent than the discourse telling it, it is nevertheless a story that is, precisely, *told*.[52]

As the author remarks, the narrator is the smallest constitutive element of narrative. It is because of him that most of the theorists who studied the question have ended up concluding that film resembled more a novel (non-mimetic diegesis) than a theater play (mimetic diegesis), and consequently, that there should be a film narrative but no theater narrative. For even if not all movies feature the intervention of a narrator talking in *off-voice* through language, all are nevertheless products of an authority that orders their content, determining the angle, duration and sequence of the shots, the events that are important enough to be shown, and so on. This active

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[52] My translation from the French original: « Sa transitivité et sa transparence ont beau être maximales, il n'en demeure pas moins que le narrateur reste présent, comme une fine pellicule de plastique aux effets de flou, comme une vitre translucide ou encore comme un verre grossissant, c'est selon, situé par nécessité scripturale entre le narrataire et le monde narré. Et c'est sur cette pellicule, cette vitre ou ce verre, véritable plan focal, que viennent s'inscrire et se réfracter les éléments du monde narré pour y être filtrés par celui qui est nécessairement acculé à un processus de transsémiotisation (il traduit en verbal, en scriptural pour être plus précis, les faits non verbaux: événements, gestes, attitudes, actes, etc.) ou, à tout le moins, à un processus de transcription (il transfère en scriptural ce qui, dans le monde narré, est supposé être de l'oral). L'*histoire* racontée a beau être plus proéminente que le discours qui me la fait tenir, il s'agit d'une histoire qui, précisément, est avant tout *racontée*. » [Gaudreault, 1988: 75]

intervention that forces a path on the reading of the text (in its broad sense: "sequence of signifiers") is much more a mark of its presence than the act of enunciation relative to the use of language. Regardless of the means of expression (language, images, sound, …) used, all it takes for a narrative authority to be more akin to a writing *narrator* than to a theater *monstrator* is to engage in a process of trans-semiotization, leaving traces of its ordering activity (its "pulling of strings", in a sense).

I will finish this short revisiting of the works of André Gaudreault by presenting his clarifications on the many incarnations that the authority responsible for conveying the narrative can take. Since we cannot place the author (the real, flesh-and-bones person) inside a narratological conception, we must envision the presence of a *fundamental narrator*, a "master of ceremonies" and "grand puppeteer" having at his disposition a certain number of means of expression (depending on the medium he uses to tell his story). He can assume two identities: that of narrator or monstrator[53]. The narrator tells the events, which is done by translating something (events, characters, etc.) in another system of signifiers, be it verbal or written language, or images.[54] The result of his work is in this way an intermediary look, a point of view, on a story, a "translation" of it. The monstrator, for his part, shows events in immediacy, without transposing them on another system of signifiers. Just as the theater director, he places props and plans the actions that will unfold without

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[53] From the French *monstrateur*, "the one who shows". Coined by André Gaudreault, it stems from *monstration*, "to show", and is opposite to *narration*, "to tell".

[54] As Christian Metz said, the image is a signifier, not only its content: "a close-up shot of a revolver does not mean 'revolver' (a purely virtual lexical unit), but means *at least*, and leaving out connotations, 'Here is a revolver!'" (My translation from the French original: « Un gros plan de revolver ne signifie pas 'revolver' (unité lexicale purement virtuelle), mais signifie *au moins*, et sans parler des connotations, 'Voici un revolver !' » [1968: 72])

forcing a path on reading. It will be up to the viewer to do this work, just as in early

cinema where, facing a *plan-tableau* (a shot so wide it is halfway between the film

shot and the painting) seen as autonomous and presenting a great amount of

characters and actions, he must direct his gaze among these different elements all

presented on an equal level. The work of the monstrator thus does not reflect an

interior subjectivity in itself, but is only a first step in the production of a movie:

> To produce a "multi-shot" [*my note: early cinema sometimes sported movies filmed in a single shot. Those are part of monstration, whereas "multi-shot" films are part of narration*] film narrative requires at first the intervention of a monstrator who, as the film is shot, "records" a multitude of micro-narratives (the shots), each having, in the end, a certain narrative autonomy. [...] then another narrative authority, the narrator, can take up these micro-narratives and, if he feels "narratively" euphoric, work their narrative substance to cancel out the autonomy of the shots produced by the monstrator and inscribe the path of a continuous reading, consequent to the gaze he has fixed on this substance and that he has transposed.[55]

8.b) In role-playing and video games

While the theoretical acquisitions I just presented – the distinction between

narration and monstration and the process of trans-semiotization that is at the origin

of narrative activity – are essential to clarify my conception of narrativity in video

games, they are insufficient without a theory that is specific to the medium.

Fortunately, Lev Manovich in *The Language of New Media* [2001] has put forth a

structure to envision new media. These would be made of, on the one hand, a

database, which is the content itself (images, text, etc.) and, on the other hand, an

algorithm: a series of instructions and procedures executed by the computer processor

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[55] My translation from the French original : « Pour produire un récit filmique pluriponctuel, il faut d'abord faire appel à un monstrateur qui, lors du tournage, "met en boîte" une multitude de micro-récits (les plans) qui ont tous et chacun, en définitive, une certaine autonomie narrative. [...] Il faut ensuite faire appel à une autre instance narrative, le narrateur, qui, se saisissant de ces micro-récits, pourra, s'il est "narrativement" euphorique, en travailler la substance narrative pour annuler l'autonomie des plans produits par le monstrateur et y inscrire le parcours d'une lecture continue, consécutive au regard qu'il aura posé sur cette substance et qu'il y aura transposé » [Gaudreault 1988: 115].

and responsible for the linking of the different elements of the database. In the case of *Super Mario Bros.*, for example, if we could open the game cartridge and extract its contents, we would see many images of Mario (one for each frame of animation, for each different movement he can make), enemies, objects, and so on (see figure 8 below).
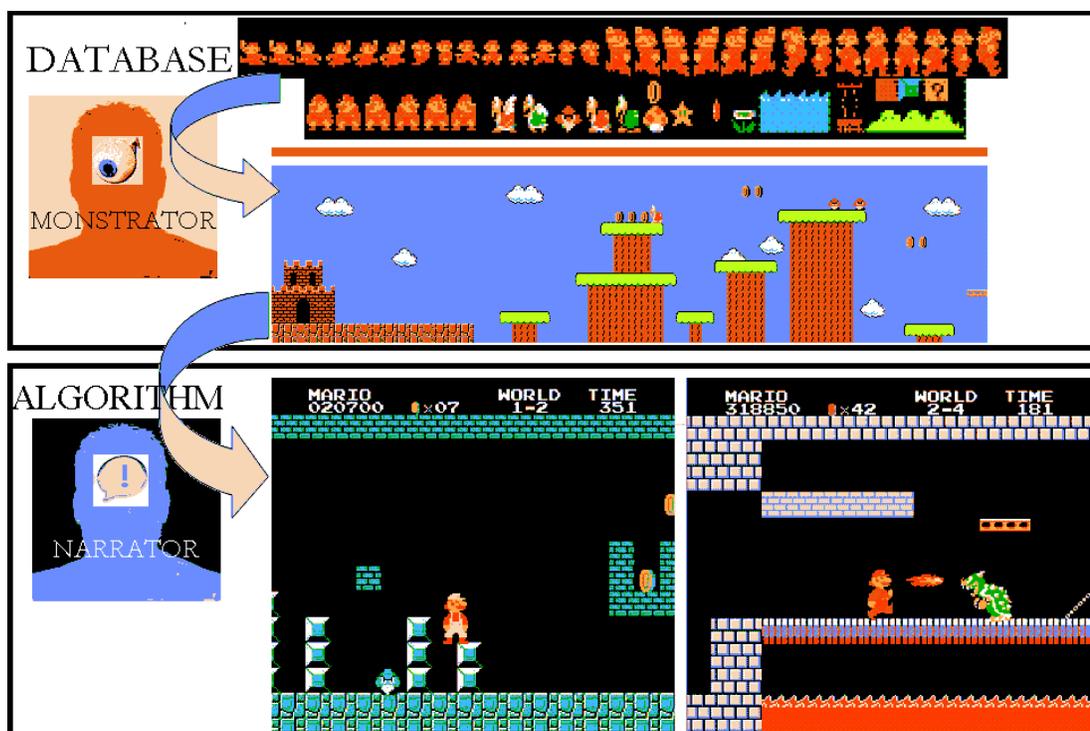
Figure 8: Dual structuring of the elements of the database (top-most), first in game levels (center) by the monstrator, then in a run-through of the game (bottom) by the narrator. (Editing of online sources: *Super Mario Bros. Headquarters* (http://www.smbhq.com/users/sprite/) and *Gamespot.com* (http://www.gamespot.com/nes/action/supermariobros/screenindex.html), accessed February 24th, 2007).

The contents of the database correspond to the matter which the film monstrator decides to stage. One could think that there is an important difference between the two mediums because in film, the monstrator operates on "real" things, and not signs: the actors are of flesh-and-bones, and the props do exist in themselves. It is true that in a video game, all the matter has to be created by artists and animators,

and thus that it is already symbolic (a pile of polygons representing a character, for instance). Yet even though the matter that is filmed in cinema is made of objects instead of signs, once the monstrator has completed his work, they are no more objects but simply spots on the physical film representing what they were at the time the shot was taken, regardless of up to which point the image tries to hide itself and show its content without a detectable mediation. Thus there is no need to trace a distinction: the activities of the film and videogame monstrator both aim at ordering the elements of content into a first layer of signs.

