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Narrative Equivocations between Movies and Games

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FOREPLAY

When the film version of the popular role-playing game *Dungeons & Dragons* (2000) was advertised on television, despite the commercial's emphasis on fast-cut visual spectacle moving at the speed of gameplay, it ended with the punchline, 'It's not a game!' This equivocating insistence on both the similarities and differences between games and movies is growing shriller, in both the popular press and cultural theory, as the convergence between these two forms increasingly appears inevitable.

In exploring this equivocation, I will focus on the comparison not only between electronic games and movies, but also more broadly between games and narrative. I come to this subject as a cultural theorist who has been writing about narrative since the 1960s, first in literature, then film and television, and now 'new media'. Since 1997, I have been directing a research initiative on interactive narrative, the Labyrinth Project, where we daily confront these equivocal relations while producing electronic fictions in collaboration with film-makers and writers known for nonlinear experimentation in earlier non-digital forms.

I will argue that narrative experimentation in cinema from earlier decades provides a valuable legacy for those interested in designing productive combinations of games and movies, especially as transmedia adaptations have thus far been so disappointing. Film adaptations of popular games, such as *Lara Croft: Tomb Raider* (2001), *Mortal Kombat* (1995) and *Super Mario Bros.* (1993), usually restrict themselves to the original sketchy characters and narrative shell, fleshing them out with generic clichés while highlighting the action, which, no matter how spectacular, still loses kinetic force. Game adaptations of films have fared somewhat better because they usually have richer characters and more elaborate narratives to draw on, especially in works such as *Blade Runner* and *Star Wars* that inaugurated paradigmatic shifts in visual culture, which can be enhanced by kinetic action and new modes of identification. Even if on-screen representations of characters prove disappointing, particularly when computer-generated or second-rate stand-ins for the original stars, players can bring memories of the original actors and back-stories to the game and put them into play, as kids do with action figures.

The hybrids I find most productive move beyond transmedia adaptations by combining the distinctive conventions and pleasures of games and movies in original ways. Perhaps because cinema is the medium threatened with extinction, these expressive possibilities have been explored in a wide range of movies: in vintage game films such as *Tron* (1982) and *The Last Starfighter* (1984); in recent complex action films such as *Run Lola Run* (1998), *Crouching Tiger, Hidden Dragon* (2000) and *The Matrix* (1999); in comedies and thrillers with experimental narratives such as *Groundhog Day* (1993), *Being John Malkovich* (1999), *Sliding Doors* (1998), *XistenZ* (1999) and *Memento* (2000); and in demanding experimental films such as *The Pillow Book* (1996), *Until the End of the World* (1991) and *Timecode* (2000).

This kind of experimentation is harder to find in games, even in today's most exciting genre – those online massively multiple player games, such as *Anarchy*, *Ultima*, *EverQuest*, *Asheron's Call* and *The Sims*. Although these profitable role-playing games provide rich narrative fields where thousands of players personalise their own avatars and objects with customised behaviours as they collaboratively spin open-ended stories, their narratives are simplistic and their pleasures interrupted by frustrating time-lags. These games could learn valuable strategies from earlier cinematic experimentation with open narratives, yet, when I made this suggestion at a recent game conference, several game designers indignantly rejected the notion.

One finds traces of this resistance even in those new media theorists who freely acknowledge continuities between electronic games and earlier narrative forms and deliberately avoid a McLuhanesque technological determinism, the dangers of which Raymond Williams exposed back in the early days of television.¹ In seeking to define 'new media' specificity, many adopt a formalist methodology I call 'cyber-structuralism', which disavows crucial discursive debates of post-structuralism and cultural studies. The most fascinating example is Lev Manovich's *The Language of New Media*, the most ambitious and rigorous book on this topic yet published.² For, despite the comprehensive range of his concerns and his broad historical contextualisation, Manovich establishes a formal rhetoric of new media without addressing cultural differences among players and practices. He ignores the crucial shift from structuralist to post-structuralist approaches to narrative, so succinctly described by Teresa de Lauretis:

Today narrative theory is no longer or not primarily intent on establishing a logic, a grammar, or a formal rhetoric of narrative; what it seeks to understand is the nature of the structuring and destructuring, even destructive, processes at work in textual and semiotic production, ... a production of meaning which involves a subject in a social field.³

To demonstrate the usefulness of narrative experimentation in cinema to contemporary gameplay while simultaneously addressing the theoretical limits of cyberstructuralism, I have chosen as my case study five experimental films produced in the highly politicised context of Paris in the 1960s and 1970s, the historical period when the shift to post-structuralism took place. By rereading these 'game films' in the light of new media, I hope

to illuminate what was at stake in these comparisons between games and movies for that period and how these texts can still be useful to our own context of convergence.