The whole of the database elements is structured so as to create game levels (worlds 1-1, 1-2, etc.) by an authority we will call the videogame monstrator, whose own (conceptual) existence is owed to the (real) work of the level designers, game designers, testers, and so on. This work can be compared to the manipulation of the profilmic in cinema. A second higher-level structuring is then made by the algorithm, by way of which the levels follow one another in a coherent series, the enemies move, and the player can "enter the fiction" and play the game. This second ordering is the work of a second authority – which I deem must be called the "videogame narrator" – and can be compared to the operations on the filmographic.

Surely the reader will ask me to explain my hypothesis. Why, indeed, should we perceive the result of the work of this second authority as a narrative? To demonstrate this, we will have to go back many years in time and look at the origins of video games, which can be traced back, as I said at the very beginning of this thesis, to role-playing games like *Dungeons & Dragons*. In a role-playing game, a

group of players each become a character and take part in adventures created by a Game Master (GM). The former decide their characters' actions and reactions, while the latter "presides over the assembly", so to speak. As Laurent Franchomme specifies in the definition of role-playing games he uses in his D.E.S.S.[56] thesis, the GM serves two functions:

> [The Game Master] is both the referee and the storyteller. He is the one who offers a "mission" to the players, by way of their characters. He describes the situation in which they are, decides of the success or failure of their actions (here comes into play the use of dice and character attributes) and describes to them the new, resulting situation. Thus he manages the adventure's frame.[57]

Referee and narrator: these are the two "roles" – no pun intended – which a Game Master must play to have a game going. Below is a description of a typical session of a role-playing game, as given in the section "An Example of Play" of the second edition *Advanced Dungeons & Dragons Player's Handbook*. I will underline the words of the Dungeon Master (DM, synonym of Game Master in *Dungeons & Dragons* nomenclature) when he acts as a referee, and use bold typeface when he acts as a narrator. The players, who play as two fighters and a cleric, are walking in a dark and cold tunnel that they know is home to several hostile creatures.

> DM: **Another 30 or 35 yards down the tunnel, you find a stone block on the floor.**
> Fighter 1: A block? I take a closer look.
> DM: **It's a cut block, about 12 by 16 inches, and 18 inches or so high. It looks like a different kind of rock than the rest of the tunnel.**

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[56] *Diplôme d'Études Supérieures Spécialisées*, roughly translatable as *Specialized Graduate Studies Degree*. His thesis, *Qu'est-ce qui fait courir le rôliste ? Analyse d'un jeu: le Jeu de Rôle* would be: *What makes the role-player run? Analysis of a game: the role-playing game*.

[57] My translation from the French original : « [Le Maître de Jeu] est à la fois l'arbitre et le conteur de l'histoire. C'est lui qui propose une "mission"aux joueurs, par l'intermédiaire de leurs personnages. Il décrit la situation dans laquelle ils se trouvent, décide de la réussite ou non de leurs actions (intervient alors l'usage des dés ainsi que les caractéristiques des personnages) et leur décrit la situation nouvelle qui en résulte. Il gère ainsi le cadre de l'aventure. » [1998: 9]

Fighter 2: Where is it? Is it in the center of the tunnel or off to the side?
DM: **It's right up against the side.**
Fighter 1: Can I move it?
DM (checking the character's Strength score): Yeah, you can push it around without too much trouble.
Fighter 1: Hmmm. This is obviously a marker of some sort. I want to check this area for secret doors. Spread out and examine the walls.
DM (rolls several dice behind his rule book, where players can't see the results): **Nobody finds anything unusual along the walls.**
Fighter 1: It has to be here somewhere. What about the ceiling?
DM: You can't reach the ceiling. It's about a foot beyond your reach.
Cleric: Of course! That block isn't a marker, it's a step. I climb up on the block and start prodding the ceiling.
DM (rolling a few more dice): **You poke around for 20 seconds or so, then suddenly part of the tunnel roof shifts. You've found a panel that lifts away.** *[etc.]* [TSR 1994: 9][58]

As we can see, the GM from this example shifts between the two levels of the real and the fictional which Jesper Juul has evoked.[59] When he acts as narrator, he tells the fictional world and describes the results of the players' actions (he "says what happens to someone or something", as Bremond put it); when he has to approve or reject a player's proposal, he acts as referee. In this fashion, when the GM rolls some dice to check if the cleric manages to discover the secret panel, the roll of dice – a real event: a die hits the table and lands on the "5" side, for example) results in a consequence on the fictional level (the character succeeds in finding something), exactly like pressing a button on the game controller results in Mario jumping in the fictional world. The result is then relayed by way of narration: the GM translates a

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[58] I am quoting from a non-paginated plain-text version of the book found online. I provide page numbers from my French edition of the book as an indication; the exact pagination may be slightly different in the English printing.
[59] Evoked, it must be reminded, to take into account the specificity of video games among other games, since they would be naturally able to produce fictional worlds. This confirms the link I am trying to establish here between role-playing and video games: both naturally engender fictional worlds.

data unit from a system of signs (mathematics and probabilities, the *Dungeons & Dragons* rules) to another (the characters and action, the story). To hold up the classification I made earlier, the refereeing authority acts on the material level of the game while the narrative authority translates this data on the level of content.

Even though in a role-playing game these two functions are performed, on a purely physical level, by the same person and the same voice (the same vocal apparatus, we might say), they nevertheless remain two distinct entities, just like two roles played by a same actor. The proof can be easily made when we factor in the fact that the narrator and referee often get in conflict with each other. For instance, in the above example of play, if the GM has built a certain narrative development on the expectation that the players will discover the trapdoor in the ceiling, he can decide to ignore the result of the die cast to check whether the cleric finds it or not and declare his endeavor a success. In such a case, the GM's aspect responsible for producing a narrative takes precedence over his duties of referee.

This multiplicity of "voices" from the authority responsible for communication has been raised by Espen Aarseth when he studied adventure video games[60], using the example of *Deadline* (Marc Blank/Infocom, 1982):

> the voice's curious mixture of styles is noticeable, to the extent that we might want to describe it as two different voices; the curt, minimalist, camera eye style (or nonnarration) in 'Cup: taken,' and the direct, covert narration in 'Sergeant Duffy walks up to you as quietly as a mouse'. [1997: 119]

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[60] As most genres in video games, the adventure game can be defined in a number of different ways according to a given group or timeframe. Aarseth uses it to refer to games known as "interactive fiction" to others, such as those by developer Infocom. An "adventure game" thus will be based on text rather than graphics, and the player types in commands using verbs and nouns that are interpreted by an algorithm (a *parser*). As Aarseth says, these games are basically digital versions of role-playing games: « The *Dungeons and Dragons* genre might be regarded as an oral cybertext, the oral predecessor to computerized, written, adventure games ». [1997: 98]

Aarseth concludes, after examining a few passages from the game, that there is not a unique "voice" communicating with the player, but rather a "chorus" of voices that are impossible to distinguish using traditional narratological tools (narrator, implied author, etc.). I believe, for my part, that the splitting of two authorities – narrator and referee – allows to adequately model the "voices" that "talk", exactly like in role-playing games. It is not hard to believe if we read the instruction manual of the game *Mean Streets* (Access Software, 1989), which (boldly) describes itself as an "interactive movie" in which the player becomes private investigator Tex Murphy. In a section titled "Who's talking", one can read:

> In this interactive movie there are two basic levels of narration. The first level uses the pronoun "I", as if Tex Murphy is narrating his own story. Imagine your favorite "Magnum" type movie with the hero's voice being played over the "drive to the beach" scene. The second level uses the pronoun "you", and is reserved for the room search sequences. This gives more of a feel that "you're actually there" and the usual "Adventure Game Ghost" is talking to you and executing your requests [Access, 1989:14].

This mysterious ghostly voice would indeed be our narrator-referee, since it is "executing our requests" and telling us what becomes of our actions. But what about the other scenes that make up a game of *Mean Streets*, if the "Adventure Game Ghost" only appears during the room search sequences? Could it be that our "Ghost" is merely an executive narrator temporarily given voice by our higher-level authority, the fundamental narrator (or mega-narrator following Gaudreault), who expresses himself by other means in the other segments of the game?

To prove this point, let us observe the technological evolution of the adventure video game, a genre undoubtedly first among all as regards narrativity

(Bertrand Gervais said: "The adventure then forms the very basis of narrativity"[61]).

The *Dungeons & Dragons* situation used above as an example can easily be transposed by replacing the living GM, sitting down at the table with the players, with a computer algorithm. Here is what this sequence could look like in video game form. As before, I am underlining the interventions of the referee and putting in boldface those of the narrator. Between parentheses and in italics, I note the operations which the computer effectuates without relaying them to the player, and the latter's thoughts that he does not transform into inputs and actions into the game.

> PLAYER: Walk tunnel
> *(The algorithm-referee correctly interprets the player's textual input: it updates his position on the virtual map and reaches out into the database to get the description of the new location.* **The algorithm-narrator relays the information to the player.)**
> **Algorithm-narrator: Another 30 or 35 yards down the tunnel, you find a stone block on the floor.**
> *(The player thinks: a block? I should take a closer look at it.)*
> PLAYER: Inspect block
> *(The algorithm-referee interprets the player's input and reaches out into the database, etc…*
> **Algorithm-narrator: It's a cut block, about 12 by 16 inches, and 18 inches or so high. It looks like a different kind of rock than the rest of the tunnel.**
> *(The player wonders: where is the block? In the center of the tunnel or off to the side? He tries to come up with a way of asking the question, but does not find any verbs recognized by the game to do this. He may make a few unsuccessful attempts to do so, and will sooner or later abandon this question to try and get something out of the block. At that point he wants to know if it is possible to move the block.)*
> PLAYER: Move block.
> *(The algorithm-referee interprets the command and applies the rule: when the word "move" is used, he looks up the target object's details to see if it can be moved, and if it can, how much Strength is required from the character to do so. In this case, the character is sufficiently strong and can move the block. But the command is incomplete: the*

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[61] My translation from the French original: "L'aventure est donc à la base même du narratif". [1990: 25]

algorithm-referee needs to know the destination intended by the player. The algorithm-narrator translates this in words.)
Algorithm-narrator: Move it where?
(The player analyses that if he could not have moved the object, he would have gotten a message like "It's too heavy". This means he can indeed move the object, and answers his question.)
PLAYER:
(He hits the confirmation key without typing anything, which means "I cancel what I was doing". **The algorithm-narrator reminds him of where he is standing.***)*
Algorithm-narrator: Near the stone block in the tunnel.

This fictional example perfectly matches early adventure video games, such as *Adventure* and *Zork* (represented below in figure 9), which used only text.
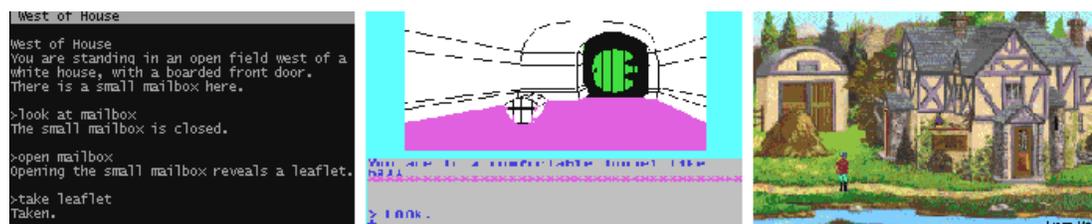
Figure 9: Evolution of graphical representation in the adventure video game. From left to right: *Zork* (Infocom, 1980), *The Hobbit* (Beam Software/Melbourne House, 1982), and *King's Quest V* (Sierra, 1990).

With technical progress, graphics started appearing. As can be seen in figure 9, *The Hobbit* sported rudimentary graphics in order to complement the classic textual system. The player still entered commands using verbs and nouns, and the drawings could not completely replace the text. (In the image above, the text reads: "You are in a comfortable tunnel-like hall". I leave it up to the reader to ponder the feasibility of inferring the "comfort" of the "hall" by relying only on the room's graphical depiction.) Yet even such little footsteps allowed to avoid a certain number of conflicts with the machine since the player could clearly see whether an object was lying to the left, right or center part of a tunnel, for instance. By further pushing forward according to the familiar proverb "a picture is worth a thousand words",

Sierra developed games called *graphical adventures*, of which the *King's Quest* series certainly is the flagship. As can be seen in figure 9 with the image from *King's Quest V*, the text input has been entirely replaced with an autonomous graphical interface.

Here comes once more into play André Gaudreault's revision of the notions of *diegesis* and *mimesis*. As I explained earlier, it is not because the authority responsible for communicating the content to the player uses verbal or written language that it can qualify to be a narrative authority, but rather because it is involved in a process of transcoding and thus leaves traces of its intervention. *King's Quest V* is not "mimetic" or "representative" (*monstrative*) because it uses graphics. Simply put, – and this justifies taking an historical approach – its narrator expresses himself using another means of expression: images instead of words. Rather than describing to the player the actions he undertakes with words, the narrator can tell "what becomes" of the world with images, in a much quicker and more efficient way. We can rewrite one final time the tunnel and block sequence as it would take place in a modern video game such as *King's Quest V*:

> *The player wants to walk in the tunnel. He pushes forward the analog joystick on the game controller. <u>The algorithm-referee interprets the button pressing as a sign of going forward, and consequently moves the player's position on the x and y axes and takes out the walking animations of the character from the database.</u> **The algorithm-narrator displays the character walking in the tunnel, the scenery changing, etc. Eventually, a stone block appears on the ground.** The player thinks A block? I should get a closer look at it. He uses the second analog joystick to move the camera so as to have a better look at the object. <u>The algorithm-referee interprets the input and moves the camera,</u> **which is visually relayed to the player by the algorithm-narrator representing the world in transformation.** The player estimates the size of the block as about 12 by 16 inches, and 18 inches*

or so high, and notices that it looks like a different kind of rock than the rest of the tunnel. He also notes that it lies right up against the side of the tunnel. To see whether it can be moved or not, he presses the Action button assigned to that function. <u>*The referee receives the input, looks up the object's description in the database to check the value of the variable "Movable", which comes up as "True". He then fixes the player's position relative to the block, and goes in the database to take out the animation of the character holding up to an object, ready to move it.*</u> ***The narrator shows the player's character holding up to the stone block to move it.*** *The player releases the button because he does not actually want to move it.)*

As I have shown, the inner workings of video games have much in common with those of role-playing games. In both cases, a "conversation", to use Crawford's rather spot-on analogy, takes place between the player and the communicating authority[62], in the form of an alternation between *"I do this"* and *"Then this happens."* A computer processor is capable of performing these exchanges at an infinitely higher speed than humans, processing dozens of propositions at the same time and forcing upon the player a rigid temporality in which he must take part if he wants to influence the course of events and not merely be a witness of his own defeat.[63] In all cases, a narrative authority always translates digital data, variables, and mathematical operations in character actions or events that are part of another system of signs: that of the narrative. After story and narration, this is the last term we have to examine, and will be the focus of the next chapter.

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[62] This authority is Todorov's "focus of narration" (*foyer de la narration*) since all the player's actions have to pass through it to reach the fictional world, and all that which is produced in the fictional world must in the same fashion pass through it to be communicated to the player.

[63] We can imagine the ceaseless talking of the algorithm-narrator in a real-time game where the player does not have time to react: "A goblin approaches from the right, a shaman starts casting a spell, the door behind you opens, you don't do anything, the goblin now is in fighting reach, he hits you with his sword, you don't do anything, the shaman casts a fireball, the sword strike has caused you a small wound, a creature appears in the open doorway, you don't do anything, the fireball hits you…"

[Post-writing note: at the time of translation, six months after finishing the original version of this thesis, I have since plunged into Blizzard Entertainment's World of Warcraft. In this game, the player can bring up and look at the "Combat Log", in which all of the computer's inner calculations and workings that are relevant to the temporal unfolding of the game are displayed. It provides a great way to visualize the narrative nature of graphical video games that I have tried to show in this chapter. Here is a short sample transcript of the combat log from one of my recent adventures. All of this takes place in about two seconds.]

You gain 1 extra attack through Reckoning.
You hit Dunemaul Brute for 90.
You hit Dunemaul Brute for 83.
Dunemaul Brute hits you for 1. (45 blocked)
Your Seal of Righteousness hits Dunemaul Brute for 32 Holy damage.
Your Seal of Righteousness hits Dunemaul Brute for 32 Holy damage.
Dunemaul Brute resists your Holy Shield.
Your Mithril Shield Spike hits Dunemaul Brute for 20.
Your Blessing of Sanctuary hits Dunemaul Brute for 28 Holy damage.
You reflect 20 Holy damage to Dunemaul Brute.
Reckoning fades from you.
You hit Dunemaul Brute for 85.
Your Seal of Righteousness hits Dunemaul Brute for 32 Holy damage.
You have slain Dunemaul Brute!
Redoubt fades from you.

Chapter Four

*

The Videogame Narrative

"Thanks to beautiful cut-scenes, and a deep, introspective narrative, Square's game [Final Fantasy VII] was also the first RPG to surpass, instead of copy, movielike storytelling."
- Electronic Gaming Monthly

9. Level 3: anatomy of interactive narrative

In the third level of the game, the player comes across a fork in the path. He chooses one way to go, and a few minutes later he enters a room with three passages. According to the way the space is set, he understands that if he had chosen the other path earlier, he would have entered the room from another point. Since both courses take him to the same place, the player is conscious that this choice has had no effect on the future of the narrative. But still he wonders what he would have seen if he had taken the other path...

Up until now I have replied to two of the ludologists' overarching arguments. As we have seen, video games are capable of deploying a temporality that is suitable for the conveying of stories. Its structure is based on two levels, the database and the algorithm, itself made of two different authorities, a referee and a narrator – narrator because it tells the state of the game system (the different variables of the database

and the mathematical operations performed by the referee) to the player using a specific system of signifiers, be it images or words. Since a story communicated by way of narration is a narrative, it seems difficult to deny the existence of an "interactive narrative". But still this concept causes certain problems that we can sum up in the two last arguments of the ludological conception. The first is the argument of linearity. Indeed, a narrative has always been considered as a closed and fixed sequence of events told. Since a game, being a cybertext, is characterized by the opposite principle – variability –, how can we talk of a "game narrative" if the game's outcome is not yet decided? This in turn will lead to the last argument, according to which the narrative sequences present in games and the gaming sequences themselves are neatly separated and should be seen as completely independent. The narrative having no effect on the game and vice-versa, video games could not be said to sport an "interactive narrative".