DEFINITIONS AND DISTINCTIONS

The perception of differences between games and films hinges on how one defines narrative and the primary functions it performs. Manovich rejects the broad definitions of narrative from film theorist Edward Branigan, who said, 'Narrative is increasingly viewed as a distinctive strategy for organizing data about the world,' and historian Hayden White who claims:

Far from being one code among many that a culture may utilize for endowing experience with meaning, narrative is a metacode, a human universal on the basis of which transcultural messages about the nature of a shared reality can be transmitted.⁴

Within the context of new media, Manovich rejects using 'narrative' as 'an all-inclusive term', claiming it is used 'to cover up the fact that we have not yet developed a language to describe these new strange objects'.⁵ Like David Bordwell, he chooses a narrower neo-formalist approach that deliberately avoids ideological considerations; defining narrative through a list of essential components and questioning whether a text 'qualifies', rather than what functions it performs. Manovich adopts the specific list of criteria prescribed by literary theorist Mieke Bal:

It should contain both an actor and a narrator; it also should contain three distinct levels consisting of the text, the story, and the fabula; and its 'contents' should be 'a series of connected events caused or experienced by actors'.⁶

Like Branigan and White, I see narrative more broadly as a discursive mode of patterning and interpreting the meaning of perceptions, an operation crucial to culture. Thus, its distinctive components – characters and events interacting within a space-time setting with change and causality – always carry specific historical, cultural and generic inflections, which enable us to contextualise its primary functions in three ways: aesthetically, ideologically and cognitively.

Aesthetically, the function of narrative is to arouse emotion or give pleasure; to create a simulacrum of the world or preserve one's experience in the face of death. The key question is which stories arouse the greatest range and depth of response. Ideologically, the function of narrative is to transmit or challenge the dominant values of a culture, as in myths, religion and history. The key questions are: how do narratives interpellate us as subjects who accept the prevailing order or, more interactively, how can we re-inscribe them for our own ends? Cognitively, the function of narrative is to contextualise the meanings of perceptions, a process involving montage and other modes of selection and combination, as well as the hermeneutic pleasures of problem-solving. The key question is: how do stories shape the way we process new data or enable us to design new narratives and

algorithms? Whereas most electronic games address the aesthetic function by constantly improving graphics and the cognitive function by requiring mastery of increasingly difficult skills, their ideological dimension is usually limited to a simplistic struggle between good and evil, leaving other social assumptions unexplored.

The ideological and cognitive functions of narrative are inextricably fused: the cognitive is the operational form of the ideological, and the ideological represents the political consequences of the cognitive. The more aesthetically powerful a story, the more effectively it performs its ideological and cognitive ends. With these interwoven functions, narrative maps the world and its inhabitants and locates us within that changing textual landscape, constantly broadening our mental cartography.

This broader definition of narrative enables one to see games as a special kind of narrative, rather than a rival form. Ordinarily defined as a playful leisure activity, games usually involve a contest between participants competing for amusement, money, fame or some other stake. Thus, most games are built on dramatic conflict like other narrative forms, and the stakes are ideologically charged for they become a means of defining power, for example, who is stronger, luckier or more worthy of becoming a cultural hero. While the term 'game' is used literally in sports and in the leisure worlds of playgrounds, casinos and arcades, it is applied figuratively in contexts where the border between leisure and other activities is ambiguous. One thinks of the mind games people play in psychological interactions; the zero-sum, mini-max games of economics, which have worldwide social and political consequences; the informal usage in business professions, such as the law game and teaching game, where people's livelihoods depend on adherence to codes of behaviour; or hunting and war games where the stakes can be amusement or survival.

In the contemporary discourse comparing games and narratives, three main distinctions are usually emphasised:

1. Whereas games require active participation by players, most narratives encourage passive readings.
2. Whereas the game world is purposely cut off from reality, most narratives are designed to represent and influence real life.
3. Whereas rules, goals and results are clear cut in games, they are usually ambiguous in narratives.

Instead of functioning as binaries, these distinctions can be treated more productively as a continuum.

ACTIVE PLAYERS VERSUS PASSIVE READERS

Unlike earlier 'new media' theorists such as Andy Lippman and Sandy Stone who fetishised interactivity as the ultimate value,⁷ Janet Murray, in her influential and useful book *Hamlet on the Holodeck*, avoids the term altogether, switching the focus to 'agency',⁸ while Manovich calls it a misleading myth.⁹ However, both realise the emphasis on interactivity in new media enables us to rethink its analogues in earlier forms.¹⁰ The crucial task is distinguishing between these forms of agency.

According to Murray, whereas stories do not require us to do anything except pay attention, 'games always involve some kind of activity and are often focused on the mastery of skills'.¹¹ To make this distinction more precise, Manovich introduces the concept of algorithm, yet soon blurs the boundary by applying the term figuratively to novels and their readers:

In contrast to most games, most narratives do not require algorithm-like behavior from their readers. However, narratives and games are similar in that the user must uncover their underlying logic while proceeding through them – their algorithm. Just like the game player, the reader of a novel gradually reconstructs the algorithm (here I use the term metaphorically) that the writer used to create the settings, the characters, and the events.¹²

Both accounts present a limited view of narrative reception, one that assumes readers merely decipher the author's intention or underlying design, without inflecting the text with their own personal associations or appropriating it for their own pleasures. They ignore conceptions of active readership that have been promoted by cultural studies over the past 30 years, whether through the 'negotiated' readings posited by Stuart Hall and the Birmingham School, or 'reading against the grain' (the phrase used by feminist film theorists in the 1970s), or 'textual poaching' (Michel Certeau's term popularised by Henry Jenkins), or 'queering' a text (the reading strategy operative in gay studies). At this point in history, any simplistic distinction between active game players and passive movie spectators would be naive.

One could also argue that all narrative forms accommodate more passive modes of response, even games. Individuals alternate between functioning as players or observers, not only in spectator sports such as basketball and chess, but also in electronic games, when friends play at home, at work or in the arcade. The consumption and awareness of games played and stories told by others help shape one's own active performance. There is a more complex mix of active and passive modes than is usually acknowledged.

REPRESENTATION VERSUS RETREAT

Intrigued with a different kind of mix, Manovich begins with the assumption that 'computer programming encapsulates the world according to its own logic'¹³ and claims the cognitive oscillation between interactivity and illusion found in computers and their electronic narratives generates a 'new kind of realism'. Although he starts to address its ideological implications, his attention quickly shifts to aesthetics:

The old realism corresponded to the functioning of ideology during modernity – totalization of a semiotic field, 'false consciousness', complete illusion. But today ideology functions differently: it continuously and skillfully deconstructs itself, presenting the subject with countless 'scandals' and 'investigations'. . . . The oscillation analyzed here is not an artifact of computer technology but a structural feature of modern society, present not just in interactive

media but in numerous other social realms and on many different levels. This may explain the popularity of this particular temporal dynamic in interactive media, but it does not address another question: does it work aesthetically? Can Brecht and Hollywood be married?¹⁴

Although hundreds of films have specifically addressed that question, Manovich chooses a provocative electronic example the ideological implications of which for 'real world' applications are obviously problematic:

In my view, the most successful example of such an aesthetics already in existence is a military simulator, the only mature form of interactive narrative. It perfectly blends perception and action, cinematic realism and computer menus. . . . In this art form, the roles of viewer and actant are blended perfectly – but there is a price to pay. The narrative is organized around a single and clearly defined goal – staying alive.¹⁵

Manovich maps this combat model of survival games over the mediascape, where he finds one-on-one serial screen wars, this time between cinema and computers, with the latter clearly in command. Claiming that 'new media embeds cinema-style illusions within the larger framework of an interactive control surface', he paints a pathetic picture of an ageing cinema's humiliating decline:

From commanding a dark movie theater, the cinema image, this twentieth-century illusion and therapy machine par excellence, becomes just a small window on a computer screen, one stream among many others coming to us through the network, one file among numerous others on our hard drives.¹⁶

But it is possible to argue, as Murray does, that the combination of interactive control and narrative illusion provides new pleasures:

Games are recreational because they offer no immediate benefit to our survival. Yet game-playing skills have always been adaptive behaviors. Games traditionally offer safe practice in areas that do have practical value; they are rehearsals for life.¹⁷

Or rehearsals for death, in those military war games that prefigured Desert Storm and in those 'mature' military simulations Manovich admires. On the one hand, the separateness of the game with its hard and fast rules provides refuge from the chaotic nature of the real world. Despite the pressures to win, playing offers a certain kind of serenity, for you know exactly what you are dealing with and can choose to withdraw at any time from the game. There is also a contrary desire to transfer these feelings of control over to the real world, a dynamic operative in games from 'fort/da' to *Doom*. Yet this contradiction also occurs in films and novels. The ratio between desires may differ, but it oscillates within all narrative forms.

GAME RULES VERSUS OPEN NARRATIVE

Despite their subjection to the laws of causality, most narratives create the illusion that anything can happen, whereas most games present a closed world with a clearly defined set of rules. According to Murray, 'games are goal directed and structured around turn taking and keeping score. All of this would seem to have nothing to do with stories'.¹⁸ Manovich argues exactly the opposite, claiming that not only are computer games 'experienced by their players as narratives', but also that it is precisely the 'well-defined task' assigned to the player ('winning the match, . . . or attaining the highest score') . . . 'that makes the player experience the game as a narrative'.¹⁹ Manovich continues:

Often the narrative shell of a game ('You are the specially trained commando who has just landed on a lunar base; your task is to make your way to the headquarters') masks a simple algorithm well-familiar to the player – kill all the enemies on the current level, while collecting all the treasures it contains.²⁰

From this perspective, the narrative premise is always the illusion, whereas the underlying algorithm, whether literal as in games or figurative in films and novels, is the deep structure that controls the user's reception. This cyber-structuralist assumption fails to acknowledge the great array of differences in class, gender, sexuality, ethnicity and generation among players or in the specific historical and cultural contexts in which these games are being played.

As a special form of narrative with explicit goals and a clear-cut set of rules, games provide an excellent opportunity to negotiate the relationship between social conventions and the degree of leeway allowed for variations in performance. This negotiation is precisely what is at stake in three recent popular game movies when a young gifted player performs innovative moves that alter the algorithms of the game and thereby challenges the oppressive social structure it upholds: whether it is finding a new rhythm to save a loved one in *Run Lola Run*; or taking a suicidal leap of faith in *Crouching Tiger, Hidden Dragon*; or combining these tactical moves with an Althusserian deconstruction of realism to become the assertive messiah who brings down *The Matrix*.

Although such abilities could be seen as fantasies restricted to films, even in those sports whose narrative dimension is minimal, we frequently find similar stories refocused around players – their hardships, team play and rivalries are a dimension now central in the television coverage of the Olympic games. We have seen the rules of the game change in response to shifting cultural and historical circumstances, such as the entry of African American and female players such as Jackie Robinson, Muhammad Ali, Tiger Woods and the Williams' sisters into the sports of baseball, boxing, golf and tennis; the use of new materials to make golf clubs, baseball bats and footballs; and the ingestion of new drugs and hormones to enhance performance and erase boundaries between genders. There is always an interaction between individual performances and their material contexts, relations that leave us wondering who are the best players of all time. In the world of electronic

games, this ongoing enhancement is mobilised to sell new playback systems, processors and patches that keep accelerating performance goals for both games and players.

In films and novels where goals and outcomes are ambiguous, we still find rules of causality and generic conventions, which guide authors in writing stories, readers in interpreting their meanings and distributors in marketing them to consumers. While some narratives follow these conventions very closely, others blatantly violate the codes, encouraging readers to take a more active role in reading or, in Barthes's terms, to perform a 'writerly' reading of the text. Openness lies at the centre of the narrative illusion; it can be read aesthetically as merely another stylistic choice or ideologically as a means of empowering readers to make meaningful interventions in the fiction and the outside world it represents. That presupposes readers acquire some kind of knowledge from the text, even if they interpret or apply it in different ways.