9.a) Dual structure of narrative

Chris Crawford, in his chapter "Interactive Storytelling" from *The Video Game Theory Reader*, mentions a problematic way of looking at narrative in video games. Many games seem to be made of an alternation between interactive non-narrative segments, and narrative non-interactive segments:

> The story itself is noninteractive, and the game itself lacks dramatic content. You interact with the nonnarrative game, then see some non-interactive story, then interact some more with the game, then see more story, and if you alternate between the two fast enough, it becomes an "interactive story"– right? [2003: 260]

This corresponds to a very strongly anchored reality in the video game industry: the model of the cut-scene, popularized among others by *Ninja Gaiden* (Tecmo, 1988; see figure 10 below).

Figure 10: *Ninja Gaiden*, emblematic figure of the "cut-scene".

In this model, a non-interactive narrative sequence appears after each level or game section to advance the story and provide a narrative justification for the next level. Once the cut-scene is over, the player regains control over his character and progresses in a standard action game level. This means that narration and interaction alternate without ever mixing. The ludologist deep inside us will (rightly) claim that this proves that video games are unable to "tell" stories, since if they want to convey a story, they must simulate literary or filmic techniques to do so. Indeed, they must suspend their faculty of interactivity by refusing, for the duration of the cut-scene, any input from the player. However, this observation rests on a prior assumption that seems to be a given, but which must be questioned: that is, that when we speak of the narrative of *Ninja Gaiden*, we mean the text and actions displayed during the cut-scenes, while the game sequences themselves would be non-narrative.

Jesper Juul has established a classification to distinguish between different types of games depending on their degree of variability [2002]. There are on the one

hand *games of progression* that take place in a structure that is quote closed and in which the player works to actualize an "ideal" sequence of events. On the other hand are *games of emergence* which are based on a relatively small number of rules capable of generating a multitude of variants. On the side of progression would figure games such as *Super Mario Bros.* or *Adventure*, where the designer places a series of puzzles or challenges that require finding *"the"* one good solution. Most classic games, like chess or sports, would figure on the side of emergence: only the base rules are specified, the challenge arising from their combination. It is easy to imagine a narrative neatly separated from the game in the case of progression games, since the player's experience is tightly controlled by a rigid structure that forces him to advance in a certain order, which allows the designer to place cut-scenes to communicate a narrative along the player's path. But how can one embed a narrative in an emergent game?

In truth, Juul has created these categories to describe the way in which the player is challenged. Even though at first sight we tend to associate games of progression with narratives and not games of emergence, such is not the case with actual games. For example, in *Prince of Persia: Warrior Within*, a very closed game of progression, the game's ending depends on the player's performance. If he has found all the power-ups, the prince (his avatar) acquires a weapon which he uses to defeat the final enemy (the Dahaka), and manages to leave the island with the Empress; if not, he is forced to kill her and then run away. The narrative's conclusion thus depends on the actions performed by the player outside the cut-scenes, which provides a first hint that the question is possibly more complex than a simple "game =

non-narrative, non-game = narrative" association which common sense usually takes for granted. The narrative does not amount exclusively to the cut-scenes independently of the game sequences; rather, there is a certain interpenetration of the two. If that is the case, can there be a "narrative" in games of emergence?

Two linguistic hurdles lie in the path of video game researchers that study narrative. The first stems from the polysemic nature of the word. On this matter Henry Jenkins [2004] has suggested four types of narratives to conceive of in video games:

– "evoked narratives" (certain settings or hints of intertextuality can evoke to the player stories that he already knows);

– "enacted narratives" ("Most often, when we discuss games as stories, we are referring to games that either enable players to perform or witness narrative events – for example, to grab a lightsaber and dispatch Darth Maul in the case of a *Star Wars* game.");

– "emergent narratives" (which are not pre-defined and result from the player's interaction with the rules);

– finally, "embedded narratives" (which are pre-defined and which the player discovers little by little during his game experience).

We can divide these types of narratives in two: *enacted* and *emergent* narratives depend directly on the player's actions, whereas *embedded* and *evoked* narratives, for their part, are "already written" when the player enters the fiction. As Jenkins mentions, detective stories function according to this model. On the first level – of the game – Tex Murphy, in *Mean Streets*, tries to find Carl Linsky by moving from place

to place, acquiring items, interrogating people, and so on. In so doing, he discovers the second narrative level of the predefined narrative: Carl Linsky was involved in a secret thought-control project, he has been pushed to commit suicide against his own will, etc. There is no doubt that this second narrative level constitutes a narrative, but what about the player's actions on the first level? Are they not contributing to the making of a second (or first, according to level!) narrative?

Indeed, we can postulate that, rather than having an alternation between predefined narrative and non-narrative gameplay, there is a dual narrative structure, and not only in a handful of "thematic genres" (like the detective story, for instance), but in *all* games that convey a dramatic story, as limited as it may be. In this fashion every game would contain on one hand a pre-written narrative, which is in a sense invariable since the player's actions make him discover this narrative level without influencing it directly, and on the other a narrative resulting from the player's actions during a game. So how can we account for this second narrative which "comes alive" only when the player picks up the controller?

This is linked to the second hurdle, which mainly exists because most research in video game studies are done in *la langue de Shakespeare*. As Marie-Laure Ryan [2006: 189] mentions, English only has the word *game* to refer both to the French *jeu* and *partie*, which renders the distinction difficult to make. I will thus suggest a simple terminology to avoid any confusion. Every game exists in itself as a system of rules (the *jeu*, or "the game of chess"). Let us call it the *game-object*, or GO. When these rules are set in motion during a "game" (what I called earlier a run-through; a

temporal event, a specific instantiation, the *partie*: *this* particular game of chess that took place yesterday night), they reveal the game (as object)'s nature, the pleasure one can have in playing it, etc. The rules engender the *game-process*, or GP. Through the GP, the player effectuates a series of actions which, I believe, must be considered as forming a narrative. Following this hypothesis, the whole of the actions performed by the player in the GP (his path taken through the GO) will be designated by the term *videogame narrative* (VN), since this narrative, born in the GP, is based on the interactivity that is inherent to the medium. The narrative that is pre-defined by the game's designers and which the player only discovers during the GP will, to borrow a term from Jenkins, be qualified as an *embedded narrative* (EN).

To illustrate all this, let us consider the case of *Super Mario Bros.* The game features an embedded narrative: the princess has been kidnapped by the evil Bowser, Mario decides to go rescue her, he progresses among the worlds, confronts and defeats Bowser, and saves the princess – which also saves the mushroom kingdom. This EN is fixed and unchanging. Of course, if my performance is not up to the task, I will not see the ending, but it does not mean that it varies according to my actions in the game. Provided I can satisfy the conditions required to reach the game's ending, nothing has any importance, whether I succeeded right away or after 20 tries, whether my score is very high or extremely low, and so on. We must in this way conceive of the EN as a thread which the player's performance will unwind, allowing him to see the whole narrative. It is thanks to this unchanging nature of the EN that we can discuss our possibly different GPs from a same GO on common ground. Even if I died a dozen times in each level and my discussion partner has beaten Bowser by

throwing fireballs at him instead of hurling him down into the lava, in both cases Mario still has saved the princess. It is our VNs that will be very different…especially if one of us used warp pipes to skip half of the game's worlds! Yet still we must agree whether our run-throughs of *Super Mario Bros.* have produced a "narrative" or not. Let us come back to it then.

9.b) Narrative and the principle of variability

As Gerald Prince's definition mentioned, a narrative is both a product, object and structure (pre-defined: this is our embedded narrative, or EN) and a process, act and structuring (this is our mysterious VN). French theorist Roger Odin's approach called semio-pragmatics is based on this very alternative:

> In this perspective a film does not make sense on its own, but rather its sense comes to it from its relationship with the viewer. The viewer produces the filmic text from the spots on the screen and the sonic vibrations that are given to his sight and hearing. […] Instead of having a mechanism of transmission of a text from an emitter to a receiver, there is a dual process of sense-making, one made in the space of creation by the [film's] director and the other made in the space of reception by the viewer. [Odin in Pliskin, 2000][64]

This logic seems much better suited to our particular interest. Why should we study interactive narrative using an immanentist approach centered on the object? It is well-known that game design is a task that necessitates a good portion of testing to ensure the system behaves in the way the designers want it to:

> Quality assurance/testing is the finding and reporting of bugs in video games and software. In the video game industry, QA has become essential for companies to compete for consumers. Testing is often considered one of the most critical components of the

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[64] My translation from the French original: « Dans cette perspective là un film n'a pas de sens en lui-même mais le sens vient au film dans la relation avec le spectateur. Le spectateur produit le texte filmique à partir de ces taches sur un écran et de ces vibrations sonores qui lui sont données à voir et à entendre. […] [A]u lieu d'effectuer un mécanisme de transmission d'un texte d'un émetteur à un récepteur, il y a un double processus de production de sens, l'un qui est fait dans l'espace de la réalisation par le réalisateur et l'autre qui est fait dans l'espace de la lecture par le spectateur. »

> development cycle. It is the glue that holds the final product together. It is both time consuming and intensive. And there is nothing worse in the eyes of a consumer than having your favorite video game freeze/lockup after beating the 3rd level boss! [IGDA Business Committee, 2003]

What this essentially means is that game designers, no matter how hard they try, cannot fully measure the ramifications of their game rules because the results they engender, once set in motion, are too complex to predict. This is in turn an indication that the link between game-object and game-process is tenuous at best. A study of the video game-object as a "series of rules resulting in a variation of states" from a formalist or structuralist perspective certainly is useful to better understand multiple aspects of video games (cf. "Games as Emergent Systems" in Salen & Zimmerman, 2004), but such an approach does not allow us to account for the Holy Grail of the digital age that the "interactive narrative", or our videogame narrative, is.

This can be demonstrated by studying a particularly insightful example: the game *Diablo* (Blizzard North/Vivendi Universal, 1996). In this game the player controls a character that he has first created: he can choose a class (warrior, archer or sorcerer) and distribute a certain number of points among different attributes. In this way each player does not play as the same character, and the game experience thus differs: the sorcerer is weak at the beginning but reaches the highest peaks of power in endgame, the warrior has a hard time fighting groups of archers since he excels at melee combat, and the archer must constantly move about to keep her enemies at a safe distance. Regarding the action, the game consists in exploring a labyrinth filled with evil creatures and treasures, one level at a time, in order to defeat Diablo, a demon that inhabits the 16th and final level. One of the innovations to which the game

owes some of its popularity regards the setting: each of the game (GO)'s sixteen levels is randomly generated every game (GP). The walls, rooms, enemies, treasures and locations of the stairways leading to the next level are all created according to algorithms specified by the designers. Figure 11 shows three "first floors" from three different games I have started.

Figure 11: Three *Diablo* games: same place, different spaces. (personal screenshots)

As can be seen, each of them is quite different from the others. In such a case, how can we apply a structural analysis to study the game-object, if the dungeon's floors are created only at the start of a game-process? We cannot in this case talk of *Diablo*'s "text" in a perspective that is external to our experience of playing the game.

If we were to rip open the *Diablo* CD-Rom and search for the content therein, we would not find game levels, but only algorithms. We could translate them into everyday language as approximately such:

Computer, when a mouse click is registered on tile x55,y40 [the tile of the staircase leading to the first labyrinth level]:

Load the textures of the "labyrinth01" group;

Generate 40 rooms laid on a maximum of 255 tiles by 255 tiles, distributed as such:

- from 1 to 4 rooms of 4 tiles by 8 tiles;

- from 5 to 11 rooms of 3 to 6 tiles by 9 to 14 tiles;

- from 6 to 12 rooms of 12 to 16 tiles by 18 to 30 tiles;

Place the staircase leading to the next level in a room that is at least 6 tiles by 6 tiles;

Fill the three largest rooms with arches according to the "arches-labyrinth01" algorithm;

Place monsters according to the "monsters-labyrinth01" algorithm, and treasures according to the "treasures-labyrinth01" algorithm.

This simple list of procedures to follow is as different from the player's experience of them as the scientific description of the wavelengths of color is to the experience of color. When the player plays *Diablo*, he sees corridors instead of "rooms of 3 to 6 tiles by 9 to 14 tiles, dressed in the textures from the labyrinth01 group". He encounters monsters that are – to him – there to prevent him from exploring the rest of the labyrinth, amassing treasures, and defeating Diablo, and not simply because the algorithm has specified a certain number of enemies to appear in the level. The player only sees the *execution* of the algorithm that acts as an *ordering authority*[65]. If it is true that there is no *videogame* narrative (VN) inscribed in *Diablo* – we could frantically search the contents of the CD-Rom, but we would not find a "the player comes before a monster and slays it", for instance – there nevertheless results, from the interaction of the different rules with the player, a content that is

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[65] In the relatively rare case of *Diablo*, it acts as an authority of monstration. The designers, instead of ordering the elements of the database in a first structuring themselves, gave created a "first-level" algorithm to take care of this. We cannot confuse it with the "second-level" algorithm that we find in all games and that acts as a narrator and referee.

compatible, as we have seen earlier, with that of a story, and conveyed by way of narration.

We could object that this is only true in the case of games of emergence such as *Diablo*, but that as regards games of progression, things are different. But these games do not contain a videogame narrative fixed in the game-object that could be extracted and analyzed like structuralism did for literary works (and which we could do for the embedded narratives of video games) either. This idea doubtlessly stems from the legacy of "choose-your-own-adventure" books that truly sported a segmented narrative in a pre-defined tree structure, but there is one crucial difference between video games and these books. "Choose-your own adventures" were written from cover to cover by an author, and thus interactivity was based on choice; thus, every action that the reader could perform had been planned out and scripted into the game-object. Barred a few rare exceptions, video games, on the other hand, do not function on the basis of choice but according to a "repertoire of action". According to Janet Murray, digital environments are procedural: "the computer is not fundamentally a wire or a pathway but an *engine*. It was designed not to carry static information [that is, a tree structure of choices with pre-defined consequences] but to embody complex, contingent behaviors." [1997: 72].

We must not consider that each and every pixel, *Super Mario Bros.* offers the player a choice between going forward, backward, stopping, running or jumping (we would quickly have a tree so big it would be extremely difficult to even think about, let alone draw). In truth, the program contains procedures (detailed by the

programmers) that define what a jump, going forward, going backward or running is *at any time*. The possibilities for action are given to the player who can use and combine them as he pleases. A program's code is not written like this:

Computer, for pit 1:

If the player presses A when he is less than 3 pixels from the edge and maintains the button pressed for 500 milliseconds, display a successful jump over the pit;

If the player presses A when he is farther than 3 pixels from the edge and maintains (…), display a failed jump in which he falls in the pit. Play the failure music and take away one of his lives.

For pit 2:

(etc. Similar instructions are given for each pit that the player encounters during the game)

but rather like this:

Computer, when the player presses A:

Increase his position the Y axis by 3 pixels for every 50 milliseconds over 500 milliseconds, then reduce it by 3 pixels for each 50 milliseconds over 500 milliseconds;

Keep his movement speed along the X axis;

If the player's position on the Y axis drops below 0, play the failure music and take away one of his lives.

Thus all video games, whether they are of emergence or of progression, are fundamentally the same as regards narrative: they contain an embedded narrative that is both invariable and pre-defined, which can be extracted from the game-object for

analysis according to a formalist or structuralist approach, and a videogame narrative that is variable within the boundaries of the algorithm, that comes alive in the game-process, and which must necessarily be studied using an approach centered on experience. The table below sums up this classification:

Game aspect	Type of narrative
Game-Object (GO)	Embedded Narrative (EN)
Game-Process (GP)	Videogame Narrative (VN)

Figure 12: The dual narrative of video games.

The distinction between games of progression and games of emergence is not based on a fundamental difference, but simply results in a variation on the degree of importance given to both types of narratives, which can be accounted for using a formula. Games of emergence typically contain a very loose embedded narrative to give the player all the freedom to "write his own stories" (as the interactive fiction utopia hopes to achieve), and thus can be described as EN < VN. The ratio of progression games like *Mean Streets* can on the opposite be expressed as EN > VN, since it is the embedded narrative that takes precedence over the player's path, which is itself dependent on it. The structural analysis of narratives thus is intrinsically incompatible with interactive narrative, regardless of the openness or closeness of the game system, since it only has an hold on the embedded narrative and the algorithm forming the game's structure, and not on the result of the latter's execution during the game-process that spawns the videogame narrative. Let us then change our approach to semio-pragmatics and study how the videogame narrative is articulated.

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10. Level 4: semio-pragmatics perspective

The fourth level introduces a new gameplay element: though the game was up to that point in third-person view, the player now is given first-person sight. He looks at the situation differently now that he explores the world through the eyes of his character.

The starting point of semio-pragmatics, as we have seen, is to consider the text as a series of instructions guiding the viewer/reader in his sense-making activity. Thus, if I go watch a movie, I am producing a text from what is being given to me, and if there are 500 people in the theater, 500 texts will be produced, each having a number of similitudes and differences depending on the movie's clarity, the spectatorial skills of each spectator, and so on. Regarding this, a precision must be made: texts are always produced, according to Odin, "by the combination of a limited number of *modes of affects- and sense-making* that each lead to a specific type of *experience* and which, taken as a whole, form our *communicative skill*: modes of spectacle, documentary, fable, art, private, etc."[66] One of these modes can lead us to view our videogame experiences as fictions (and eventually narratives): the mode of fiction, which is defined as such: "In terms of experience (lived by the reader, targeted by the addresser), I will characterize the mode of fiction as the mode that allows me to *vibrate to the rhythm of the fictional events told*".[67] This approach can

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[66] My translation from the French original: « par la combinatoire d'un nombre limité de *modes de production de sens et d'affects* qui conduisent chacun à un type d'*expérience* spécifique et dont l'ensemble forme notre *compétence communicative*: modes spectacularisant, documentarisant, fabulisant, artistique, privé, etc. » [2000: 11].

[67] My translation from the French original: « En termes d'expérience (vécue par le lecteur, visée par le destinateur), je caractériserai la fictionnalisation comme le mode qui me conduit à *vibrer au rythme des événements fictifs racontés* » [2000: 11].

account for the differing visions regarding the importance of narrative in video games.

To show this, let us use the well-known game *The Sims* (Will Wright/Maxis, 2000) as an example. The player occupies a position similar to a god (hence why we call it a *god game*) that intervenes on the course of events in the virtual world, where he must take care of his family of simulated persons (*Sims*) by having them do cleaning tasks in their house, meet friends, learn to play a musical instrument or keep their jobs, among others. Players who play games on the mode of performance[68] come to them so they can be challenged and develop strategies. In this perspective, buying an in-ground swimming pool is expensive because the benefits on the level of stress of the Sims are high, and thus if the pool was cheap, the game would be too easy. For gamers of performance, the narrative aspect is accessory: a good game must be difficult, well-balanced, stimulating, etc. For another category of players who approach games on the mode of fiction, *The Sims* is fun because if allows them to create their own stories[69], and for them, if a swimming pool is expensive, it is because it requires a hefty amount of materials and man-hours to install. Lastly, for a third portion of players that privilege the mode of ludism, games that are closer to *paidia* than *ludus* (to use Caillois' terminology) are more appreciated. For them, the cost of building a swimming pool is only a boring limitation that prevents them from having fun with their virtual dollhouse.