In online role-playing games, procedural narratives seem designed to expand the range of possible customisations of such textual knowledge. According to Murray, they offer 'the highest form of narrative agency the medium allows'.²¹ Dismissing this ideological potential as an illusion, Manovich sees this genre as simply more evidence for his general principle of transcoding ('the projection of the ontology of a computer onto culture itself') and for his cyber-structuralist assumption that 'an algorithm is the key to the game experience'.²² After quoting Will Wright, the 'legendary author' of *The Sims* games, Manovich concludes:

The world is reduced to two kinds of software objects that are complementary to each other – data structures and algorithms. Any process or task is reduced to an algorithm, a final sequence of simple operations that a computer can execute to accomplish a given task. And any object in the world – be it the population of a city, or the weather over the course of a century, or a chair, or a human brain – is modeled as a data structure, that is, data organized in a particular way for efficient search and retrieval.²³

Reminding us that a database 'is anything but a simple collection of items',²⁴ Manovich sets narrative and data structures in dialectic opposition: as 'two competing imaginations, two basic creative impulses, two essential responses to the world' with modern media as 'the new battlefield for the competition between database and narrative'.²⁵ Whereas he was willing to use the term 'algorithm' metaphorically when referring to the reader's search for the writer's logic, he refuses to deviate from a strict operational definition of database. In pursuing media specificity, he resists the notion of database narrative.

Conversely, I see database and narrative as two compatible structures that always function together. All narratives are constructed by selecting items from databases and combining them to create a particular story, while each retrieval of information from a database has a narrative dimension, but only in the broad cognitive definition of narrative rather than the narrower neo-formalist definition that Manovich appropriates from Bal and Bordwell. This compatibility enables one to perceive closer similarities between narratives and games, which both have underlying database structures that frequently remain hidden.

I use the term 'database narrative' to refer to those narratives, whether in novels, films or games, whose structure exposes the dual processes of selection and combination that lie at the heart of all stories and that are crucial to language: the selection of particular characters, images, sounds, events from a series of paradigms, which are then combined to generate specific tales. Raising meta-narrative issues, such structures reveal the arbitrariness of the particular choices made and the possibility of making other combinations, which would create alternative stories.

Although Manovich grants that a 'poetics' of database structure will someday be realised in cyberspace, he finds its cinematic precursors to be rare. Only two auteurs qualify, Dziga Vertov and Peter Greenaway, who conveniently represent modernism and postmodernism, respectively.²⁶ In contrast, I find database narrative throughout the entire history of cinema, from the early cinema of attractions, through modernist film-makers such as Buñuel, Leger, Eisenstein and Vertov, to narrative experimentation in the post-structuralist period of the 1960s and 1970s, to recent hybridisations of movies and games, yet inflected differently in each period.

My definition of 'database narrative' is consistent with Buñuel's own 'synoptic table of the American cinema', a bizarre document he allegedly constructed when he was in Hollywood trying to 'learn some good American technical skills.'

There were several movable columns set up on a large piece of pasteboard: the first for 'ambience' (Parisian, western, gangster, etc.), the second for 'epochs', the third for 'main characters', and so on. Altogether there were four or five categories, each with a tab for easy maneuverability. What I wanted to do was show that the American cinema was composed along such precise and standardized lines that, thanks to my system, anyone could predict the basic plot of a film simply by lining up a given setting with a particular era, ambience, and character.²⁷

Buñuel's exposure of the database structure within Hollywood narratives was performed as a subversive act. However, for Manovich, the database remains tied to the computer, whose encapsulation of the world justifies a return to structuralism, a discursive move that makes it more difficult to read the ideological implications of narrative in general and games in particular.

CINEMATIC CASE STUDY

Finally we turn to the context of Paris in the 1960s and 1970s, when the experimental fusion of games and films was in direct dialogue not only with radical changes in narrative theory through the movement from structuralism to post-structuralism, but also with the political events of May 1968, which helped to politicise film and narrative studies worldwide. The interest in games was partially motivated by the emergence of narratology and its attempts to define the deep structure of narrative as a closed system, whose complete formal possibilities could be charted, and by the subsequent mobilisation of this theory in

the political sphere where it helped to challenge dominant master narratives and their ideological assumptions and where in the process it, like the *nouvelle vague* itself, was transformed. Although these theoretical and political currents were also in dialogue with narrative experimentation in the novel, cinema was considered a privileged arena for this struggle, partly because the firing of Henri Langlois as director of the Cinémathèque Française helped to spark the uprisings against de Gaulle's government and also because the mass medium of cinema in general and the transparent realism of the prevailing Hollywood aesthetic were perceived as powerful transmitters of a political hegemony that was culturally colonising the world. Thus, an effective alternative cinema had to de-naturalise realistic illusions and expose the ideological functions of their pleasures. While these historical dynamics are well known, what has been overlooked is the role that games played in the mix.

I have selected five films made in this context which show how the line of narrative experimentation with games became increasingly politicised. Yet all of these works contain strategies that could be useful for the hybridisation of games and films, for all of them have a game embedded in the centre, which functions as one of three narrative modes through which a story is being told.

1. *The documentation of an open yet specific narrative field*, where characters and spectators wait for the 'real story' to emerge. Relying on the recording function of cinema, this mode privileges the iterative, the representation of what usually happens repeatedly in this space and its connection with the outside social 'reality'.²⁸
2. *A game*, which functions as a microcosm for narrative contrivance and its algorithms. The choice of game helps define what is at stake and thereby offers a reading of the overall narrative system.
3. *The singulative fictional narrative*, which tracks a spatial journey within a limited stretch of time, focusing on individuated characters, their chance meetings and changing relationships.

By combining the three modes, the film prevents us from seeing any of them as the truth. What emerges instead is a formidable narrative machine whose ideological operations are exposed.

The simplest example is Agnes Varda's *Cleo from 5 to 7* (1961), which uses tarot cards, a serious game of prophecy, to set up the contrived plot of a seemingly frivolous pop star faced with the melodramatic prospect of cancer. The algorithm is extended into the narrative by means of the temporal limits imposed on her playtime by the film's title ('from 5 to 7') and by the segmentation of the narrative into titled episodes that name each person she encounters and record the elapsing of time. Although Cleo at first seems as stereotypical as the avatars in the tarot deck, once she moves into the open narrative field of the city, filmed with the kind of 'city symphony' documentary style with which Varda began her career, the avatar becomes humanised and the temporal countdown a reminder that we are documenting her movements in 'real time'. In this space she meets a young soldier on leave from Algeria who is also facing death, a chance encounter that locates her in history and

redirects the 'woman's film' towards an open ending that the driving endgames of tarot, cancer and melodrama did not lead us to predict.

The game is more pivotal to the experimental structure of *Last Year at Marienbad* (1961), which was called 'a documentary about statues' by its collaborators, film-maker Alain Resnais and novelist Alain Robbe-Grillet. It opens with the protagonist wandering through the winding corridors of a baroque hotel describing its lavish decor in repetitive detail, as if archiving these items for a database. The hotel serves as a labyrinthine narrative field in which both characters and spectators become lost in a mélange of interpretations and reflective echoes of their own situation. Despite the rigid formalism of the setting, the repetition compulsions of the protagonist and the clichés of the romantic triangle (including a princess who must be rescued), the narrative resists closure. Everything in the film – even time, space and causality – remains totally open to interpretation, waiting to be replayed.

Yet the game at its centre provides a contrary reading that exposes the driving power of the narrative engine. Early in the film, the antagonist introduces the game of Nin, carefully arranging playing cards and other objects in parallel rows and explaining the rules to his opponent and on-screen spectators: whenever it is a player's turn, he can remove as many objects from a single row that he pleases, but the player left with the last piece is the loser. Despite this explanation, the algorithms for Nin and the narrative remain mysterious because no matter how many times the game is played, the antagonist (who claims he can lose) in fact always wins. Is he cheating or merely lucky? Is there some underlying principle that only he has mastered? Or is this winning streak a contrivance of the narrative in which the game is embedded? We never find out. Not only is this game an analogue for the two men's competition for the woman, but also its patterned rows are repeatedly reflected in the *mise en scène*: in the artworks displayed in the hotel's corridors, in the checkered rows of dark and illuminated windows, and in the multiple photographs and mirror reflections of the woman displayed in her bedroom. The database structure of the game controls our reading of the outcome: despite the openness of the labyrinthine narrative and the erotic obsessions of the protagonist, we conclude he is the loser, for he is the one left with the woman.