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[68] In the sense of "the act of performing; of doing something successfully; using knowledge as distinguished from merely possessing it", of succeeding at doing something, achieving the highest score, etc.; not in the sense of "the act of presenting a play or a piece of music or other entertainment".

[69] One can consult a list of fansites of the game dedicated exclusively to housing stories in the "Links" section of the official Electronic Arts *The Sims* website, at http://thesims.ea.com/us/chat/links/index.html?category_id=65 (accessed February 24th, 2007).

Of course, these three player profiles are only approximations: the modes of performance, ludism and fiction (among others) are combined in every player at varying degrees depending on individual preferences, mood, gaming context, and so on. This explains why for certain people challenge is more important than the story presented (precedence of the mode of performance over the mode of fiction), while for others in the opposite situation, a high difficulty level can prevent the elaboration of a narrative. The game's difficulty will in this case be perceived as negative. And so we have a first requirement for the presence of a videogame "narrative": the player must work on the mode of fiction. There cannot be a narrative if the player is not interested in producing one. For the player who works on this mode, a certain number of operations remain to be executed, which I will detail here by summing up Odin's propositions.[70]

10.a) Diegetization

The first step to see a run-through of a video game as a fiction is to diegetize, which means to construct a fictional world (diegesis). I can do this if three conditions are met. First, I must figurativize, that is, perceive the content presented as being figurative, or "having a correspondence on the level of the expressed natural semiotics (or the natural world)"[71] [p.18]. In other words, I must have the impression that the images and sounds given to me represent something that could exist. It must

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[70] Since they have all been made in the same book, I will only list the page numbers instead of incessantly repeating the [Odin, 2000:].

[71] Odin quotes: « A.J. Greimas et J. Courtés, *Dictionnaire raisonné de la théorie du langage*, Hachette Université, tome 1, 1979, p. 146 et ss ; sur cette notion, cf. aussi tome 2, 1986, p. 90-91 ».

be noted that "the analogy is not *verified* but *presupposed*; the important thing is that I consider what is given to me as representing elements of the world, whether I can (or want to) verify their resemblance to the world or not" [p.19]. Second, I must erase the support, that is, see an imaginary world instead of a series of signs. The third requirement is that the represented space is perceived as inhabitable by a character. Once all these conditions are met, I can diegetize.

An enormous proportion of video games is based on the exploration of space by a character. In this way there are very few games that prevent diegetization. Besides *Pong*, *Breakout*, *Tetris* and their kin, videogame abstraction is rarely sufficiently important to make the player unable to find a natural-world referent to what is represented on-screen. Erasing the support is also in most cases done naturally, though it requires a period of familiarization with the game's interface and representation. For example, early video games attempted to show spaceships or characters, but it was difficult to recognize them as such because of large pixels and a limited number of colors. In these cases, one had to understand the graphics first. Once this was done, though, a spaceship might have been a block of 7 pixels arranged in triangular fashion, but it was nevertheless seen as a spaceship.

Of course, this problem does not appear in modern games since they are so graphically detailed that it is possible to recognize characters, weapons and settings without difficulty. But the required period of adaptation has not yet disappeared: it has simply migrated to the interface. Since games are becoming increasingly complex, the repertoire of actions given to the player is ever-growing (this is

evidenced in the evolution from the 4-way directional pad and 4-buttons controller of the NES to the Xbox and Playstation controllers, each sporting 2 analog joysticks, a 4-way directional pad, and 10 buttons). In this way there is a period of familiarization that one needs to go through, but once the controls are mastered, the player can enter the fiction.[72] The last requirement, which is to consider the space as inhabitable by a character, is presupposed by the incarnation of the player in an avatar. Indeed, we cannot conceive of a game in which both the player's character *and* his enemies do not exist in a space, as little, static or simplistic as it may be. As Johan Huizinga said, space seems to be at the heart of the game phenomenon:

> The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. [1955: 10]

Video games are no exception: though the player does not seem to have a place in the diegetic universe of the *The Sims* (he is a controlling, invisible entity), his Sims, for their part, very well inhabit this space.

10.b) Narrativization

Once diegetization is in motion, I can produce a narrative. To this end, I must be able to link the elements that are communicated to me by the three requirements which I established earlier for the dramatic story: temporality, causality, and conflict. This takes the events to the next level: narrativization, which works as "a kind of backdrop" (*une sorte d'arrière-plan*). On this level I remain in a state of "*pre-comprehension* of sorts" (*une sorte de pré-compréhension*) [p.29]: the events that unfold seem to order themselves toward a certain goal and as a part of some kind of

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[72] For more details on this topic, see my paper "Dark Waters: Spotlight on Immersion" [2005].

narrative reach, though it is still too early to grasp all its ramifications. The level of narrativization reigns supreme in video games. Unlike what Espen Aarseth [in Ryan, 2004] declared, and as Ryan [2006] said, video games are not experimented like real-life, because they take place in worlds that we know have been created by designers. This results in a fundamental difference that transforms our expectations and perception: we look at video games with the idea that *all makes (or will make) sense*, and that nothing is the work of randomness, exactly like we look at novels or movies. (Lev Manovich said so: "in a game, from the user's point of view, all the elements are motivated (i.e., their presence is justified)" [2001: 222][73]).

In this view, an event without justification is merely in wait of being justified.[74] This is why, when I find the Space Jump Boots while exploring the hallways in *Metroid Prime* (Retro Studios/Nintendo, 2002), I suspect this is not an item placed there without reason. Without the shadow of a doubt, collecting this object constitutes a micro-narrative that will later embed itself in a larger narrative, by successive insertions, until my finished videogame narrative is formed; but in which way it will embed itself, I cannot say at this stage. I see that something is in the works, and I narrativize: I put this discovery among the "actions" and wait for its justification to be found later to finish the "network" that will link my actions together.

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[73] Manovich, in making this comment, quotes David Bordwell and Kristin Thompson, who explain motivation in film in *Film Art* (op. cit.).

[74] I am referring to the *videogame* narrative here, and not to the embedded narrative. To take back my *Mean Streets* example, it is not about examining how the player discovers (at the same time than Tex Murphy) what happened to Carl Linsky, but rather how the player understands the many actions he undertakes: why he goes to this destination, what his searching of that desk means, etc.

10.c) Narration

To obtain a narrative, the narrativized content must be structured on a second level: the one of narration. To do this, three operations must be performed:

- 1) A semantic operation of content structuring, which means to construct a semantic isotopy (a group of elements that, by recurrence, create coherence) whose contents are regulated by a temporal relationship of succession and which can be articulated in a single great transformation, according to a thematic hypothesis (a topic). Typically, the reader approaches a text with a hypothesis that comes from his own expectations and desires, his social context, or the paratext.

- 2) An operation of structuring of forces, that is, grouping the actors (in the sense in which I have defined them when treating the concept of "story") in paradigms according to their function. On this topic, Greimas' actantial model works perfectly (Subject, Object, Helper, Opponent, Addresser, Addressee, etc.).

- 3) A temporal syntagmatic operation, which consists in ordering the actions in a succession "corresponding to the phases expected of a narrative" [Odin, 2000: 31][75]. According to Odin, all the observations made by the different theorists regarding the phases of narratives can be worked in a 7-phase model: initial situation, triggering event, recognition of change and decision to respond to it (assignation of a goal), quest for the means to reach the goal, complications and struggles, resolution, final situation. This variation on Larivaille's model I presented earlier is explained by the fact that "these phases presuppose each other: only this presupposition allows us to

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[75] My translation from the French original : « correspondant aux phases attendues pour un récit »

understand a narrative, even if it is lacking: the missing phases are reestablished by inferences."[76]

The semio-pragmatic approach has much to do with cognitive film theory. In this domain, Bernard Perron has studied the film reception activity, which he dubbed spectatorship-in-progression (*spectature-en-progression*), and suggested to think of the work done by a narrative movie spectator in terms of heuristics, "a method of exploration by successive evaluations and temporary hypotheses which does not guarantee an answer or a clear and precise solution."[77] This ties in with the first-level structuring which Odin calls narrativization. Since the second-level narrative structuring functions by the insertion of narrativized micro-narratives, every new element that gets to the spectator/player potentially entails a restructuring of the narrative level. This is why Perron asserts that "[the spectator] "circles" around the micro-questions raised by the intrigue. When he finds answers and things get clearer, he can abandon some of the hypotheses he came up with earlier. At the end, he will have effectuated one functional "circle" around the macro-question(s) of the film."[78] In other words, the articulation of the micro-narratives in a single great transformation requires knowledge of the intrigue's last word:

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[76] My translation from the French original: « ces phases se présupposent l'une l'autre: seule cette présupposition permet de comprendre qu'un récit, même très lacunaire, puisse tout de même être compris: les phases manquantes sont rétablies par inférences » [p.32].