The political implications of the game are more apparent in Chris Marker's celebrated short film *La Jetée* (1962), which made it more powerful than its high-tech 1990s remake, *Twelve Monkeys*. The film demonstrates how a narrativising voice-over can transform what looks like a simple database of documentary stills into a compelling sci-fi story, a popular genre that ordinarily relies on expensive special effects to dramatise humanity's powers of survival. However, in Marker's low-tech, low-budget approach to the genre, it is conceptual power (the use of narrative to recontextualise the meaning of visual and audio perceptions) that can reanimate the dead and save the world. The narrative is driven by two opposing forces: the nonlinear narrative field of one man's memories (an open database of documentary images) versus the militaristic mind games of experimental scientists who impose procedural algorithms on this subject in order to mobilise his mental wanderings as a linear mode of time travel, first backwards to find resources from the past, then forwards to build a brave new world. The key to winning this game is finding the crucial image, which can

simultaneously be read both as a flashback and flash forward and thereby function as a warp zone to provide entry into another historical era or level of experience. Once they find it in the protagonist's vision of death, they transform his primal scene into a search engine that can access whatever they need. Although these ingenious mind games are supposedly designed to save mankind, in the larger narrative scheme they function as a ruthless form of murderous oppression. By keeping our attention focused on the individual subject and his love for a particular woman whom he encounters in the narrative field, Marker enables us to distinguish the scientists' relentless narrative drive from the over-arching omniscient voice-over, which deconstructs the ideological dangers of the game. Still, the rivalry between these two modes of contextualisation exposes the vulnerability of all discrete images and signs, which, like the haunting vision of death that frames the film, can always be redefined by any narrative machine.

The transformative power of games is explored much more fully within the endless narrative shuffle of Jacques Rivette's films, whose long running times (usually over three hours) and repetitive structures enable him and his collaborators to suggest the full range of possibilities for any given character or narrative premise and thereby demonstrate the endless playability of cinema. With their long, slow stretches and serial improvisations, his films may have the most to offer online role-playing games. His most brilliant use of games occurs in *Celine and Julie Go Boating* (1974), where tarot readings and magical incantations launch the collaborative interplay of two women, a magician and librarian. Like two little girls playing house, together they create a house of fiction where they collaborate on saving a princess, with whom they both identify. This young girl in peril is being held captive in an alternative melodramatic narrative, based on a story by Henry James, which, first through spectatorship, then interactive interventions, these two women customise with their own childhood memories, inventive fantasies and improvisations. Within this fiction, they take turns playing one of the minor characters (Miss Terry Angel) and participate in familiar games (frozen statues and which hand has the bonbon?). The Games seem to delight, but actually are designed to eliminate the young girl so that the stereotypical female avatars can get down to their one-to-one mortal combat over her father and his fortune, a game at the heart of many women's melodramas.

Despite the satisfactions of the happy ending, *Celine and Julie* ends with the same image with which it began: a woman sitting alone on a park bench in an open narrative field reading a book of magic. At first nothing happens; the camera merely documents the casual games within its field of vision – children playing ball, a cat stalking a bird. Eventually, after a ritual incantation performed by the reader, a young woman passes by and drops an object, a combination that creates the illusion of causality and sets their collaborative narrative in motion. At the end of the film, the same scene is repeated, but with the women's positions reversed, as we are told, 'This time it began like this.' This line extends the film's playability by demonstrating how repetition can open any closed narrative.

Buñuel's films made in Paris during this period are equally provocative in their meta-narrative use of games, a subject I have elaborated on elsewhere.²⁹ In his penultimate film,

The Phantom of Liberty (1974), a country inn (the traditional stopping place in picaresque fiction) provides two analogues that expose the database structure of all narratives, including this radical film. A central hallway connects several rooms, which contain mini-stories and characters competing for this central narrative space. In one room, a game of poker is being played by a woman and four Dominicans, who repeatedly shuffle the cards into new syntagmatic combinations while betting medals, Virgins and Sacred Hearts, which, like their own religious order, become paradigmatic suits. Despite the film's rigorous linear structure, no singular story emerges and events prove as unpredictable as the random shuffling of cards.