[77] My translation from the French original: « une méthode d'exploration qui procède par évaluations successives et hypothèses provisoires et qui ne garantit pas une réponse ou une solution claire et précise. » [Perron, 2002: 138]

[78] My translation from the French original: « [le spectateur] 'tourne' autour des micro-questions soulevées par l'intrigue. Lorsqu'il trouve des réponses et que les choses se précisent, il peut abandonner certaines hypothèses qu'il avait formulées. À la fin, il aura fait 'un tour' fonctionnel de la ou des macro-questions du film. » [2002: 149]

> To follow a story is to advance among contingencies and peripeteia under the guidance of an expectation that finds its accomplishment in the conclusion. This conclusion is not logically implied by any anterior premises. It gives to the story a last word that in turn provides the point of view from which the story can be perceived as forming a whole. To understand a story is to understand how and why the successive episodes have led to this conclusion which, far from being predictable, must in the end be acceptable as congruous with the episodes assembled.[79]

And so my discovery of the Space Jump Boots in *Metroid Prime* starts to make sense when, a few minutes later, I encounter a pit that is too wide to be jumped over: the boots I found allow me to jump twice in the air, and thereby to bypass it. All the elements required for narrativization are present: the two events are linked by a temporal relationship of succession (I found the boots before encountering the pit), and each depends on the other: obtaining the item allows me to resolve the conflict which the pit creates regarding my mission (exploring the planet to find and destroy "evil", a topic given to me by the game's tagline[80]), and the pit provides the causality for me finding the boots (I found them so I can progress beyond this point). However, I still need more data to structure these events in a narration, first and foremost the "last word" of my adventure. Until I have reached the end, I will not know whether bypassing this pit leads me to find the "evil" or only allows me to find another item which could in turn be used to access a new space, etc. It is thanks to the closure that I will be able to structure the many micro-narratives and understand how their insertions in greater narratives have formed a homogeneous whole.

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[79] My translation from the French original: « Suivre une histoire, c'est avancer au milieu de contingences et de péripéties sous la conduite d'une attente qui trouve son accomplissement dans la conclusion. Cette conclusion n'est pas logiquement impliquée par quelques prémisses antérieures. Elle donne à l'histoire un point final lequel à son tour fournit le point de vue d'où l'histoire peut être perçue comme formant un tout. Comprendre l'histoire, c'est comprendre comment et pourquoi les épisodes successifs ont conduit à cette conclusion laquelle loin d'être prévisible doit être finalement acceptable comme congruente avec les épisodes rassemblés [Ricoeur, 1983: 104].

[80] « Evil must be exterminated. But first, it must be found. » It can be consulted at the entry dedicated to the game on the IMDB (Internet Movie Data Base), online at http://www.imdb.com/title/tt0319854/ (accessed February 24th, 2007).

In the case of *Metroid Prime*, it is only after defeating the namesake enemy that my thematic hypothesis is confirmed. From there, the semantic isotopy can be constructed. The recurrence of actions (moving through environments, finding new items, fighting enemies) allows me to articulate the single great transformation of my game: Samus explores the planet and defeats the "evil". The structuring of forces is also done: the many artifacts are *helpers* that help me triumph over the *opponents* that the spatial geography and enemies are, forces that try to prevent Samus (my avatar, the *subject*) from exploring the planet to find and exterminate "evil" (the *object* of the quest). Finally, this "last word" of my game allows me to identify the last phases of the narrative, the resolution and the conclusion. Even though we know that the greater majority of videogame narratives end with a large-scale confrontation against the main enemy (the "boss fight"), we cannot understand how each game element plays a part (or not) in this final conflict until getting there. The fight against Metroid Prime, for instance, is not affected at all by the Space Jump Boots. Their use thus resides not in the defeat of "evil" but in Samus' ability to find it. I need the "last word" to determine exactly which role the item plays in the narrative and what its meaning is in terms of gameplay.

<div align="center">*</div>

11. Boss fight: synergy of narratives

Finally, after all the trials he has been through, the player stands before the leader of his enemies. The boss fight commences, a final battle that will test the abilities and skills which the player has acquired along the way.

Up until now I have analyzed the videogame narrative exclusively, by treating

it as an entity that could be perfectly separate from the embedded narrative. Yet I still

have not given up in face of the fourth and last ludological argument which asserts

that games (the videogame narrative) and narratives (the embedded narrative) have no

impact on each other – saving, like an astute gamer (or like the protagonist of a

narrative, as suits the reader) my ultimate weapon for the most difficult fight. It is the

concept of attunement put forward by Odin: "I call *narrative attunement* the process

that leads me to *vibrate to the rhythm of the events told*".[81] To be attuned to a

narrative requires two operations:

> The first requires that I reverse the work of the whole filmic parameters to the service
> of the narrative; this means that all the esthetic, rhythmic and musical work of the
> film, all the dynamics of montage, the interplays on framing and the way in which
> actors play their roles, must be brought to the work of narrative. In a movie *read in
> attunement, everything becomes narrative*.[82]

Thus for a spectator viewing *Indiana Jones and the Temple of Doom* in the

perspective of fictionalization (who wants to produce a narrative), all the formal work

of the conveyor belt scene is done in service to the narrative: the alternating montage

showing in succession the enemy and the rock crusher, the accelerating music, etc.

Even better, this work is done to make him live what Indy feels. This is the second

operation required for attunement: "that the relations created between the spectator

and the filmic signifier (the *filmic relations*) are constructed as homologous to the

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[81] My translation from the French original: « J'appelle *mise en phase narrative*, le processus qui me
conduit à *vibrer au rythme des événements racontés*. » [Odin, 2000: 39]

[82] My translation from the French original : « La première impose que je reverse le travail de
l'ensemble des paramètres filmiques au service du récit; cela signifie que tout le travail plastique,
rythmique et musical du film, que toute la dynamique du montage, du jeu sur les regards et des
cadrages ainsi que la façon de jouer des acteurs doivent être rapportés au travail du récit. Dans un film
lu à la mise en phase, tout devient narratif. » [p.42]

relations existing between the elements of the diegesis that are prevalent in the unfolding of the story (the *diegetic relations*)"[83]

Narrative attunement corresponds to the "analogy between the player-machine-relation and the player-world-relation" which Rune Klevjer has evoked:

> In a strategy game like *Sim City*, the simulation establishes a characteristic analogy between the player-machine-relation and the player-world-relation: balancing parameters *is like* rational management of a city. System A (the computer program) is analogous to system B (the city) – both systems being a specific interpretation of the other. When system B is interpreted in terms of system A, playing with the machine is the attraction. When system A is interpreted in terms of system B, playing with a fictional world is the attraction [quoted from the electronic version].

In *Sim City* (Will Wright/Maxis, 1989), the player is tasked with becoming the mayor of a city. This embedded narrative, though extremely minimal, constitutes the "system B" of which Klevjer speaks, or Odin's "diegetic relations". This brings us to analyze that it is the embedded narrative that provides the diegetic relations to the player, while the videogame relations (the player's relationship with the game, analog to the filmic relations) take place in the videogame narrative. In other words, the predefined narrative communicated to the player by way of non-interactive narration provides him with elements that will charge with narrativity the events to unfold next in sequences of interactivity (that are supposedly non-narrative, a point that I dispute), making these events narrative. This indicates that there seems to be an interpenetration between these two narrative levels, and that far from being arbitrary, the relationship between a game's gameplay (which delimitates the repertoire of

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[83] My translation from the French original: « que les relations créées entre le spectateur et le signifiant filmique (les *relations filmiques*) soient construites comme *homologues* aux relations existant entre les éléments de la diégèse qui sont parties prenantes dans le déroulement de l'histoire (les *relations diégétiques*) » [p.44].

actions that a player can execute) and its embedded narrative is founded on an analogy and a link of necessity.

I will illustrate the working of narrative attunement by analyzing a specific game sequence from the perspective of a fictionalizing player : the transformation scene of Cecil in *Final Fantasy IV* (Square, 1991)[84]. In this game, the player incarnates Cecil, a Dark Knight who serves a king named Baron. In the introductory sequence and the first hours of gameplay, he commits some acts which he judges morally reprehensible because of what seems to be duty and loyalty to his lord, but which is later revealed to be a lack of will. After having burned down a village and almost killing a child, he makes the decision of rejecting this existence and tries to protect this child, an attempt to atone for his deeds. He will soon be engaged in a conflict with a man called Golbez, Baron's new right-hand man, and will be directed to Mount Ordeals to leave behind his life of Dark Knight and become a paladin[85]. It is, according to a sage who steers him toward this path, the only way to defeat Golbez, for as long as Cecil depends on the dark sword, he will be unable to defeat evil, and might even become corrupted by its dark nature someday.[86]

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[84] The game has actually been published in 1991 under the name *Final Fantasy 2* outside of Japan since at the time it came out, Square had exported only the first *Final Fantasy*. As the second and third titles in the series had only been published in Japan, when the company decided to translate and export *Final Fantasy IV*, it was named *Final Fantasy 2*. Since then the chronology has been readjusted, and remakes of the game that appeared on other platforms have been given the title « *Final Fantasy IV* ».

[85] Typically, in a role-playing game that takes place in a medieval fantasy setting, the paladin is a champion of good, a good and noble warrior.

[86] He says exactly: « while you depend upon the dark sword, you cannot overcome true evil. Moreover, you might be consumed by its darkness someday. » (Quoted from an online transcription of the game's script, available at http://www.neoseeker.com/resourcelink.html?rlid=64499&rid=59634 (accessed February 24th, 2007).

Final Fantasy IV is an RPG (*Role-Playing Game*). This videogame genre attempts to be a digital rendition of the standard role-playing game which I have discussed in chapter 3. In this way, I can look at Cecil's attributes in a game menu, which are at the start of the game: Strength: 10; Agility: 13; Vitality: 11; Wisdom: 6; ….and Will: 3. In a role-playing game, the power of a character is measured according to his "experience level". By defeating monsters and gaining experience points, a character increases in level, and his attributes increase as well. Yet, according to the information which Étienne Santerre has submitted in a guide to the game dedicated to maxing out the ability scores of each character, Cecil's attributes, if he gets to level 70, are: Strength:61; Agility: 41; Vitality: 41; Wisdom: 24; Will:…1! Such a backward movement in statistics can not be explained by any game logic, and can only be perceived as an aberration, a programming bug. For a fictionalizing player, however, this simple mathematical operation contributes to his narrative attunement, clearly establishing that the game system is put to the service of the intrigue. Cecil's Will weakens as he gains power being a Dark Knight because the dark sword that he wields slowly consumes him. The embedded narrative thus details a part of the videogame narrative.

When he gets to the top of Mount Ordeals, Cecil is transformed into a paladin by a ray of light. But his reflection in the mirror does not change, and suddenly his Dark Knight reflection attacks him as a voice tells him to "break from the past and conquer his own darkness". In order to win this fight, the player must not attack the enemy. After a few combat turns in which the player chooses the "Defense" option or simply waits, the Dark Knight decays and disappear, and Cecil has become a paladin.

Not only does this boss fight (like Cecil's Will attribute decreasing) not make much sense on its own if we disregard the embedded narrative that is communicated, but it instates a videogame relationship (between the player and the game) that is homologous to the diegetic relationship (between Cecil and his past). Up until now, the game's embedded narrative has shown the player that Cecil's weakness is his lack of will. To become a paladin and leave behind his former existence, he must "break from the past" by making an act of self-determination, proving his willpower and getting rid of his flaws to obtain redemption. The very same effort is required from the player: he must refuse to attack his enemy, a decision at the very opposite of what he has done up until now and which requires an effort of will because it goes against common sense and endangers his character. It is by narrative attunement that the player can make sense of the fight.

The example of *Final Fantasy IV* should suffice to show how the two narrative levels are not without link, separated and distinct beyond all necessities, but rather form a synergy, both working to complete the other's contribution to offer the player an articulated and coherent experience. Playing a game in the perspective of fictionalization allows one to understand certain aspects of video games that we would have a hard time pointing out by resorting to other approaches.

Conclusion

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While Waiting for the Cyberbard

> *"It seems to me quite possible that a future digital Homer will arise who combines literary ambition, a connection with a wide audience, and computational expertise. But for now we have to listen very, very carefully to hear, amid the cacophony of cyberspace, the first fumbling chords of the awakening bard."*
>
> - Janet Murray, *Hamlet on the Holodeck*

12. Ending cut-scene: the forbidden union consecrated

After having triumphed over all the hurdles in his way, the player can finally watch the ending cut-scene. Beyond serving as a reward, it often goes back over the accomplishments of the player throughout the game.

I started this thesis with a look on the troubled relationship between game and narrative, a union that many believe to be impossible:

> "Curiously", there are no attempts to define games as narratives in Elliott M. Avedon's and Brian Sutton-Smith's classic *The Study of Games* (1971) that contains and compresses a century of Western game studies. The words and contested concepts like narrative, story, drama, or theatre do not come up even in its subject index. So should we believe that suddenly, by the advent of computer games, games turned into narratives? Maybe something happened in the marketing department instead [Eskelinen, 2001].

Eskelinen makes an interesting claim here. Unfortunately, it is not strong enough to deter a very simple hypothesis, which lies at the heart of Jesper Juul's *Half-Real* and

whose foundations I have pointed out in here. Maybe the advent of video games has not suddenly transformed games into narratives but, simply, that video games have things in common with narratives that classic games do not. In other words, and as I have said at the beginning of this thesis, video games would be intrinsically narrative.

I think my reasoning, if it has not proven it, has at least offered some solid ground on which to build this hypothesis. Besides a certain number of relatively marginal productions in which the player does not incarnate an avatar and/or no inhabitable space is represented, on the level of content, a very large majority of video games are made of the same constitutive elements than a "dramatic story": temporality, causality, and conflict. On the level of expression, games are, like novels or movies, filled with operations on temporality, even if these are not truly a mark of narrativity. Video games are narrative because the algorithm, analogous to the Game Master in a role-playing game, not only serves as a refereeing authority tasked with upholding the rules, but also as a narrative authority responsible for ordering the unfolding of contents and informing the player about what becomes of the fictional world and the actions he undertakes. Whether this communication between man and machine can be considered a narrative depends on the player. Extrinsically, video games are capable of "telling" stories by emulating cinematographic or literary techniques to present a "classical" (embedded) narrative. Intrinsically, the player's actions can be narrativized since video games provide from the onset the elements necessary for diegetization. This is where its specificity lies, and is why the concepts of story, narrative and narration appear so often in video game studies. For a player

coming to the game on the mode of fictionalization, everything is narrative, and his run-through of the game is in this respect a *narrative in becoming* that will crystallize itself with the "last word" of the game. Far from being a useless ornament, the embedded narrative provides the diegetic relations which give the player a chance to establish videogame relations that are homologous to them, and in so doing become attuned to the fusion of the two narratives and get to "vibrate to the rhythm of the fictional events told" [Odin, 2000: 11].

For a player approaching a game on the mode of performance, the embedded narrative can indeed be nothing but a useless ornament that gets in the way of what he truly wants (to be challenged). The whole representation of a fictional world then only serves as a crutch or backdrop for his comprehension of the gameplay: it is easier to know what to do when facing a horned demon charging towards oneself with fury in its eyes than interpreting the lateral movement of a green pixelized figure on a blue axis. Though I detailed the workings of narrative attunement, the intricacies of performative attunement remain to be deciphered, as well as the way in which a player is made to privilege one over the other. It is clear to me that the ludic posture taken to shape a videogame play experience depends at least as much on the game itself than on the individual preferences of a given player. The next step of my thinking will be to identify and break down the different constitutive elements of the videogame genres, for I believe the expectations and narrative positioning of a player are shaped primarily by the type of gameplay that a game offers.

Janet Murray envisions (or impatiently awaits?) the coming of a "cyberbard", a true "mega-narrator" wielding the literary word with a velvet glove and the computer code with an iron fist, putting the computer's power at the service of imagination and grand stories rich in emotions. Yet I have personally lived this during my whole childhood. As I had "the chance" of being born in the 1980s, I played video games on my parents' Atari 2600 console from my earliest days on. At the age of four we played, my brother and I, a game which I believe to be *Star Raiders* (Atari 1979), in which the player pilots a spaceship. We did not know what the game's objective was (if there even was one), but "surviving for as long as possible" seemed pretty acceptable. Rearranging the couch cushions and pulling out cardboard boxes in the basement, we would build around the television the spaceship in which we took place. The one using the Atari controller would be the pilot, and the other the mechanic. When the pilot took damage, he would yell orders to the mechanic who would in turn repair the ship with all sorts of objects and toys on hand. A multitude of situations, each more dramatic than the last, would come out of these gameplay sessions.

Of course, twenty years later, I would never have the idea of doing this, and not only because I have grown up. Video games have changed. Today's production is much more directed, and the vast majority of games contain (embedded) narratives to guide the player's experience. This is not a bad thing; my adolescence has been positively marked by games of this type that succeeded in communicating to me ideas far more complex and interesting than a simple game of galactic make-believe. But all this leads me to believe that the utopia of interactive fiction, far from resting on

the shoulders of a coming cyberbard, would rather be the work of an Homeric interactor, a fictionalizing player who would never miss an opportunity to inscribe his gameplay performance in a narrative context.

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13. Credits

Once all has been said, the player can see the list of people who contributed to craft

his gaming experience.

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<u>Ludography</u>

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Astérix et Obélix contre César (Cryo, 2000)

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Chessmaster 9000 (Ubisoft, 2002)

Deadline (Marc Blank/Infocom, 1982)

Donjons & Dragons (Gary Gygax & Dave Arneson, 1974)

Donkey Kong (Shigeru Miyamoto/Nintendo, 1981)

Fahrenheit (David Cage/Atari, 2005)

Final Fantasy (Square, 1987)

Final Fantasy IV (Square, 1991)

Final Fantasy VII (Square, 1997)

Final Fantasy X (Square, 2001)

God of War (Sony Computer Entertainment America, 2005)

Grand Theft Auto: Vice City (Rockstar North, 2003)

Halo: Combat Evolved (Bungie Studios/Microsoft Game Studios, 2001)

King's Quest V (Sierra, 1990)

La planète des singes (Visiware, 2000)

Max Payne (Remedy Entertainment/Gathering of Developers, 2001)

Mean Streets (Access Software, 1989)

Metal Gear Solid (Hideo Kojima/Konami Computer Entertainment Japan, 1998)

Metroid Prime (Retro Studios/Nintendo, 2002)

Monopoly (Charles Darrow/Parker Brothers, 1935)

Ninja Gaiden (Tecmo, 1988)

Pong (Nolan Bushnell/Atari, 1972)

Prince of Persia: The Sands of Time (Ubisoft, 2003)

Prince of Persia: Warrior Within (Ubisoft, 2004)

Puzzle Bobble (Taito, 1994)

Shadow of the Colossus (Fumito Ueda/Sony Computer Entertainment, 2005)

Sim City (Will Wright/Maxis, 1989)

Solitaire (Wes Cherry, 1989)

Space Invaders (Taito, 1977)

Star Raiders (Atari 1979)

Star Wars (Atari, 1983)

Star Wars: Knights of the Old Republic (BioWare/LucasArts, 2003)

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