With the exception of Buñuel (who died in 1983) and Rivette (whose exploration of games never ceased), these new wave film-makers recently returned to their experiments with database game films, now filtered through the tropes of new media. Chris Marker's *Immemory* (1999), a CD-ROM comprised of stills organised into interwoven databases, and his feature film *Level 5* (1999), the protagonist of which is designing an electronic game about the Battle of Okinawa, exploring the complicity of representational practices in many kinds of warfare, both return to concerns he addressed in pre-digital database films such as *La Jetée* and *Sans soleil*. Resnais's pair of multi-branching films *Smoking/No Smoking* (1993), based on the eight plays in Alan Ayckborn's *Intimate Exchanges* (1982), play out the full range of narrative possibilities in the relationships among a limited number of characters (played by only two actors). Though at first they seem narrow, they keep growing in unpredictable ways despite their restrictive settings, a premise similar to the one he explored in *Marienbad*. Agnes Varda's *Gleaners and I* (2000), a documentary with a database structure, uses a digital video camera to 'glean' a fascinating collection of rural and urban scavengers living off the surplus waste of a consumerist culture; in the process she proves the most accomplished gleaner of all, especially as she turns the camera on her own ageing hands advancing towards death and recycles techniques and issues that have preoccupied her from *La Pointe courte* (1954) to *Vagabond* (1985). Varda demonstrates all filming is a form of collecting and all gleaning (whether historic or contemporary, material or conceptual, economic or artistic, autobiographical or communal) is an essential part of constructing the database narratives crucial to historical memory.

All of these films, those vintage works from the 1960s and 1970s as well as the recent ones they have helped spawn, infuse the interplay between games and movies, database structures and stories, with a conceptual power that fully engages the aesthetic, cognitive and ideological functions of narrative in the broadest sense of the term. That is why they offer such a valuable legacy for those interested in conceptualising the future equivocal relations between films and games.

Notes

1. Raymond Williams, *Television: Technology and Cultural Form* (New York: Schocken Books, 1975).
2. Lev Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2001).
3. Teresa de Lauretis, 'Desire in Narrative', *Alice Doesn't: Feminism, Semiotics, Cinema* (Bloomington: Indiana University Press, 1984), p. 105.

4. Edward Branigan, *Narrative Comprehension and Film* (London: Routledge, 1992), p. 36; Hayden White, 'The Value of Narrativity in the Representation of Reality', *The Content of the Form: Narrative Discourse and Historical Representation* (Baltimore, MD: The Johns Hopkins University Press, 1987).
5. Lev Manovich, *The Language of New Media*, p. 228.
6. Ibid. See also Mieke Bal, *Narratology: Introduction to the Theory of Narrative* (Toronto: University of Toronto Press, 1985), p. 8.
7. Allucquère Rosanne Stone, *The War of Desire and Technology at the Close of the Mechanical Age* (Cambridge, MA: MIT Press, 1995). See pp. 10–11 for her discussion of Andy Lippman's definition of interactivity.
8. Janet H. Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (New York: The Free Press, 1997), p. 128.
9. Lev Manovich, *The Language of New Media*, pp. 55–61.
10. See Erkki Huhtamo, 'From Cybernation to Interaction: A Contribution to an Archaeology of Interactivity', in Peter Lunenfeld (ed.), *The Digital Dialectic* (Cambridge, MA: MIT Press, 1999), pp. 96–110.
11. Janet H. Murray, *Hamlet on the Holodeck*, p. 140.
12. Lev Manovich, *The Language of New Media*, p. 225.
13. Ibid., p. 223.
14. Ibid., pp. 208–9.
15. Ibid., p. 210.
16. Ibid., pp. 210–11.
17. Janet H. Murray, *Hamlet on the Holodeck*, p. 144.
18. Ibid., p. 140.
19. Lev Manovich, *The Language of New Media*, p. 221.
20. Ibid., pp. 221–2.
21. Janet H. Murray, *Hamlet on the Holodeck*, p. 148.
22. Lev Manovich, *The Language of New Media*, p. 222–3.
23. Ibid., p. 223.
24. Ibid., p. 219.
25. Ibid., p. 233.
26. Ibid., p. 239.
27. Luis Buñuel, *My Last Sigh*, trans. Abigail Israel (New York: Vintage Books, 1984), p. 132.
28. For a discussion of the iterative in cinema, see Marsha Kinder, 'The Subversive Potential of the Pseudo Iterative', *Film Quarterly*, vol. 43 no. 2, Winter 1989/90, pp. 2–16.
29. Marsha Kinder, 'Hot Spots, Avatars and Narrative Fields Forever: Buñuel's Legacy for New Digital Media & Interactive Database Narrative', *Film Quarterly* (forthcoming).